PORTAL ORIGINS

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HSC Major Work

Year 12 Multimedia

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Red=Ongoing Evaluation

Design Management

Statement of Intent

For my Industrial Technology Multimedia Year 12 Major Work, I plan to film and edit a movie trailer with special effects, which I will design, film and edit. I will use my knowledge of video editing and video filming techniques to create a trailer as professional and of as high quality as possible. As I have acquired 4 years of experience from multimedia I have learnt a variety of basic multimedia skills e.g. 3d modelling, photo manipulation and adding special effects to raw footage. Using this basis of skills I will further my knowledge and experience in various skills, through testings, tutorials and camera test. I will present my major work on a DVD.

The skills I will need and develop in the making of my project include:

- Graphic Design: for the DVD Menu
- Adding Special Effects to plain footage
- Adding 3d Modelling to raw footage
- Audio Manipulation: for trailer music
- Creating a DVD Menu to present my major work
- Photo Manipulation: for creating movie poster
- Basic editing of raw footage
- Compositing edited footage for final product
- Time management
- Organisation Skills
- Camera Operation Skills – camera angles

Software I intend to use:

- Video Editing Software
- Audio Editing Software
- Photo Manipulation Software
- Word Processing Software
- DVD Menu Designing Software
- Video Compositing Software

Multimedia equipment I intend to use:

- Computer
- Printer
- Digital Camera with video capabilities
- Wacom Tablet
- Removable Hard Drive

Limitations:

- In school and out of school commitments
- I do not have access to a high quality camera so I will either have to borrow a high quality camera or just make use of using camera of lesser quality
- What can be regarded as PG content e.g. weapons, sexual content or violence cannot be included due to guidelines from the ace manual

Motivation:

The reason I chose to create this trailer was not for a single reason, but for several motivations which are:

- As I am a fan of movies, I have watched many trailers for anticipated movies, and would like to design and create a trailer so I can learn the skills it takes to make a trailer professionally.
- I have always been intrigued by the way trailers and films are compiled and have chosen to study and research the mechanics of 3d modelling and After Effects, as they are simpler and are more at my level of experience. I have often wondered how they work, the process involved in making a movie/trailer and how difficult it is to create at a high quality.
- In the past year, I have gained experience in 3d modelling, After Effects and Photoshop. I would like to see if I can use those skills to create a trailer using the skills that I have learnt.

Production Timeframe:

Weeks: The total amount of weeks in each term and the total amount of weeks it takes to complete the project.
Lessons: 3 lessons per week dedicated to creating the folio.
Homework: At least 2 times a week (and whenever else I can) to work on the Major Work including filming and editing
Hours: 75 minutes for school lessons, and sessions of 1-3 hours at home.

Target Audience:

The target audience for my movie trailer is very broad, as there will be no content which is unsuitable for any age. However, it is focused mainly at an older audience with its action packed content. At the same time, I still want to make it accessible to a younger audience though, and so it can't appear to have anything inappropriate for kids.

Research

My project required research in special effect techniques and methods, DVD menu creation, and program tutorials for video editing software. A lot of this came from reading the help files of the software I used e.g. After Effects, though other resources were very helpful. The resources I used are listed below:

Resource	Description
The Gnomon Workshop	Provides tutorials and information that educates artists on visual effects and 3d modelling
Creative Cow Master Series	A collection video tutorials for multimedia for novice to advanced
Create a DVD Menu in Adobe Photoshop	Learn how to create DVD menus in Photoshop for use in Adobe Encore
Google	A search engine used to find websites and information
Killer Camera Rigs That You Can Build	Tutorials instructing on how to build a camera dolly
Location Research	Personal Research which I performed to decide where I was going to film my project, in particular the final sequence.
File Format	Through reading information on websites and personal testing, I found what I believe to be the best results for the file format for my project
Movie Trailers	Short videos used to engage the audience and mainly used as advertisements for upcoming movies
Video Co Pilot	Provides tutorials and information that educates artist on visual effects and 3d modelling
Computer Components	Personal research that I undertook to find out what components I would need for a computer that would be required to run the programs that I wished to use, and at a fast pace
Presentation Techniques	Research on methods to present my major work in order to have the most professional look e.g. storyboards, DVD menu, DVD

‘Create a DVD menu in Adobe Photoshop’

Tutorial

Source: http://www.adobe.com/designcenter/encore/articles/enc15menu.html

Overview:
This website teaches the reader how to create various DVD menus inside Photoshop, which can later be used in Adobe Encore. The tutorial teachers the user how to create buttons, button highlights, backgrounds, and video thumbnails.

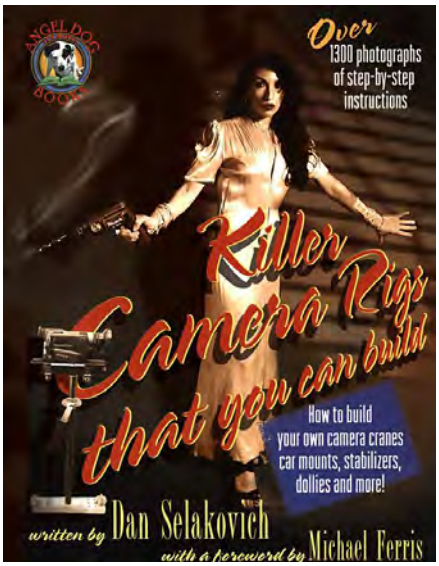
As detailed on the website, the user can have a great amount of functionality and control of DVD menus by modifying them in Photoshop. It also helped me in editing my menus quickly and efficiently, by teaching me that I can edit menus almost instantly, due to the connectivity between Photoshop and Encore.

Result of Research:

- Learned to modify the properties and functions of buttons in Adobe Encore by creating and editing them in Photoshop
- Allowed for a more sophisticated and useful DVD menu
- Greater knowledge of Adobe Encore and Adobe Photoshop
- Taught me how to create custom DVD menus, a very useful skill in the industry of Multimedia

‘Killer Camera Rigs That You Can Build’

Instructional Book



Source: Written by Dan Selakovich

Overview: This instructional book written by Dan Selakovich with its use of detailed diagrams/photos and clear instructions, teach readers how to create camera rigs with basic equipment and a low price.

This book proved to be useful guide to aid my construction of a professional Camera Dolly.

Resource:

First, we need to figure out where to put our brackets for the wheels. The plywood I'm using for this dolly measures 3'x2', plenty big enough to hold a tripod or small boom arm. 5" from the edge seems about right. Use the framing square to make sure the placement of the bracket is square with the deck, and right on the edge of the board. If we were using a smaller piece of wood for the platform, we might want to only go in a couple of inches.

1.

As you can see, I'm placing the bracket flush to the edge. **IMPORTANT: make sure all of the brackets are lined up the same, or they won't fit into the track properly!**

Here I'm using a piece of aluminum that runs the full length of the board as a straight edge against my framing square so I know where to place the bracket on the other end. It might be a good idea to draw a pencil line down the length of the straight edge and line both brackets against that line.

Once the Bracket is in place, mark the center of the hole in the bracket. This is where we'll being drilling in to our deck to attach the bracket. Do this in each corner with the remaining 3 brackets.
In this photo, I'm using a bracket with 2 holes on a much smaller platform, but the principle is the same.

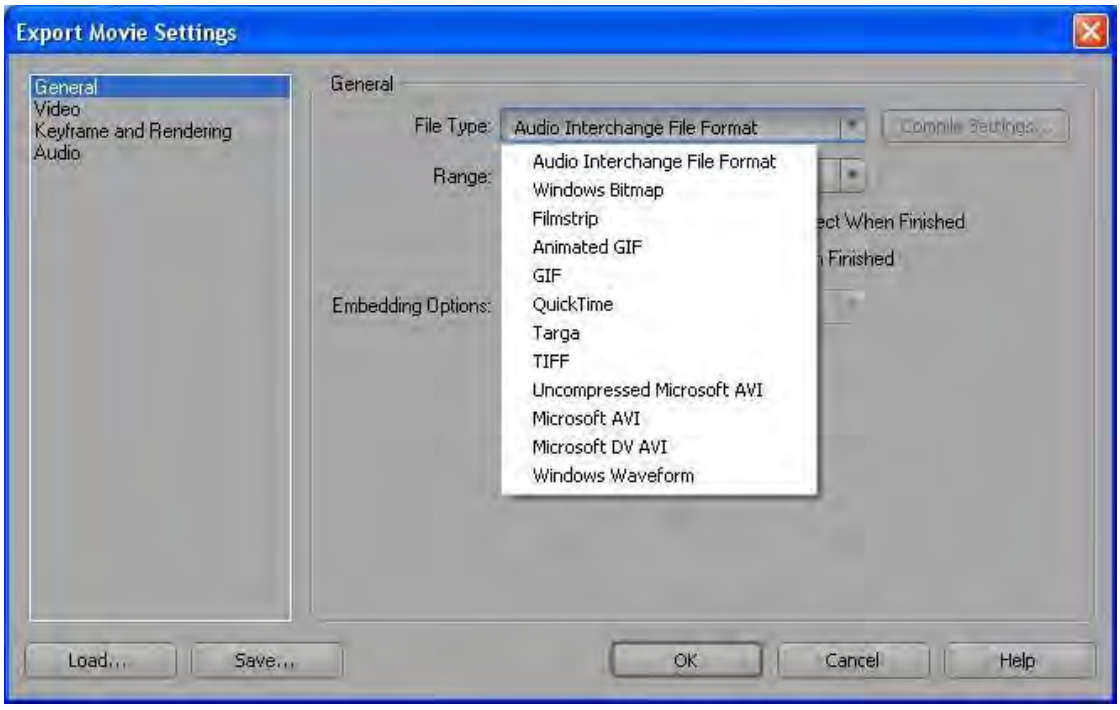
Application:

File Format

Personal Research

Overview:

As I wanted to produce the highest quality product possible, I had to research what settings and file type I would want the exported movie to have. To do this, testing was done to compare the different aspects of file formats and their properties, as well as some reading of internet sites.



By being informed about the various file types and settings I could apply to them, I was able to enhance the quality of my product by selecting the best file type for my project. To do this, I constructed a table to compare the various functions and features of each file type. However, I only compared my strongest 3 options of file formats, as many of the options seen in the picture above are image formats (GIF, Windows Bitmap, TIFF), or different settings of the same format (Microsoft AVI and Uncompressed Microsoft AVI).

Resource:

File Type	Advantages	Disadvantages
 **QuickTime (.mov)**	• Can have a small file size with the right compression settings • Allows for menus to be built into the file • Supports a large	• Not supported by all computer systems • Requires QuickTime to play
 **Windows Waveform (WMV)**	• Decent quality video compression	• Limited support for audio Codecs • Support by most computer systems
 **DV- AVI (.AVI)**	• Regarded as the highest quality file available	• Large file size • Limited support for audio • codecs

Result of Research:

- A high quality video that would look good on a DVD player.
- Greater knowledge of video file formats, and when to apply these formats
- Provided information that would inform my decision of which file type to use for my major work

Video Co-Pilot

Tutorial

Overview: A website which has many tutorials which I watched to assist me in the creation of special effects

Source: http://www.videocopilot.net

Result of Research:

- Gained ideas and inspiration of special effects that I could create
- Learned how to use various plug-ins in after effects

Application:

Computer Components

Personal Research

Overview:

The quality of a multimedia product is largely dependent upon the quality of the hardware and software it is created by. As computers become more advanced, so do the programs required to run them, and more processing ability is required to run them effectively. For this reason, a project must be able to be completed on a computer with hardware that is suitable for its creation.

Researching computer components was a very helpful process for my project, as it allowed me to determine what processes I could and could not undertake, and if I would need new hardware to complete my project. If this research was not conducted, I could have filmed my major work, and then when it came to animating and editing the footage, my computer wouldn't be able to process my demands effectively. Without this part of research, my project could have been very hard to complete, or even started again from scratch.

Resource:

Central Processing Unit (CPU)

The CPU is like the brain of a computer; it assigns the tasks for other computer components to perform. For this reason, it must process information quickly, so that it can order more tasks at a faster speed, and the programs can run more efficiently. Dual core processors are becoming more and more popular, and quad core processors are becoming available. The number of "cores" a processor has is the number of different sections of the "brain". For example in a dual core processor, this means that a video could be rendered on one core, while a virus scan runs on

the other, and the two processes won't affect the speed of one another.

Random Access Memory (RAM)

RAM is the storage system of data processing, all relevant information to programs that are running are stored in this system. By having more RAM, more programs can store more information at once, and faster RAM will allow the programs to access this information more quickly.

Hard Disk Drive

A storage device built into the computer which holds all the user's data and information. Hard drives differ in the amount of data they can hold which is normally measured in gigabytes (GB), though terabyte hard drives (1024GB) are a necessity for larger projects in the multimedia industry.

Video Card

A video card is often needed in multimedia projects to render complex 3D animations in real time and view other graphics intensive projects. However, they are not so important when it comes to video editing and processing. This is because when a video is rendered it done entirely by the CPU through data processes. The only aspects a video card will help with in terms of video editing are playing the video back inside the program if many complex effects are being used at the same time, and even then the processor will still bear more burden.

Display Screen

When a project is being created, it must be realised that it will be displayed on many different types of screens, with varying sizes and properties. For this reason, it is appropriate to have an array of screens to test to product on, in order to make sure it displays correctly

DVD Burner

DVD burners are used to write information to a DVD drive. They vary in the speed at which they can write data, obviously faster is better as it takes less time

Presentation Techniques

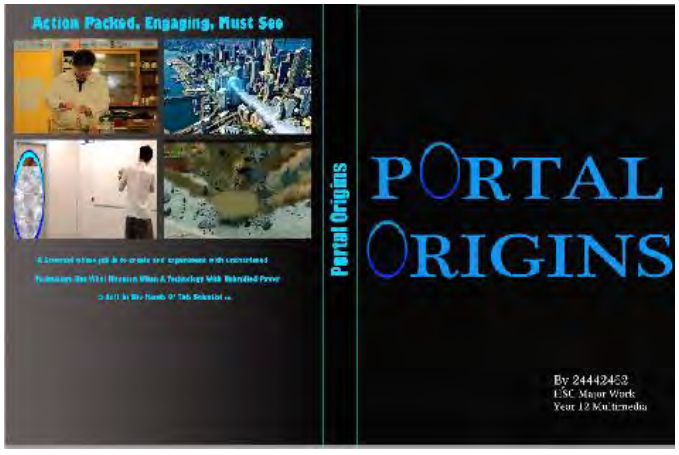
Personal Research

Overview: As I wanted my major project to be as high quality as possible, I looked into various ways I could present my major work which ranged from using a DVD and integrating a DVD menu. These researches lead to the creation of the DVD menu as well as the DVD cover.

Result of Research:

- Acted as an inspiration to create a DVD menu to present my major project
- Gained knowledge of professional methods of presentation

Application:



Previous HSC mw / ideas

- 'Suits' past HSC MW, movie trailer consisting of 3d modelling, motion tracking and other various special effects. 0.57 mins voice overed.
- 'Brick' trailer of a 3d modelled robot consists of various special effects 1.26 mins. Engaging Text used 'Coming Soon'

YouTube

- Dark Knight Trailer 2.21 mins, Fly by title used 'the legend ends now', Dramatic Pauses used 3d model based special effect
- Red Dawn Trailer 2.32mins Fade in Titles used base 'a group of unlikely heroes 3d model based special effect
- Watchmen Trailer 2:20 Fade ins 'Everything we Know Will Change' Electricity Effect

Special Effects

- 3d Meteor Crash
- Lightsaber
- Explosions
- Portal
- Titles
- Demon Face Warp
- Bird Flock
- Smoke Trails
- Meteor Crater
- Flames

Major Work Idea

Special Effects Film Trailer

Music/ Sound Effects Commonly Used In Trailer

- Eerie Music is usually used in the beginning then as the pace and intensity of the trailer builds up the music compliments this
- As a title flies onto the screen this is complimented by a heavy kick drum sound effect which gives an effect of emphasises

Layout of Trailers

- Film Classification Opening
- Scenes of the trailer
- Intriguing Line 'Coming Soon'
- More Scenes
- Intriguing Line 'Everything is about to Change'
- More Scenes
- Film Title to End

Selection and Justification of Materials

Computer:

Lenovo 7360BB5 (School Computer)

Processor: Dual 2.60 GHz Pentium Dual-Core E5300

Memory: 1885 MB

Hard Drive: 100GB

Monitor: 22'' Flat screen

DVD Burner: Yes

Custom Built Computer – Personal Computer

Processor: AMD FX 8120 Eight-Core

Memory: 4x4GB (16GB) RAM

Hard Drive: 1TB

Screen: 22'' LG FLatron E2260

DVD Burner: Yes

Selection

A computer was needed for all parts of my Major Work project, from processing film, to animating, and even creating the portfolio. I had two computers to work with, my own personal computer and the computers provided by the school. As I was going to perform very intensive editing (with multiple programs open at one time) I decided to use my home computer primarily as the 'work' computer, while the school computers were used to complete my folio, and show my progress to classmates.

Justification

This decision was based on practicality and efficiency. Transporting the files to and from school would be a hassle, easily solved by simply doing the work at home. Also, the school computers are not as powerful as my own, and although capable, it was much easier to use programs at home. The classroom environment can also be distracting, as many of the students are my friends and we often chat. At home I can control my surroundings, and focus entirely on the task at hand.

The screenshot below shows that my research was worth undertaking, as my RAM was used extensively by After Effects, Premiere Pro and Flash, even when the system was idle. This is clear evidence that my selection of hardware was justified, as this process simply

would not be possible on the school computers, with After Effects alone requiring more RAM than the system could provide.

Camera

Sony Cyber-Shot DSC P100 – School Camera
Video Resolution: 640x480
Zoom: 3x Optical Zoom, 2x Digital Zoom
Storage Space: 32MB Flash Memory
Display: 1.8” LCD Display

Cannon 8MP Camera Power Shot SD1100IS – Personal Camera
Video Resolution: 640x 480
Zoom: 3x Optical Zoom, 2x Digital Zoom
Storage Space: 2GB Flash Memory
Display: 2.5 Inch Pure Colour LCD II Screen

Selection

A digital camera was needed to capture the video footage I would later to animate over in order to create my project. Although the school offered a digital camera, I decided to once again use my own equipment. However, this time my own personal camera wasn’t of a high enough, and so I borrowed my friend’s camera for the filming requirements of production.

Justification

This was a choice based on quality and limitations. My friend’s camera was of much better quality than my own and those provided by the school, and also had a larger storage capacity. This coupled with the fact that the environments I wished to shoo are not available at school, reaffirmed my choice of doing practical work at home while completing the folio at school.

My friend’s camera also shot film in a resolution of 720x576 at 25fps, the standard settings for PAL. This meant that the recorded footage would display as expected when played back on a DVD player, which meant I didn’t have to process film from either the school or my own camera. The fact that my camera and the school camera only recorded at 640x480, meant that if I was to use them for my project they would be up scaled, causing the pixels to increase in size and reducing the quality of my product.

Drawing Input Device

Lenovo Optical Mouse – School Mouse
Features: None

Cooler master Inferno Gaming Mouse – Personal Mouse
Features: High Precision mouse, ergonomic features (contoured mouse), programmable hotkeys

Selection

The process of 3d modelling / editing on a computer involves a device interpreting the motion of a human hand and creating positional information based on this. Based on my options, I decided to use my mouse at home as it was an effective means of drawing

Justification

As I did not require a drawing in the project a tablet was not necessary, an ergonomic mouse provided the comfort and control I needed in order to edit my video footage and 3d model.

Footage Compilation Software

Sony Vegas

A popular video editing program used by many in the multimedia industry.

Windows Movie Maker

A simple video editing program which comes packaged with the Windows operating system.

Adobe Premiere Pro CS4

A program designed for video editing and creation.

Selection

I decided to use Adobe Premiere Pro CS3 to edit my video footage to edit and arrange footage, and also to export the final product. However, Windows Movie Maker was also used for another purpose

Justification

The only problem I had with Sony Vegas was that the software was not available at school, and so I couldn't see my project files there or simply explore the menus in my spare time as I did with Premiere Pro. Premiere Pro also gave me an advantage as I used a lot of Adobe software, which are all interconnected. One of the main features this allowed me was live updating of video footage when it was exported from After Effects. Although I never intended to use Windows Movie Maker, due to its nature to crash unexpectedly and lose production progress, it was used to convert my footage into a suitable file format for Premiere Pro to use.

Image Capture and Modification Software

Microsoft Paint

A very limited program with little control over image editing and output quality

Adobe Photoshop CS4

A professional program designed for image and photo editing.

Selection

Photoshop was chosen to save screenshots, crop images and produce image files.

Justification

There really wasn't much of a choice here, as Photoshop outdoes Paint in all aspects. It has much better editing options, user interface, and output quality.

DVD Creation Software

Adobe Encore CS4

A program designed for creating DVD interfaces.

Selection

With no other options at school, Encore was used to create the DVD system for my project. It was used to create DVD menus, including Play, Scene Select, and Special Features menus.

Justification

There is other DVD creation software available, but nothing offers the level of control that Encore does. This combined with the fact that Encore was available at school and had menu creation functionality with Photoshop made it an obvious choice.

Video Editing Software

Sony Vegas

A popular video editing program used by many in the multimedia industry.

Adobe After Effects CS4

A program designed for altering and manipulating video footage.

Selection

After Effects was once again selected instead of Sony Vegas due to its availability, and its functionality with other Adobe software.

Justification

Adobe After Effects also had the added bonus of being able to import .swf files, the files created by Flash. This meant I could import my raw animations straight into After Effects, without converting them to a lossy video file format. This improved the quality of my product, and therefore made my selection of After Effects appropriate.

File Types

QuickTime (.mov)

A file format designed by apple handling various mediums of media e.g. video, audio

Audio Video Interlaced (.avi)

A file format is a multimedia container format created by Microsoft

Selection

QuickTime was selected due to the high compression whilst maintaining a good quality of image and audio.

Justification

QuickTime is a free program which meant I would cost nothing for me to download and present my trailer on it. The main advantage was its high compression and low file size, which meant I could play my trailer smoothly without the lag that comes with the larger, less compressed file types.

Skills/Special Effect Types

Smoke Trails: Skills included were Optical Flares, Particular, Image Manipulation, and Colour Correction

Flame Out Of Test Tubes: Skills included were Particular and Colour Correction and Masking and Tracking/Stabilisation

Lightsaber Effect: Masking, Rotoscoping, Glow and Colour Correction

Bird Flock: Image Manipulation, Animating and Colour Correction

Meteor Crash: 3d Modelling, Particle Physics, Particular, Motion Tracking, Stabilization, Colour Correction, Image Manipulation

Portal Gun Shining: Optical Flares, Motion Tracking, Colour Correction

Portal Scenes: Image Manipulation, Glow, Masking, Muzzle Flash, Colour Correction

Sound Effects: Audio Manipulation

Music: Audio Manipulation

Shatterize Titles: Optical Flares, CC Pixel Polly, Glow

Meteor Crater: 3d modelling

Demon Face Warp: Masking, Motion Tracking, Liquefy

Selection

I decided to use the effects Smoke Trails, Flame Out of Test Tubes, Lightsabers, Bird Flock, Meteor Crash, Portal Gun Shining, Portal Scenes, Sound Effects, Music and Shatterize Titles.

Justification

I did not include the Demon Face Warp despite it being a good effect as it did not fit in nicely with the trailer which was themed around Science. The Meteor Crater was considered to be used in the trailer however due to time constraints it had to be removed. The effects I decided to use were chosen because they all tied together well with the theme of Science and Portals as well as displaying an array of skills.

Development of Ideas

While deciding on which idea to use for my Major Work, I have a clear idea of what I want to incorporate; a trailer that feature numerous special effects. This idea presented a unique challenge for me, my skills, and was also very enjoyable to create. Having experience with special effects and a bit of knowledge in video editing, it confirmed my choice.

Originally I thought about doing an animation because I thought it would be fun to learn, I also considered doing a 3d model for my major as I have has previous experience with 3d modelling software. Finally I established I should create a film trailer as I the most interest in that area and I have a strong idea on how I am going to achieve this. After deciding that I was going to do a trailer I needed to brainstorm what genre of trailer I was going to make. I considered making a trailer that advertises a movie similar to the show "Dragon Ball Z" where the characters shoot energy blast out of their hands. I eventually brainstormed the idea to make a trailer loosely based on the game "Portal" and the movie "Jumper". I then thought of a DVD menu for presenting my major because it would incorporate additional skills and would also be fun to make.

As my project continued, I had to sacrifice certain elements and ideas I would have liked to incorporate in order to finish the project on time, and to keep frustration minimal (which would ultimately lead to a lack of interest).

After watching some tutorials on special effects on 'Video Co- Pilot' and 'YouTube', it showed specifically how they created various special effects and how to integrate these effects into real-life footage, I was convinced that I would need to film first with what effects I wanted to create in mind, and then edit the footage. This meant that I would need a very solid idea of what would be on the screen in my head, which placed heavy importance of an accurate and clear storyboard.

Throughout the project I had to venture into areas which I thought I would not have had to originally (such as 3d modelling and complex masking), but I decided it would be better for the project and the overall outcome to pursue these paths and develop my ideas around them (even if it meant changing some pre-conceived ones). However, due to these problems during production, I have learnt many new skills and, I feel, drastically improved the quality of the project.

I also jotted down my ideas in my book containing all my ideas and sketches of ideas as they were processed and thought up. This also let me design my DVD menu and its transitions, as well as develop my ideas of what would be in the film further.

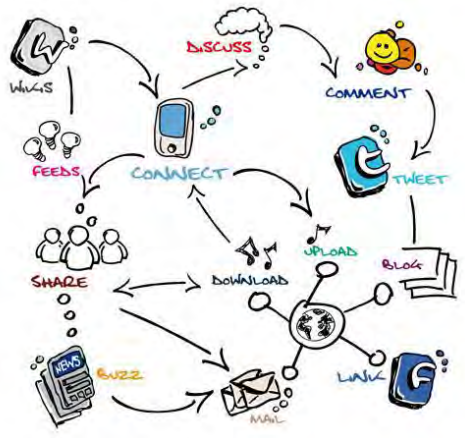
Trailer Concept Brainstorm

- A trailer that is similar style as modern day trailers for superhero films
- A trailer that will show action shots to make it more exciting and fast paced
- Instead on basing the portal gun on the actual gun from the game "Portal" I want to base the portal gun shooting a one way portal that you just think about where you want to go before stepping in.
- Use upbeat music to make the trailer seem more exciting

Major Trailer: Required Features

- Have a Portal which the protagonist uses to travel
- Have multiple special effects e.g. explosions
- Have a DVD Menu
- Use colour correction effect to fix bad quality footage

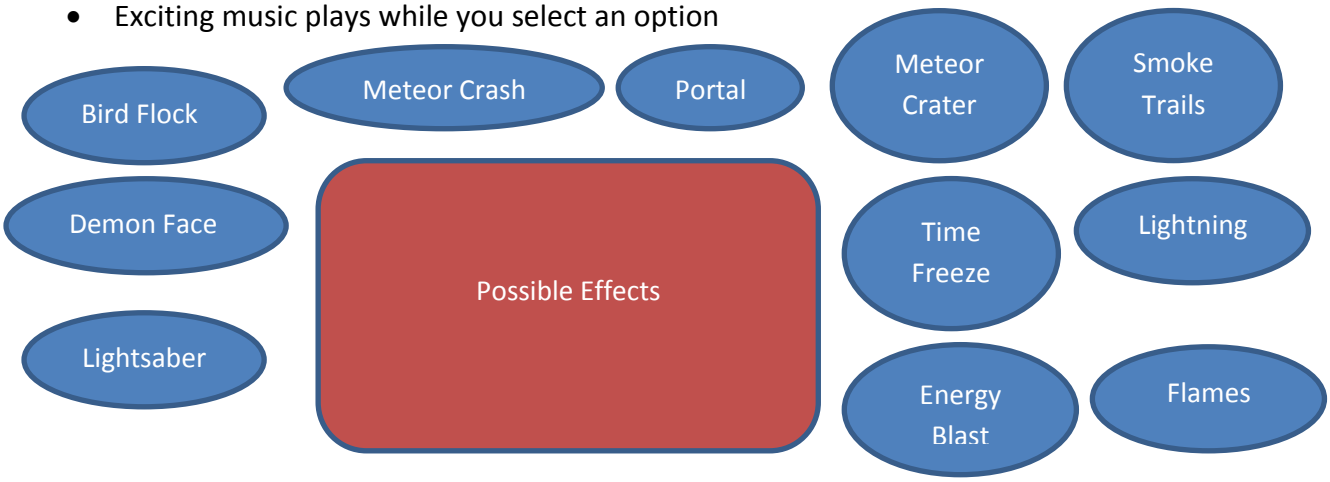
Major Trailer: Optional Features



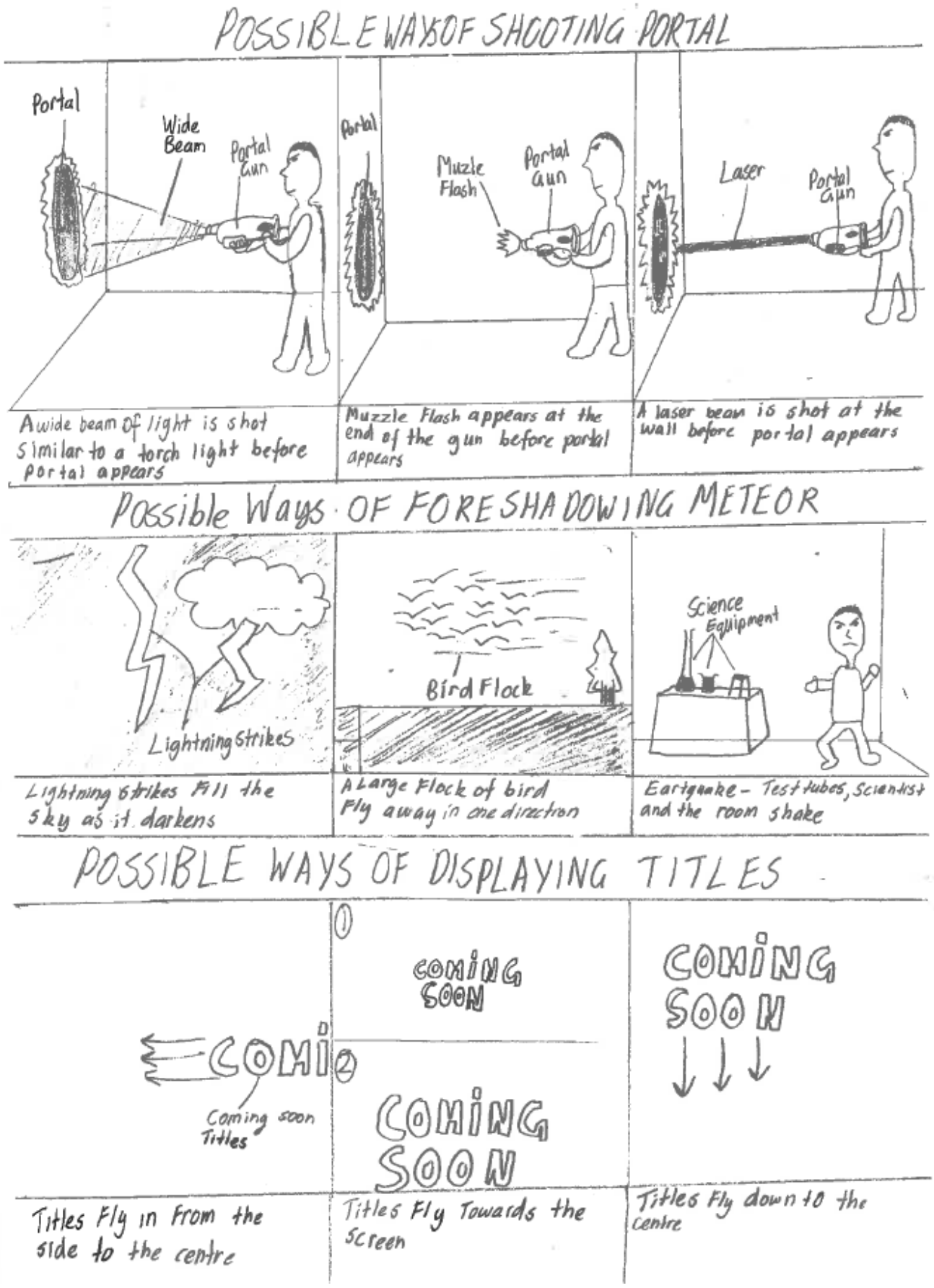
- Have a crater crashing and 3d model the debris
- Have a 3d DVD Menu
- Apply some green screen skills
- Advanced Masking
- Playing around with the lighting
- Use optical flares to enhance the look of the portal
- Add bits of animation to the trailer
- Use Effects to change the weather of the footage, this would require some research

Major Trailer: Menu Features

- When you click on the button it glows
- Menu will rotate in a 3d rotation
- Bits of the trailer will be previewing in the background
- Exciting music plays while you select an option



Concept Sketches of Possible Effects



Film Storyboard

Storyboards are a part of project development which map out the various aspects of the production they are made for, in my case a trailer. This is accomplished by the arrangement of a number of panels which contain sketches of each shot from the film, with a small description explaining the action and effects of the camera, the actions of the objects on-screen, and the audio in each given panel. Storyboards are an essential part of a project's development because it acts as an accurate guide for the progression of the film, and what angles, sounds, and directions will be needed to produce it.

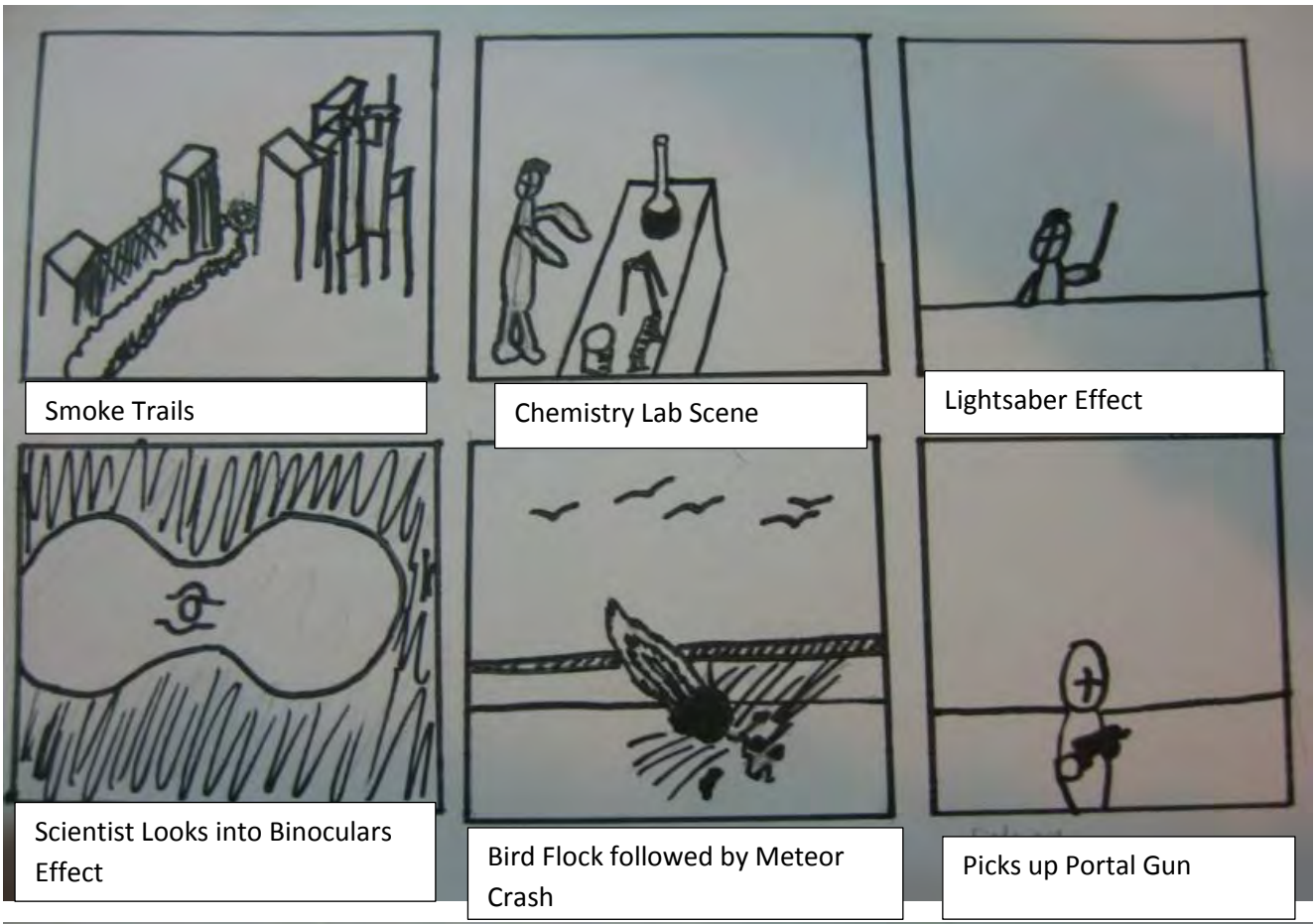
My book contains a rough storyboard which was my initial idea for the project. However, after analysing it I decided that there were numerous problems with it:

- The plans for the film weren't entirely clear, as I still wasn't confident with all my ideas.
- The drawings were very rough and showed not clear layout of the scene
- It wasn't very well thought out, with the main portion of the film simply being ideas, which weren't constructed in the storyboard
- Since it was a trailer it had no real story, which made it hard to direct

For this reason, I decided to remove some of the more complex ideas I had, added simple scenes that would easily flow to the next in the video and made sure that each shot had a purpose rather than just being a transition scene because I wanted my trailer to be upbeat and exciting. After these modifications, I created a new storyboard, and am certain that this has created a much more meaningful and entertaining experience. Music was also a huge consideration as it would play a major part in adding the atmosphere to the trailer. The song "The Beginning is the End", in my mind was the perfect song to fit my trailer.

The storyboard fulfilled its purpose of creating a guideline for me to follow, and also helped in organising the project and designing my camera angles and sequences.

Concept Storyboard



Smoke Trails

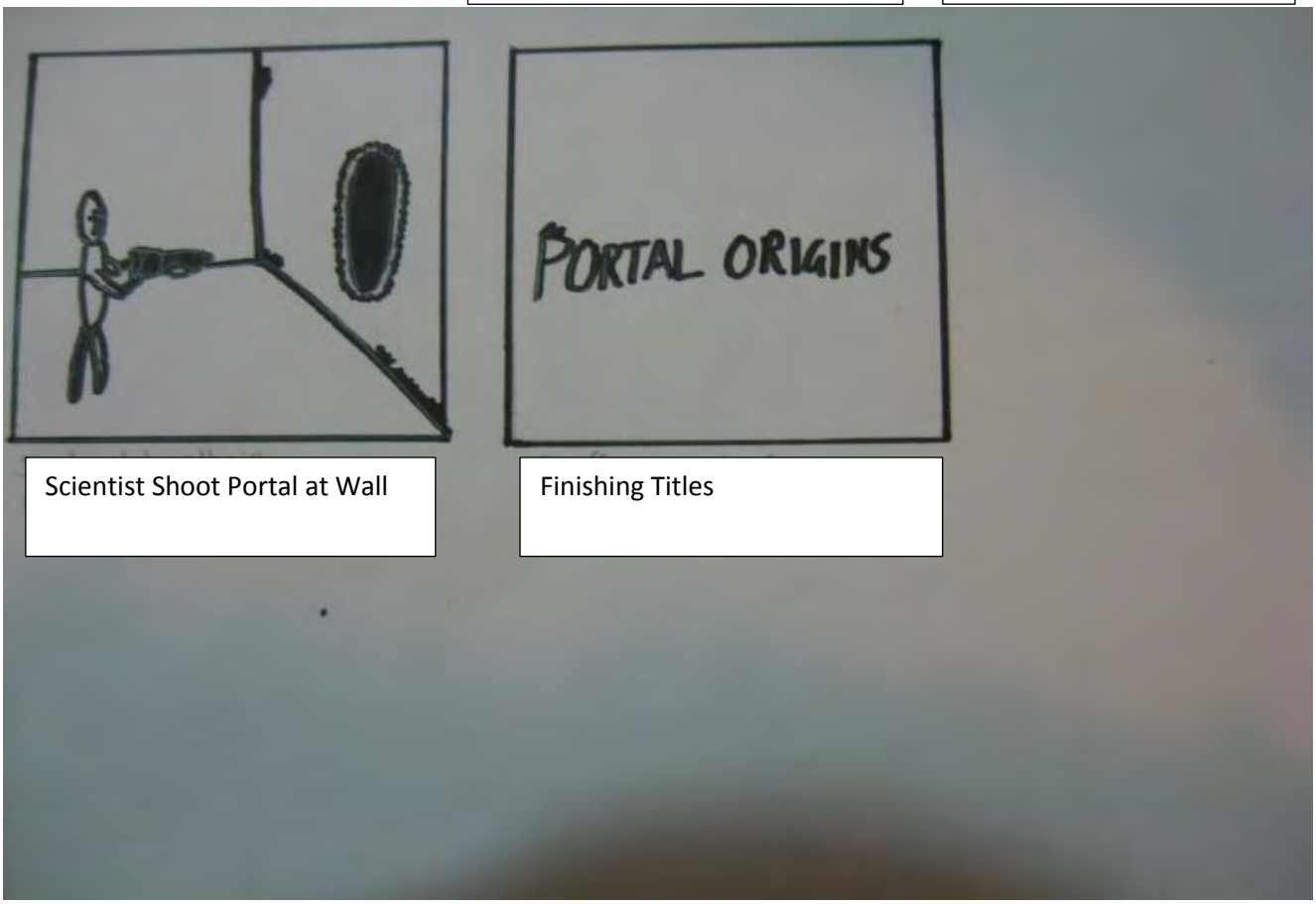
Chemistry Lab Scene

Lightsaber Effect

Scientist Looks into Binoculars Effect

Bird Flock followed by Meteor Crash

Picks up Portal Gun



Scientist Shoot Portal at Wall

Finishing Titles

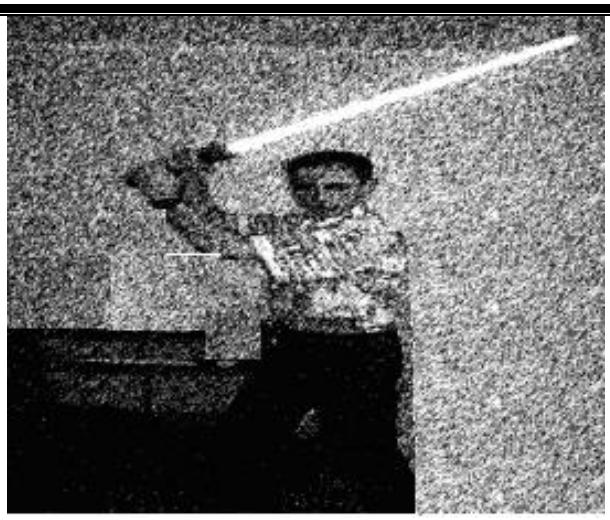
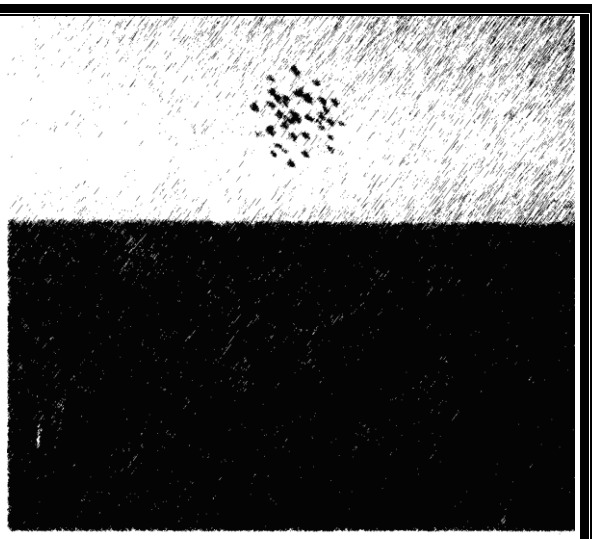
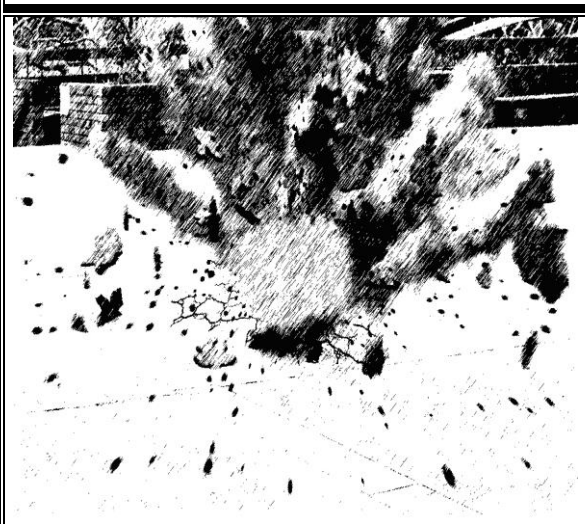
Final Storyboard

<table>
<tr><td>  </td><td> 
</td></tr>
<tr><td>Shot Number: 1

Content: Fade in to show overlooking view of the city, glowing orb with a smoke trail flying through the city
Audio: sounds a missile launching, music
Camera Directions: Still</td><td>Shot Number: 2

Content: Fade in titles from the right
Audio: music
Camera Directions: Still</td></tr>
<tr><td>  </td><td> 
</td></tr>
<tr><td>Shot Number: 3

Content: Fade to Scientist pouring chemicals, flame flares out of the test tube, scientist recoils
Audio: voiceover, music
Camera Directions: Still</td><td>Content: Fade in titles from the right
Audio: music
Camera Directions: Still</td></tr>
</table>

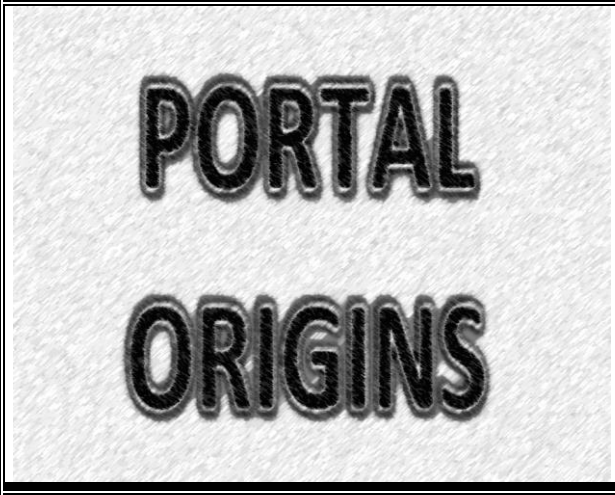
	
Shot Number: 3 **Content:** Fade to scientist swinging lightsaber around **Audio:** Buzzing Noises, Voiceover, music **Camera Directions:** Still	Shot Number: 5 **Content:** Fade to flock of birds flying in one direction. Straight after fade to Black **Audio:** bird noises, voiceover, music **Camera Direction:** Still
	
Shot Number: 6 **Content:** Fade to meteor crashing in the ground causing debris to flying in all direction **Audio:** explosion, music **Camera:** Pan Down	Shot Number: 7 **Content:** Scientist picks up gun **Audio:** Voiceover, music **Camera Directions:** Push Dolly towards Actor

Shot Number: 8

Content: Scientist shoots portal gun at wall, portal appears on wall
Audio: music
Camera Directions: Still

Shot Number: 9

Content: Scientist walks forward entering the portal, fade to white
Audio: music
Camera Directions: Still

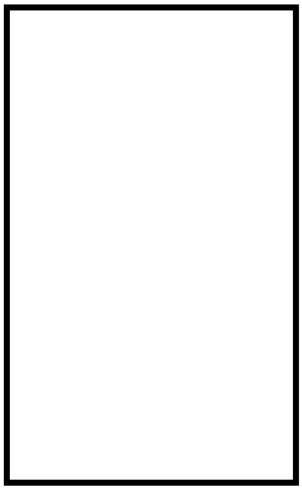


Shot Number 10:

Content: Titles fade onto the screen
Audio: heavy bass noise
Camera: None

Portal Design

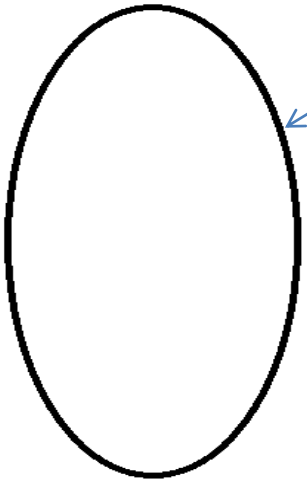
Simple Shape



Traditional Door Shape

Large enough for a person to walk through

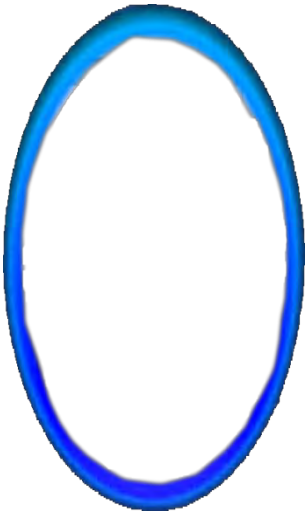
Slightly more aesthetic shape



An oval is a more traditional shape for a portal

Large enough for a person to walk through

Bluish Colours added for more visual appeal



Thickened outline

Based on the designs I decided that the oval shape with its more aesthetic shape and with added colours would provide an appealing portal to be used in an effect.

Menu Ideas

I had numerous ideas for the transition between the different menus of my DVD, including:

Page Turn: An effect involving the current menu being turned like a page, which reveals the next menu underneath it. Structure like an old looking Scientific Journal

Portal Warp: An effect that involving a portal around the word 'Play' and in each transitions the portal warps into itself disappearing and reappearing on the next option. When the selection has been made the portal and text expands giving the appearance of entering the portal followed by options from the next menu fading in.

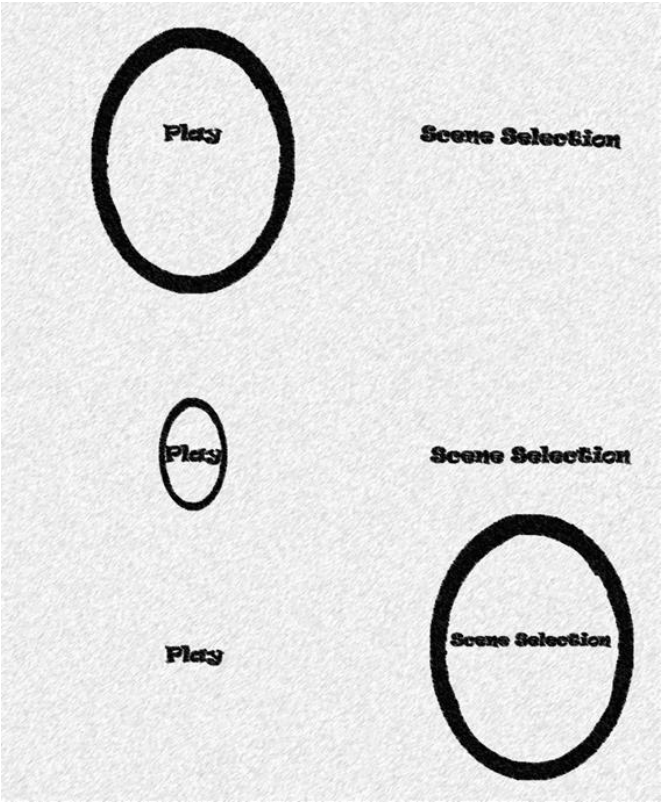
After some more thinking, I decided that the portal warp effect would be my best option for the menu transitions because it was easier to create than the other two, and it also fitted with the science fiction portal theme of the trailer.

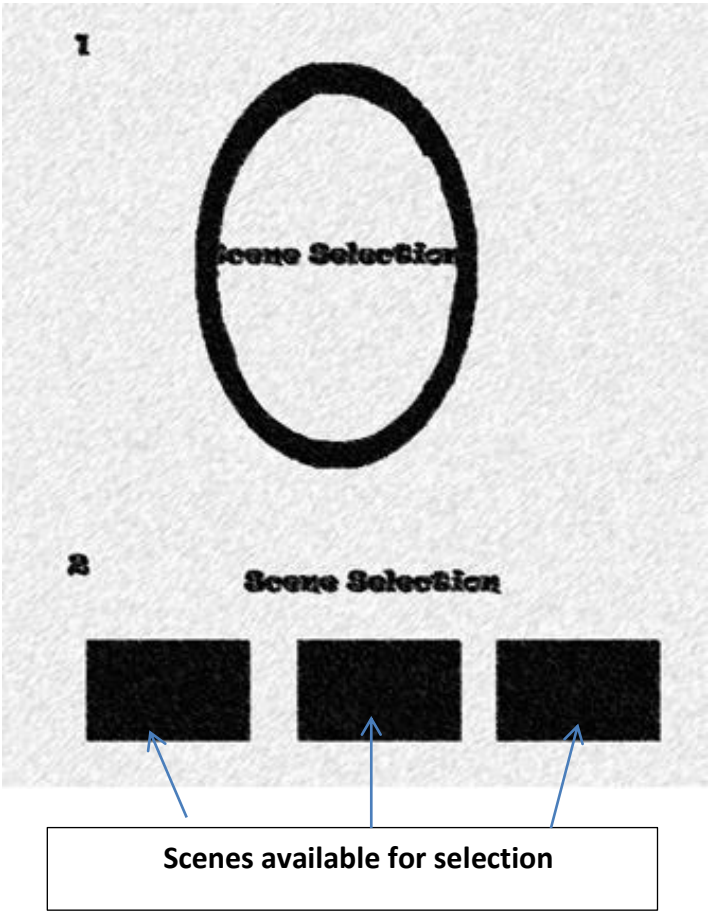
I also created a comparison between the use of generic menu transitions and transitions created for each individual menu selection. I feel this shows a clear indication of my development of ideas through the analysis of the advantages and disadvantages of various options I am presented with.

	Advantages	**Disadvantages**
Generic Transitions	• Less Work • Only need to be perfected once	• Won't look as good • Repetitive and will look uninteresting
Unique Transitions	• Looks better • Transitions feel unique • Greater control and manipulation of effect	• Will take a lot of work • Complicated setup • Will take a lot of time in order to look perfect

Based on this comparison, I decided to create unique transitions between the options which have given my DVD menu the very neat effect of appearing as an interactive portal selector.

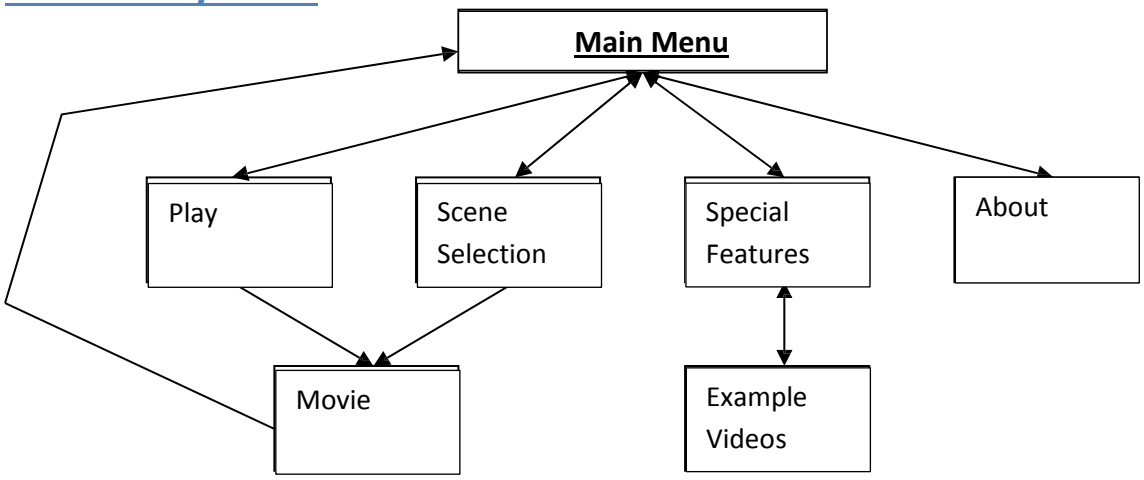
- The Portal Selector when highlighting a different option is at full size
- Whilst changing the selection the portal ring shrinks to nothing then reappears on the new selection
- This method of selection continues throughout the other options the user can choose from





- At stage 1 when the selection has been made, the portal ring and scene selection title both expand until they take up the entire screen giving the effect of an entrance, the menu then fades to white
- From the white stage 2 fades in which reveals a new sub menu options for scene selection

Menu Storyboard



Below is a simplistic storyboard of the menu system in my major work. The main menu consists of 4 buttons, marked a), b), c), and d) to match the theme school book theme I was trying to achieve:

Play

This option simply plays the film, and then returns the user to the main menu

Scene Selection

This allows users to navigate the film without having to watch the whole sequence again. When the aid of animated thumbnails users can easily identify the part of the trailer they wish to start/continue from, and instantly be taken to that location. Within the Scene Selection are 3 portals containing the different scenes users can select.

Special Features

This sub-menu contains a few examples of the tests and processes that enable me to make 'Portal Origins' trailer.

About

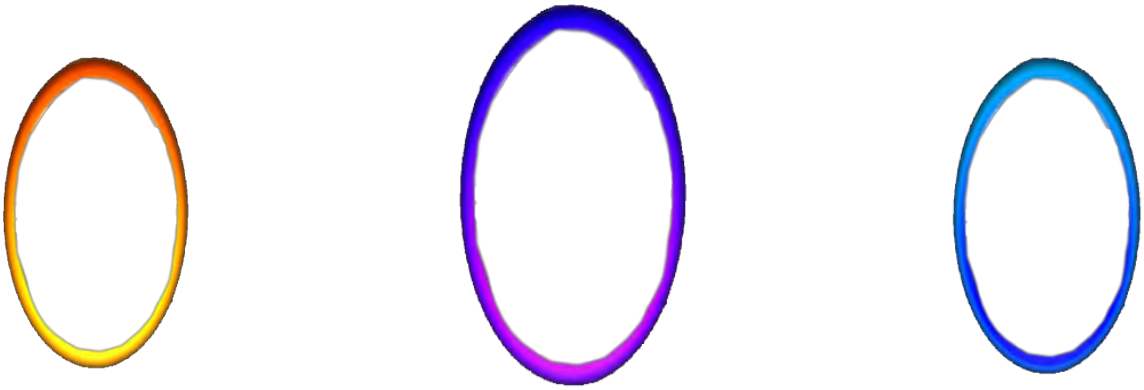
A page with a shot description about the trailer.

Special Effect Testing

Portal Masking Test

During this time I looked up numerous tutorials on how to create the portal effect which involved a lot of complex masking.

I designed the portal in Photoshop where I played around with the colouring and shape of the portal which I then imported into *After Effects* and tweaked with the masking and physics of the portal.



Originally I intended on running into the Portal as if I was going through a door, however through testing I learnt for this special effect to look its best and more realistic, I needed to jump through the portal. Doing tests helped me learn what to and not to do when producing my actual project.

Demon Face Warp Test (Masking, Motion Tracking)

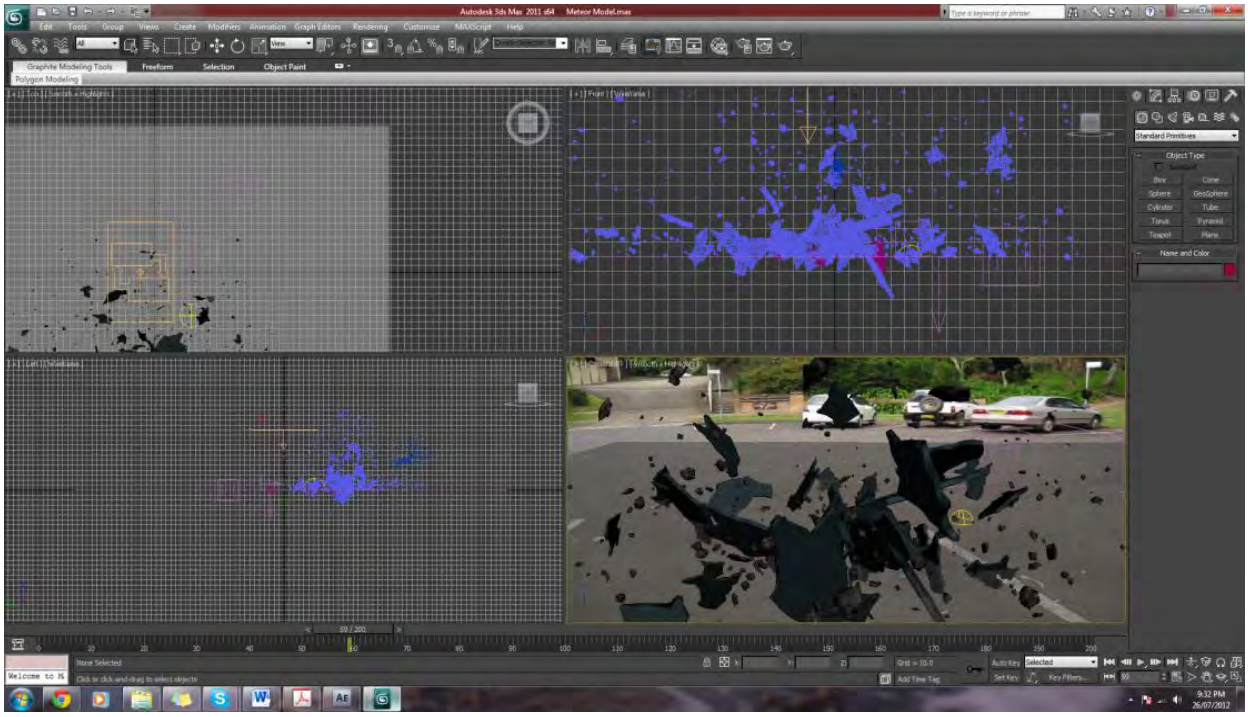
I decided to practice masking and motion tracking in order to create the 'Demon Face Warp'. This effect involved masking and reverse masking which was easy to learn seeing as I already learnt how to mask in my previous effect 'Portal Masking, however the skill of motion tracking was new to me so I watched a few tutorials.

Afterwards I quickly filmed some 'shaky footage' which I would later on motion track and add the demon face. For this effect I got to experience using *Liquefy which* is a powerful tool use for distortion and in this case, the distortion of the face to make it a demon face.

After manipulating the face and changing it to how I wanted it to look I added a mask to the face which changed the colour and texture to give it a more demon effect. Practicing motion tracking and masking was vital seeing as many of the effects in my trailer require these skills. After testing this effect I decided I did not want to have it in this effect in my major work as it didn't really fit in with the theme.

Meteor Effect (3d Modelling) Testing

This effect was a difficult effect as it incorporated skills from After Effects as well as 3d modelling, because of this I had to watch the tutorial on *Video Co-Pilot* numerous times before even attempting this effect. I filmed the sky then dropped the camera down rapidly to the point where the meteor would land. Whilst doing this I had to make sure there was minimal wind as the effect would look strange and unrealistic if background objects were being blown around in the background seeing as this effect uses still frames.



Afterwards I imported the footage into After Effects where I exported the still frame of where I wanted the meteor to land into 3d Max. From there I 3d modelled and animated the debris from the explosion and added textures which matched the road to add realism. Using the physics engine of 3d max I tweaked with the settings for instance: gravity, drag, wind and speed all of which affected the particles drastically. From doing this test it helped me gain a better grasp of one of the more complicated effects of my trailer.

SWOT Analysis

Overview

Based on the idea chosen a SWOT analysis is a method of evaluating Strengths, Weaknesses, Opportunities and Threats of a project. A SWOT analysis is performed by first creating a chart with four boxes, detailing strengths weakness and opportunities. Once this is done, and the relevant aspects of whatever being analysed are added to the table, work is done on thinking up ways to maximises strengths, avoid weaknesses, benefit from available opportunities and minimise threats

Analysis of Myself	
Strengths	**Weaknesses**
• Logical and determined • Filmed Short films before • Previous experience with After Effects • Previous experience with Photoshop • Have watched many films/trailers of all genres	• Never manipulated audio files before • If I am not motivated, I lose focus • Perfectionist, I will waste time developing insignificant parts of the trailer, which won't be noticeable. • I'm bad with time management
Opportunities	**Threats**
• To increase and learn new skills about using software • Gain more experience and skills in design • Develop my time management ability	• No good quality camera available so will have to make due • If weather is bad I will have film another day • If I am bored or demotivated I will lose focus
Analysis of Project	
Strengths	**Weaknesses**
• The trailer will be well compiled and interesting • The effects will look really nice • Aspects of the trailer display a variety of skills	• Many superhero movies have already been made • The quality of the film may be bad People that dislike superhero/action movies will not like it as it is aimed for a particular audience
Opportunities	**Threats**
• Produce a trailer which I am proud of and will entertain others • To increase my portfolio of programs if required in university or future jobs Could add to my show reel if required in university or future jobs	• With music used in my trailer I will need to make sure I use royalty free music or compose my own music • As it is a trailer people will only watch it a few times then get bored of it

Timeline Plan Table

Overview:

The action and time plan is a visual representation of the actions and processes planned to be carried out during an assigned date. The action time plan is also vital, as it is an effective way to keep track of what has to be completed by what date. It is also an essential tool in the organisation of the project, as this plan allows there to be a well-documented record of all the different areas of the project.

Term 4 2012

Week	Planned Work	Achieved	Comments
1	Timeline Plan	No	I hadn't seen what was necessary for the portfolio of my project, and only realised we needed a timeline during the second week. This was then updated every week from then on.
	Ongoing Evaluation	No	Like the timeline plan, I wasn't aware of the need for an ongoing evaluation, and so I started it during the second week, and continued it from then on.
	Record of Procedures	No	The same applies to my record of procedures, and so it was started and continued from the second week onwards until the end of my project.
	Development of Ideas	No	I didn't start my development of ideas yet, as I hadn't thought much about the project so far.
2	Development of Ideas	No	I still haven't started work on the design side of the project. Portfolio work that was to be started last week has begun.
3	Development of Ideas	Yes	I started my development of ideas week, by planning what I could do for my project in a sketch book

4	Statement of Intent	No	Have furthered my development of ideas by creating a list of ideas for my trailer. The statement of intent has not been completed as I haven't grounded all my concepts yet
	Research	No	The research has not yet been conducted as I am not yet sure of what needs to be researched
5	Development of Ideas	Yes	Worked more on some conceptual storyboards of my project, started adding them to the development of ideas section of the portfolio. I also created a rough storyboard for the trailer.
6	Development of Ideas	Yes	Added more information and sketches to the development of ideas section, and also created a more accurate storyboard
7	Selection and Justification of Materials	Yes	I've created a list of selected materials based on what I know I'm going to need, but this is likely to change through the project's development.
	SWOT Analysis	Yes	Completed a SWOT Analysis in preparation for my project. Also created a rough storyboard
8	Finance Plan	Yes	Completed the Finance Plan section of my portfolio. Also developed a more solid
9	Portfolio Improvement	Yes	The work for this week went into expanding on previous sections of the portfolio as well as adding some pictures when necessary
10	Portfolio Improvement	Yes	Small changes were made to the portfolio, adding and modifying information as necessary
Holidays	Testing	Yes	I roughly filmed some footage and did some test on certain effects such as the meteor effect

Term 1 2013

Week	Planned Work	Achieved	Comments
1	Filming	Yes	Started filming my project
2	Filming	No	I didn't film this week but instead did some catching up on my folio
3	Research	Yes	I added more information to my portfolio and did a fair bit of my research
4	Filming	Yes	Shot one scene of my trailer
5	Research	Yes	Completed my research
6	Filming	No	Exam Block
7	Filming	No	Exam Block
8	Filming	No	Exam Block
9	Filming	Yes	Continued filming
10	Filming	Yes	Continued to edit as well as touching up my portfolio after my teacher made a few suggestions when I showed it to him
11	Compiling & Editing Footage	No	I hadn't finished editing my film and so compilation of footage has not taken place but started animating
Holidays	Compiling & Editing Footage	Yes	Finished filming in the holidays and continued to edit the footage with special effects

Term 2 2013

Week	Planned Work	Achieved	Comments
1	Evidence of Safe Working Practices and OH&S Issues	Yes	This section was completed a week prior to the achievement date, as I wished to get ahead in the theory components of my project. All safety issues had already been addressed, and so it seemed like a good idea
	Appropriate Design and Design Modification	No	I pushed back this work until thenext week, and instead completed the compilation of all my footage.
	Evaluation and Relationship of Major Work to Statement of Intent	No	This section was also postponed until the next week in order to complete the production of my project, as it couldn't be completed until then
2	Communication Techniques	Yes	I completed the communication techniques section of my portfolio, and also looked at Encore in terms of DVD menus; exploring the various aspects of its creation
	Computer Applications	No	This section was not completed, due to me completing my planned work of communication techniques, as well as the delayed work of appropriate design and design modification and the Evaluation of Major Work to Statement of Intent
3	Use of Appropriate Industrial Processes and Equipment	Yes	This section was completed along with the computer applications section of my portfolio
4	Quality of Product	Yes	This section was completed on time
	Evidence of Range of Skills	Yes	The evidence and range of skills section was written this week, and completed when I added the accompanying images
	Degree of Difficulty	Yes	I also completed the degree of difficulty section this week

5	Links Between Planning and Production	Yes	Continued work on my portfolio and completed this section of it, as planned
5	Evidence of Industrial Processes	Yes	I also completed the evidence of industrial processes section

6	Use of Industrial Technologies	Yes	This section was completed one week prior, due to upcoming exams
	Evidence of Solutions to Problems in Production	No	I didn't complete this section as I had to study for upcoming half yearly examinations
7	Portfolio Improvement	No	I was studying and taking my half yearly examinations this week
8	Portfolio Improvement	No	I started the evidence of solutions to problems section this week as I had put it off for my examinations
9	Create Menu System	No	This work was not completed as I completed the evidence of solutions to problems
10	Create Menu System	Yes	I started working on my created DVD menu for my project
11	Burn Disc	No	My menu was finished at the end of this week, but I didn't have time to burn it to a DVD
	Product Testing	No	As I didn't have a disc to check, I couldn't test my project
Holidays	Print Portfolio	No	My project was not yet completed, and so I could not complete the sections which needed constant updating. This meant that the portfolio was not ready to be printed. However, I managed to burn the disc and test my product to remove any potential issues

Term 3 2009

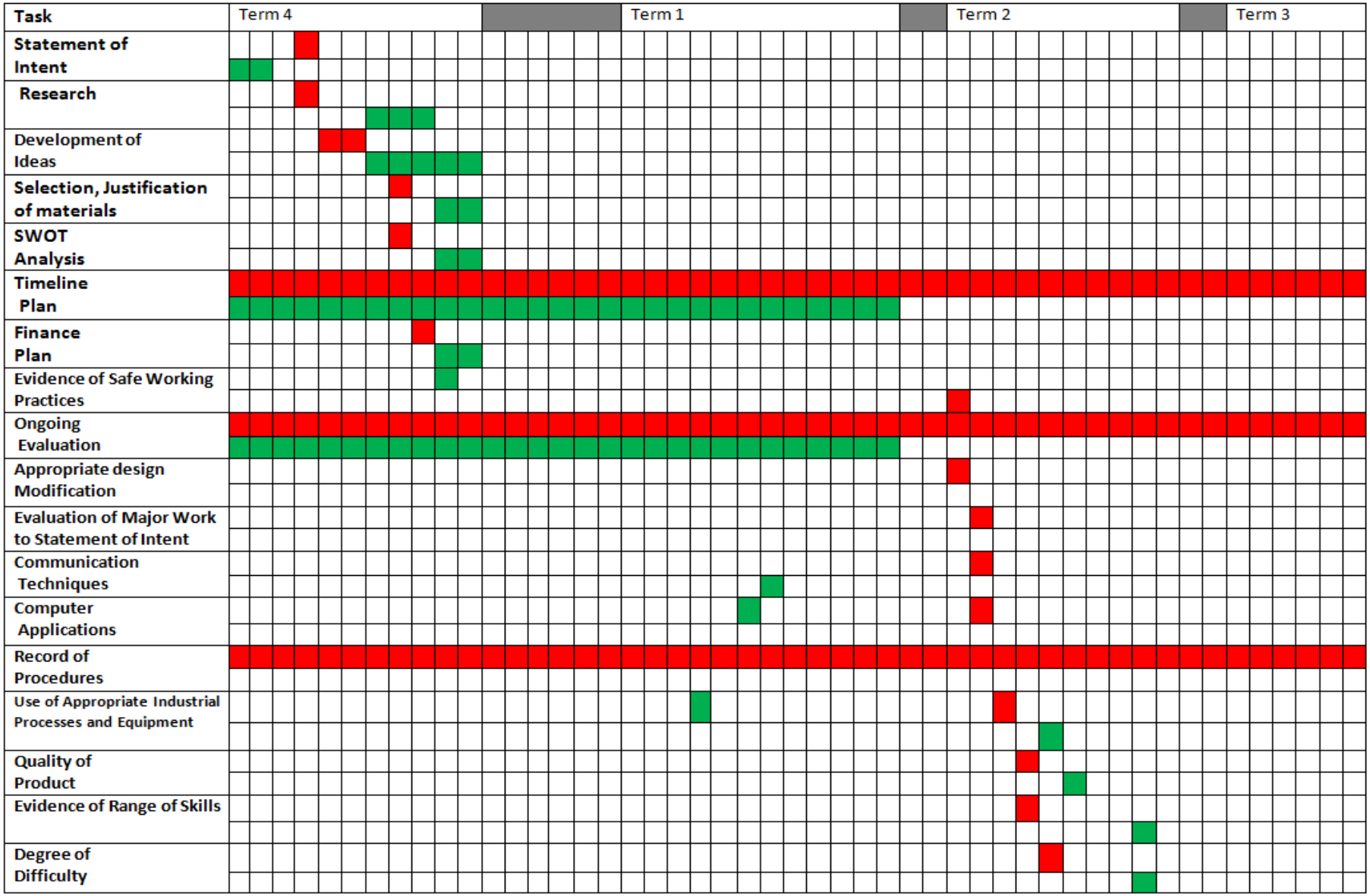
Week	Planned Work	Achieved	Comments
1	None	Yes	I sent my portfolio to Mother's Work this week, and it was printed by the end of the week.
2	-	-	-
3	-	-	-
4	-	-	-
5	Submit Finished Product	Yes	My project was submitted on time with all work completed

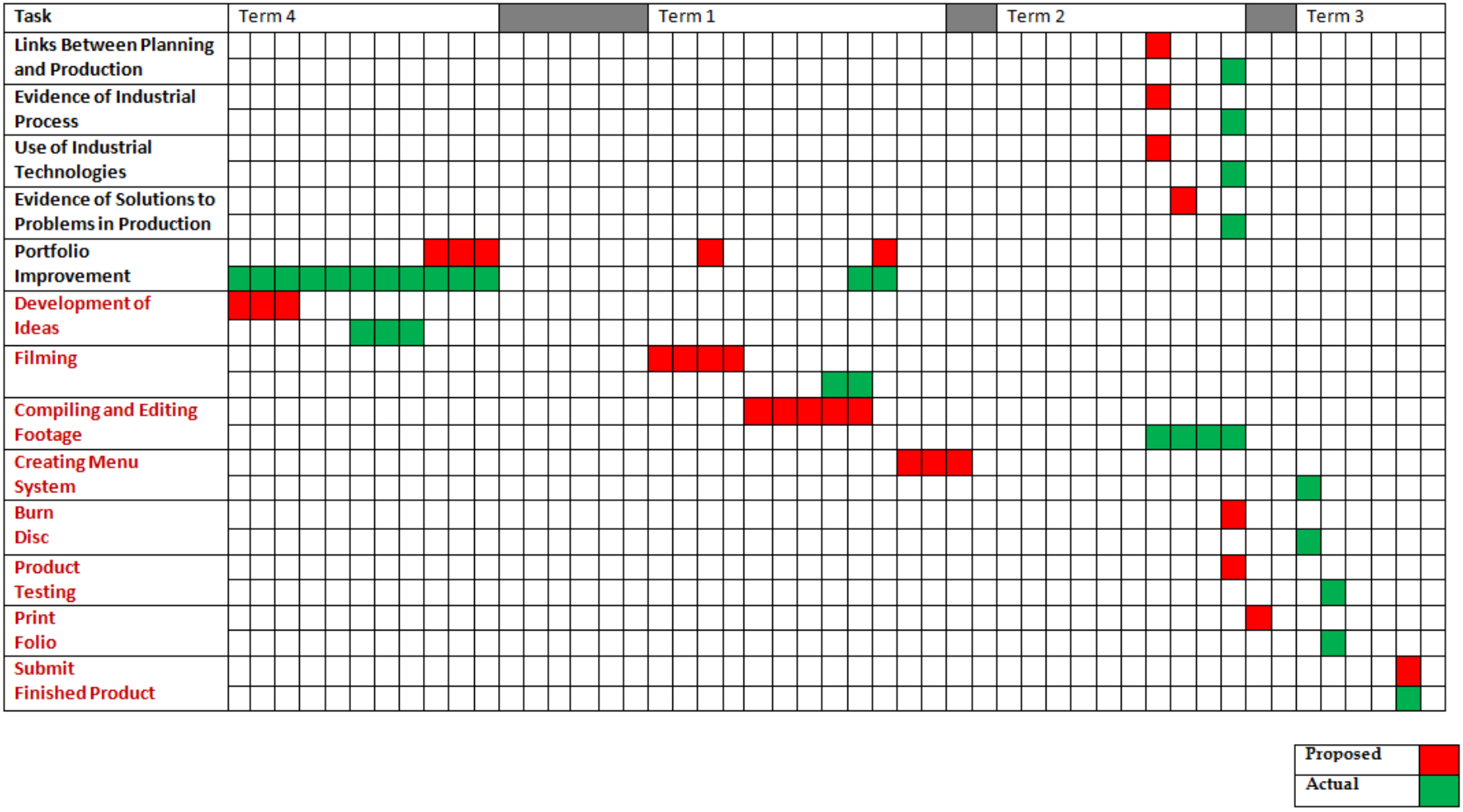
Evaluation of Timeline Plan

As can be seen from my timeline plan table, I have achieved most of my work on time. The only times I didn't was at the beginning of the project when I got off to a late start, and during the second half of the Term 2, when I delayed work to study for my half-yearly examinations.

I believe that by creating a timeline plan I have added the motivation and organisation needed to complete my project on time. I'm certain that if I did not utilise one, I would still have completed my project on time, but it would be of lower quality, and would probably be completed at the last minute. By creating the timeline I have eliminated these possibilities, and have drastically improved the quality of my product.

GNATT Chart


Task
Term 4
Term 1
Term 2
Term 3
Statement of Intent
Research
Development of Ideas
Selection, Justification of materials
SWOT Analysis
Timeline Plan
Finance Plan
Evidence of Safe Working Practices
Ongoing Evaluation
Appropriate design Modification
Evaluation of Major Work to Statement of Intent
Communication Techniques
Computer Applications
Record of Procedures
Use of Appropriate Industrial Processes and Equipment
Quality of Product
Evidence of Range of Skills
Degree of Difficulty



Evaluation: The GNATT chart helped me plan out what I had to do and when I had to do it. However as shown by the chart I did not always follow the proposed time plan, this was due to factors such as homework from other subjects and exam blocks which I had to study for.

Finance Plan

In the development of my project, I will require a number of equipment (hardware) and programs (software) which can be very expensive. The funding of my project was by my parents, but in the multimedia industry the funding is normally by a stock, investors, parent company or a business loan. The industry also sets up a budget to ensure the funds are used most efficiently, determine where and how much funding is needed and to establish that the cost will not exceed what the company is willing or can afford to pay. As I already had all the software needed, excluding an operating system upgrade, and some equipment, USB and DVDs I currently own, I only needed to pay for the components for the computer and printing costs, so I assigned myself a budget of $1500. I plan on purchasing the computer parts at a computer store called "ARC Computers".

Product	Image	Estimated Price	Actual Price
Cooler Master Inferno Gaming Mouse		***$45.00***	**$40**
Cooler Master 750W Power Supply		***$145.00***	**$109**
Samsung S222A DVDRW Drive		***$39.00***	**$24**
Cooler master Storm Enforcer Computer Case		***$100.00***	**$97**
Corsair CML 16Gb (4x4GB) DDR3		***$105.00***	**$110**
Seagate 1TB Hard Drive		***$59.00***	**$118**

Product	Image	Estimated Price	Actual Price
AMD FX 8120 Eight-Core		***$269.00***	**$228**
Gigabyte AMD 990FX Motherboard		***$169.00***	**$137**
Sapphire HD6970 2GB Graphics Card		***$229.00***	**$358**
Microsoft Media Keyboard		***$18.00***	**$11**
DVDs		***$49.95***	**$30**
16GB Cruzer USB		***$51.00***	**$23**
Microsoft Windows 7 Ultimate		***$259.00***	**Already Owned**
Adobe CS5 Package		***$2500.00***	**Already Owned**
Printing		***$20.00***	
LG Monitor Flatron E2260 22 Inch		***$200***	**$147**
Total		**$3001.95**	**$1432**

Evaluation

As this chart shows, the actual cost of producing my product cost a lot less than my estimated cost with a difference of about $1500. There is also a large disparity between the estimated and actual costs software. The price of the software was a rough estimate, and shows that this aspect is indeed the most costly part of producing a product, though in mass production it would be relatively small compared to the cost of producing large amounts of DVDs luckily I already owned these expensive programs and saved a lot of money. However, I did not have to spend the $3000 predicted over the course of this project for several reasons. The first is that I already owned a majority of the software used, and that which I didn't was accessible at school. In fact, no software had to be purchased during the production of my film. The camera was borrowed from my friend, and the only aspects I had to pay for during the production of my project were for the product's presentation. In total, the amount of money I spent over the course of the project was $1432 which was mainly from the cost of the computer; I was well within my proposed bounds.

Chemistry Lab Scene Screenshot

Record of Production

Video capture from cameras
In order to edit the footage I had captured I needed to download and convert the footage properly. The process was different for the Handy Cam and Canon DSLR. With my Sony Handy Cam, the footage was recorded onto the internal hard drive as .m2ts files. M2ts files are high definition variants of the mpeg-2 format used by AVCHD file systems and Blu-Ray disks. They support up to 1080p HD quality but cannot be edited by any program. In order to use these files, I had to run them through Compressor and export them out as uncompressed .MOV files. The uncompressed .MOV files allow 100% of the quality of the original file but saved with the MOV codec, meaning I can edit it in Sony Vegas and Aftereffects.

With the Canon DSLR, the footage was saved as standard .MOV files but at a higher frame rate of 60fps. I wanted my footage to be slowed down, but when I imported the footage into Final Cut it didn't play at 60 frames per second. It had been converted to play in normal time at 25fps. After some research into this issue I found that there was an easy fix that involved running it through compressor in a very specific format that allowed it to be read by Aftereffects and Sony Vegas.

Colour Correction
Colour correcting all the different files took all the different files took a lot of tweaking and adjusting to get a uniform look throughout the movie trailer. The standard adjustments I made for each shot was a bit of contrast, light diffusion to soften the look 3 way colour correction involving a reduction of the greens and blues and a final addition of some inverted saturation to brighten the overall look. The 3 way colour correction gives a uniform colour grade throughout the video, so each shot required a different approach as to how much colour was added to the lows, mid and highs.

DVD Menu Creation
I had no previous experience with Adobe Encore, the DVD authoring software I used, so I had to view several tutorials to understand the basics. As I am able to learn new software reasonably quickly, it was easy to grasp the basic concepts of how to use this program. The process of creating the DVD menu/s involved designing the separate menus in Photoshop and importing them in to Encore. I then had to link each button to its correct sub menu/ video. The process of linking to a video was slightly different as it involved dropping the video into a 'timeline' and then linking the button to that. The final process involved setting up the DVD render setting and then compiling and burning the whole project onto a single sided DVD.

Camera Dolly Construction
I needed to construct a Camera Dolly to use to shoot one of my scenes in my trailer. I looked at tutorials from the book 'Killer Camera Rigs' and came to the conclusion I wanted to make a 'Dark Passage Dolly'. Instead of using the original plans of using a wheel on track I

constructed a Dolly that acted similar to ski's and slid along the track. The construction of the Dolly involved using power tools in the wood work room so I had to take a safety course online before I could use the power tools and earn each of the different certificates.

After completing the knowledge test I was then able to commence the construction of my camera dolly.

1. Two PVC Pipes was screwed onto a plank of pine, this was down twice with equal measurements

2. The two sliders were glued to a large pine board

3. The two sliders were clamped and left to dry

4. 1 PVC pipe was screwed to a plank of pine; this was done 4 times to create the track

5. The tracks were aligned and sealed together with duct tape as to allow deconstruction and easy transportation, the track was lubricated and the top slider board was placed on top, the Dolly was ready to use.

Video Stabilizing

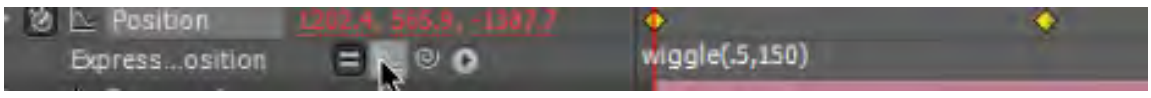
Stabilizing shaky footage before it could be edited was necessary as most scenes were shot without a tripod in order to achieve a more realistic/aesthetic shot. The standard method I used in after effects for each scene was place a track point on a point of contrast and track the motion after the key frames had been logged I was able to stabilize the footage, the composition had to be readjusted to a smaller size to avoid the video from leaving the work area and revealing blacks. The stabilized footage was then able to have special effects applied to it without shifting out of position.

Motion Tracking

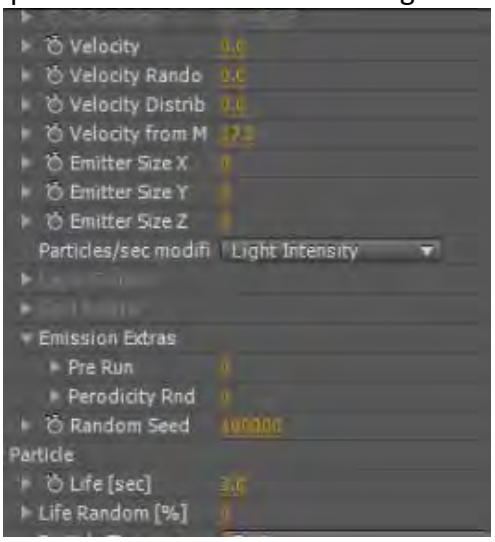
Motion tracking was necessary for scenes such as the meteor scene that included a fast downward pan, which were shot by hand. With motion tracking two motion trackers were placed on points of contrast, one to track the X,Y movements and the other to track the Z movements. The tracking data was then applied to a 'null object', all special effects/ images that weren't part of the original video were 'parented' to this null object in order to give the illusion of the effects actually being in the scene.

Smoke Trails Scene

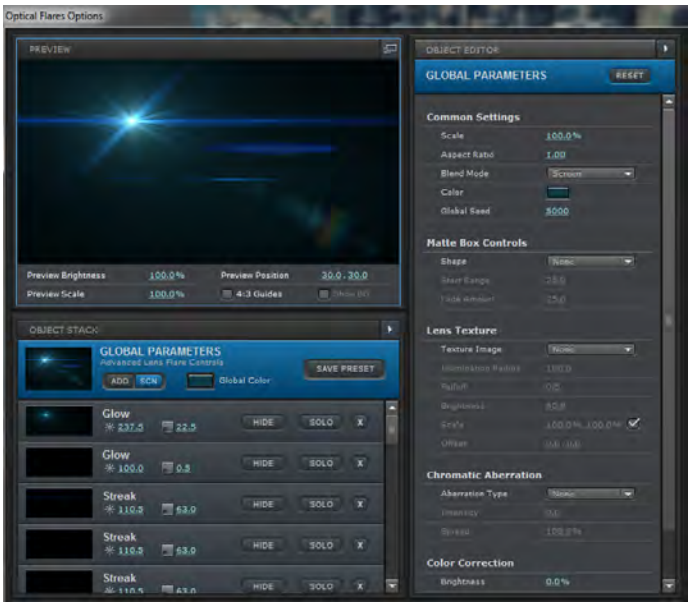
This was the opening shot of the video; it involved using a still image and giving the illusion that it was video footage. The scene included a creating a light and animating it to travel across the scene, in order for the this to look convincing a value had to be added to the 'wiggle' to give the appearance of a slight shake in the movement of the glowing orb.



As the light the flies through the city it leaves a trail of smoke, this trail of smoke was created using the plugin ‘Particular’, this proved to be useful as it gave the smoke a realistic look and allowed for the tweak of the particle physics and air resistance to give the smoke a realistic look, this step took a lot of careful tweaking.

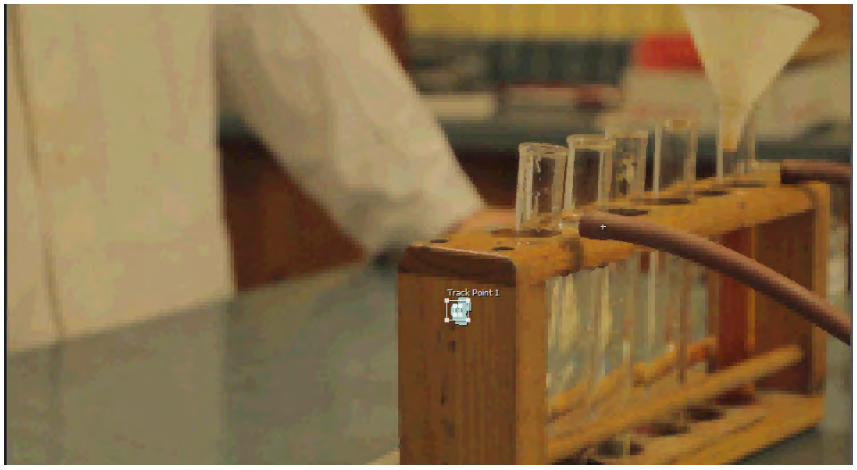


After the animation had been finalised and the smoke particles had been finalised the orb was created using the plugin ‘Optical Flares’ using this plugin I was able to tweak the flickering of the light, the glow radius, light colour and various other aspects in order to give the orb a nice finish and look realistic. After all this was done the effect was finished.

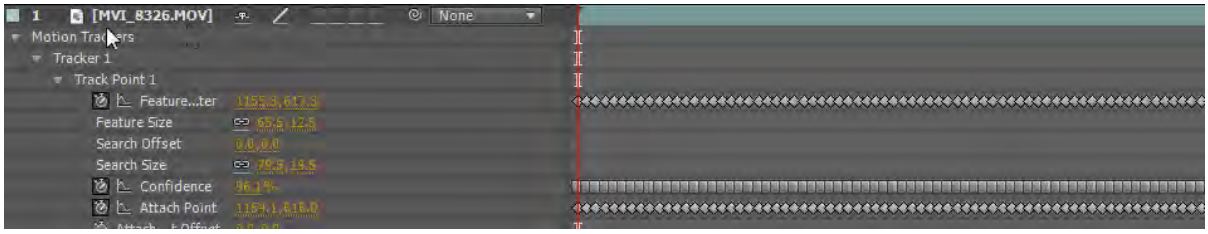


Close Up Chemistry Experiment

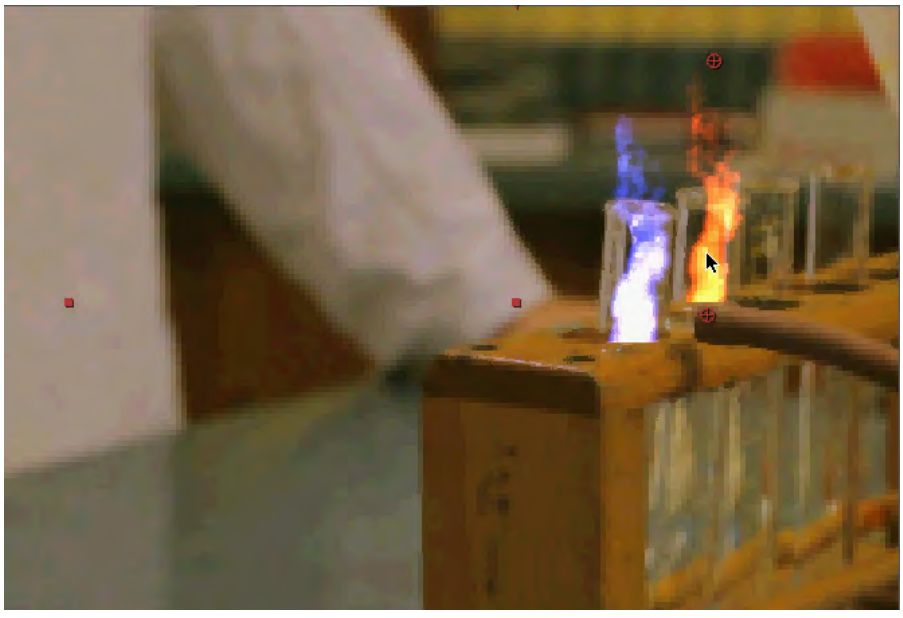
This scene was first stabilized as the footage was too shaky I placed the motion tracker on a brown knot in the wood of a test tube rack as it was the best point of contrast I could see



After the motion was tracked the movement of the tracker was recorded into key frames and the composition settings readjusted to avoid the black background from showing when the video moved around to stabilize.



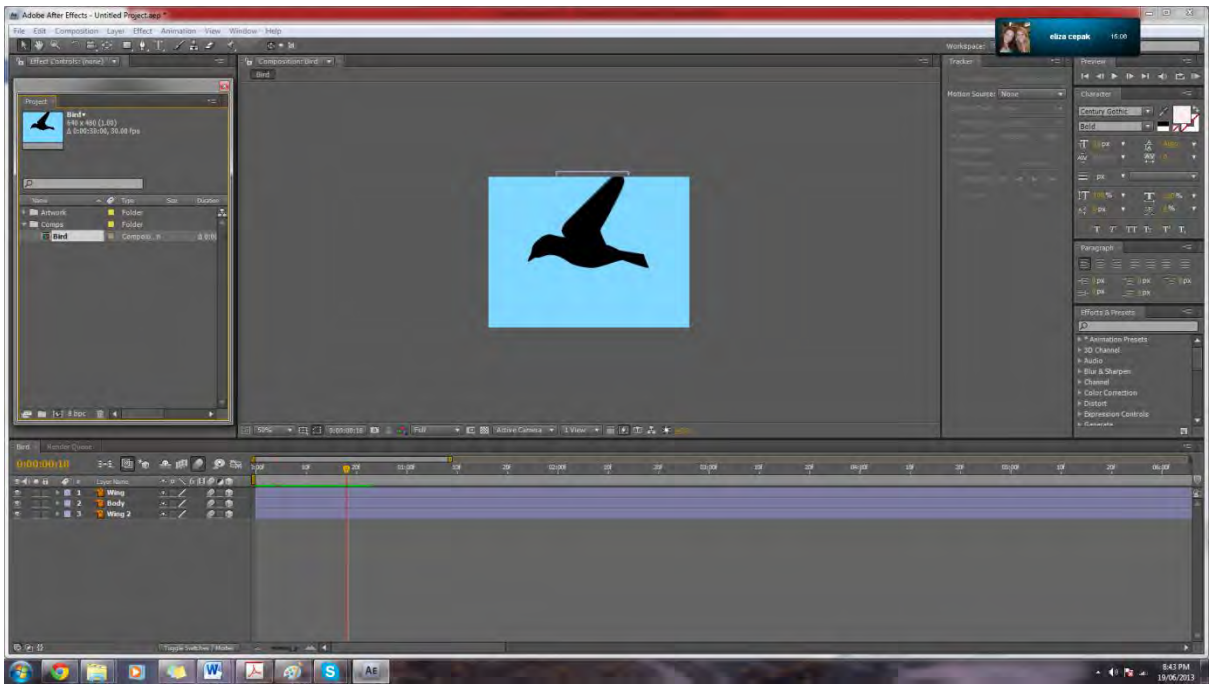
Animated Flames were then added to the empty test tubes and their particle settings and colour were modified in particular, the video layer was then duplicated and overlayed with the opacity turned down to give the illusion that the coloured flames were inside the test tubes.



Bird Flock Scene

I first drew the bird in photo shop then imported it in to after effects as a .PNG

After it was imported into after effects I animated the image to appear as though it was flying.



After the bird was animated I imported the bird into my recorded footage, from there I duplicated the bird until I had a flock, from there I made a huge flock and off-setted each bird slightly so that the flock was not synchronized as that would look unnatural.

Portal Origins Titles

I first added text in after effects using the text tool and added a metal texture to the text and layered the text to give it a three dimensional look. I used the plugin CC Pixel Polly which allowed me to tweak with the settings and make it appear that the text shattered. This alone was originally going to be the final title. However I decided to add a blue glow to the text giving it a better look using the glow plugin with this I tweaked with the glow intensity and glow radius. I finished the titles of with a blue optical flare which I tweaked to flicked giving the look that it was shining.

Light Saber Scene

The Light Saber Scene involved first making a white solid and Roto-scoping it over the red pole frame by frame, after each frame had been Roto-scoped the solid was duplicated the opacity of each one was off-setted by a certain value and feather out giving the solid a glowing look, the solid was then colour balanced to the colour blue.

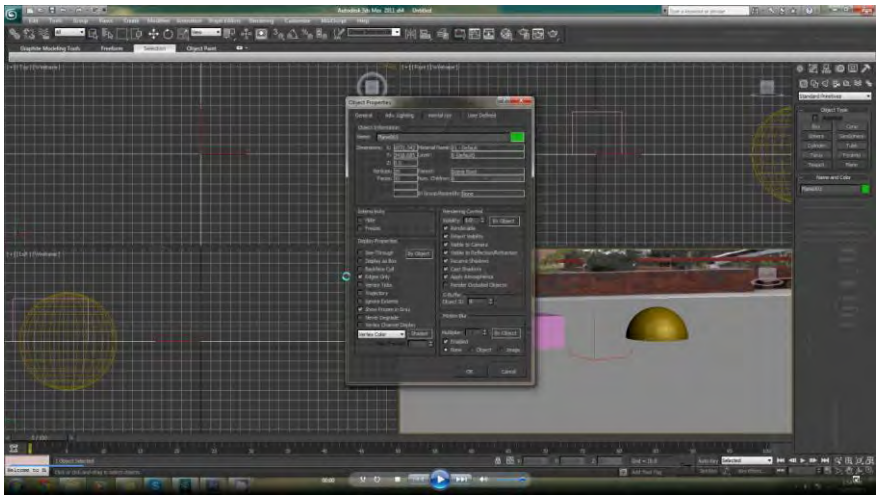
Shooting Portal/ Entering Portal Scene

The portal was created in Photoshop which was then imported into after effects. I then used a still captured from my video recordings and placed it over the portal and masked out a circle the same size as the portal using the elliptical mask tool so that only the fraction of the image inside the portal was visible, fractal noise was then added to the image to make it appear swirly. The portal rim was polished off with the glow plug-in where I increased the glow radius and intensity. Using the 'Corner Pin' plug-in I pinned the portal to the door to give the appearance that it was actually on the door. As the portal gun was fired I used a muzzle flash which I positioned over the gun and key framed the opacity to turn on and off over three frames. As this was happening I changed the scaling of the portal to expand over a few frames all this would give the appearance that the portal forms as the gun is fired. As the character goes to enter the portal I had to use mask over the character so he could walk in front of the portal before entering, as the character entered I used the bulge plug in to make the portal and character bludge before he disappears into the portal.

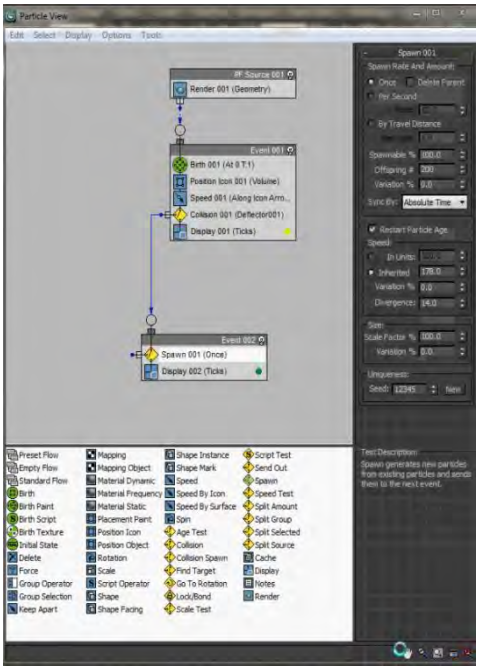
Picking Up the Portal Gun Scene
This scene mainly consisted of filming techniques such as the smooth upward pan that took many attempts followed by the forward pan using the camera dolly. I used the optical flare plug-in to give the portal gun a shiny look.

Meteor Crash Scene

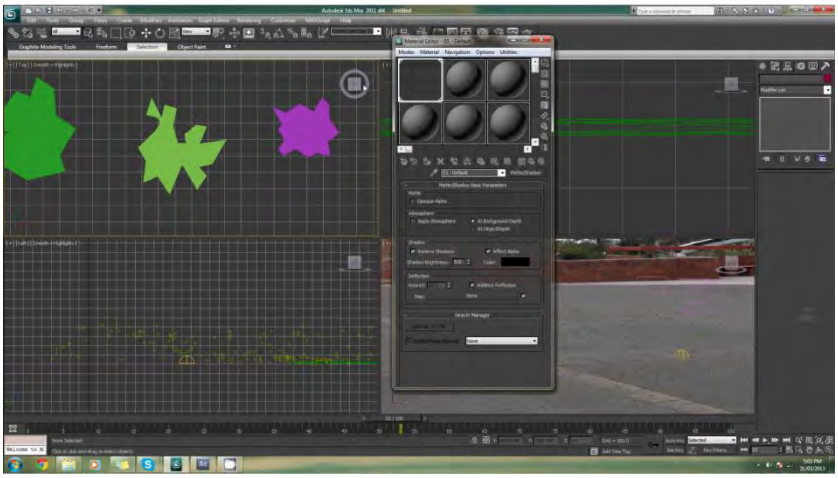
This scene was firstly shot and the filming technique used was a fast downward pan, after this shot was captured I captured a still frame and imported it into 3d max. I then created a plane which I added lights allowing the resulting 3d model to have similar lighting to when the real time footage was captured.



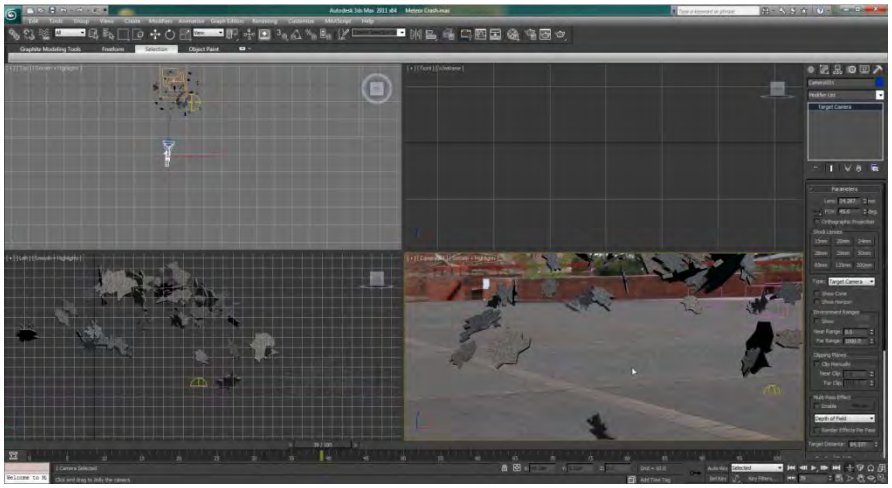
After the lights were I added a 'PF Source' which would generate particles which would eventually imitate the movement of meteor debris, following this, a deflector was added to the plane which would allow for the particles to bounce like meteor debris would if it hit the ground. This process involved a lot of tweaking with the 'particle view' interface in order for the particles to scatter and bounce in a realistic manner.



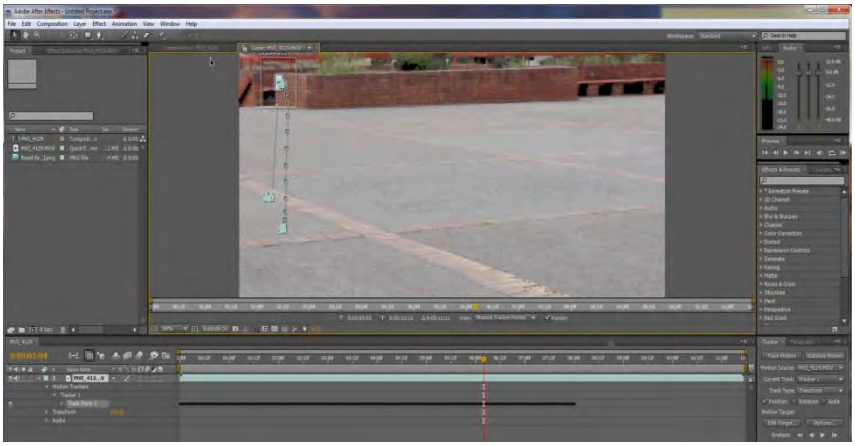
After the particles had been tweaked to look realistic, I then 3d modelled the debris which consisted of concrete pieces and dirt particles during this process I altered the bevel settings, subdivided the pieces giving the pieces variation so they would not look the same and finished off with apply textures to the 3d models.



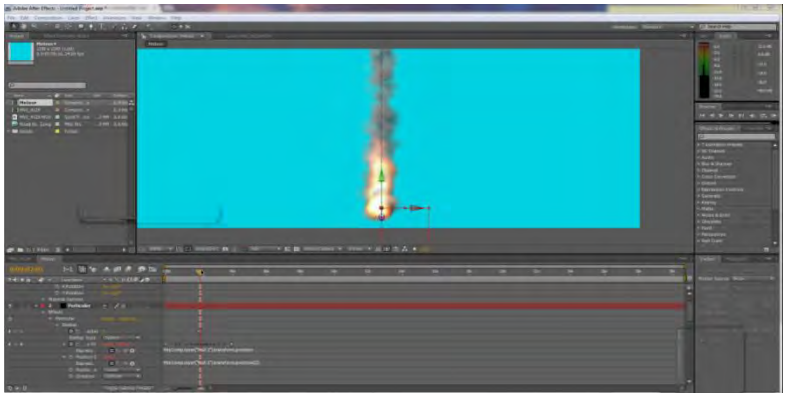
The particles had to be re tweaked in particular the rotation and particle spawn.



The finished 3d model was then exported as a .PNG sequence and imported into after effects. The raw footage was first motion tracked; this information was edited onto a null object.



The meteor was created in particular and was parented into to the null object the meteor was then animated to crash into the ground.



The 3d model, ground crack was added to the footage, and was parented to the null object. This was all adjusted until the animating of the explosion match the meteor crashing and the ground cracks appeared at the right time. After this had been done smoke was added and the colour balance was changed over time to give appearance of impact glowing smoke and general grey smoke.

Use of Proper Industrial Processes and Equipment

The record and explanation of industrial processes and equipment, as well as their relevance and appropriateness to my Major Work is important as draws attention to the reason of their choice and their effect on the project. Without it, people may think that some parts of the portfolio are completely irrelevant and do not hold any meaning within the context of my film's production. However, by highlighting and explaining their use, I can show both how and why they are used which makes my portfolio in general more relevant to my Major Work and will result in a better mark for the theoretical aspects of my work, which is one of the aims of this film's and portfolio's production.

Ongoing Evaluation

An ongoing evaluation helps to help map a developer's thoughts and processes through the creation of a product. It also allows them to critically analyse their project in terms of time remaining and quality of the product. With reference to a timeline plan, it can explain why certain parts of a project were not completed on time, and in an industry position, can be used to examine the progress and feelings of other members who are a part of the project.

Industrial Processes

Selection and Justification of Materials Comparison

By creating a list of equipment that I would use, I was able to compare and contrast the advantages and disadvantages of the options I was provided with. Along with a brief description, the specifications reflect why I chose certain hardware and software over others. This process made it easier to make decisions about which materials to use, based on their properties which are relevant to my trailer's production. This allowed me to improve the overall quality of my product.

SWOT Analysis

By being able to create a list and visually compare the strength and weaknesses and the opportunities and threats of myself and also my project, I was able to better develop ideas and think of plans in my mind. By presenting the information in a clear, easy to read table, I also made this process easier for myself. This process also helped me realise problems I may have run into during the course of my trailer's production before I found them, which saved me some time and also helped me better plan out my project.

Timeline Plan

By creating short and long term goals, I was able to better focus on and complete tasks on time. This allowed me to plan my whole project, and made sure that I wasn't too stressed about anything by breaking it up into small, manageable amounts. It also allowed me to see how far through the project I was, boosting my self-esteem and determination at times. Part of my timeline plan is presented in the format of a Gantt chart, which allows others myself and others to easily review my overall progress throughout the product's development, and also allowed me to see what work I should be focused on completing. My tabulated timeline plan reinforces my planning, and is a more in-depth record, which acted more as a checklist during production.

Pictures/Visual Aids

Pictures allow for a more engaging experience when reading the folio, and hold the interest of the reader for longer. By using pictures, I have been able to create a more professional looking, and pleasing folio which looks a lot less dull. This was an appropriate process to undertake as the examiners marking my portfolio will be seeing many, and by using pictures it helps to keep them entertained and spaces out chunks of text.

Testing

Before the product was handed in for marking, I had to make sure that I tested all aspects of it, in order to make sure there were no errors. This included taking every DVD menu path possible, checking all of the DVD menu transitions, playing back all content on the DVD and making sure each chapter from the scene selection menu worked correctly. Testing is used in the industry to make sure there are no faults in the product, and is usually conducted by a large group of people. The testing stage is the final stage of quality control in a product such as a DVD, as it cannot be changed dynamically in the way a website can be taken down and fixed, or an online video removed, corrected, and republished. In the multimedia industry, testing is a very large part of production, as the product must not be faulty when it is released. If it is, expensive recalls of the product must take place, which affects both the company's profit and public image of quality.

Conceptual Design

All products of Multimedia start with a collection of ideas which are drafted and reviewed. A critical stage after this is the development of conceptual designs. Concept work is able to effectively communicate the direction the project will be created in, and when involved in team projects is a necessity in maintaining consistency. I used concept artwork for both the design of my character, and the DVD menu system and layout. This process was needed to make sure that I had a decided theme, mood, and feeling to my short film, and that these aspects were reflected in all parts of its presentation including the film itself, the DVD design, and the portfolio's cover. Conceptual work creates a unified design, and is a necessity in the multimedia industry for both reference and inspiration during the product's creation.

Diary

The diary I kept through the production of my Major Work allowed me to keep a concise and easily accessible medium to store and review ideas about my project. It could easily be transported to and from school, and acted as the hard copy of my conceptual work, which is necessary in an industrial environment in co-operating ideas and features of a project to others. The diary also housed many of my design and concept works, which were constantly referenced to throughout the production of my short film.

Risk Assessment

Risk assessments document risks in two aspects – their probability of occurring, and the degree of danger in the risk involved when they occur. Risk assessments help to find and minimise or resolve any potential dangers during the production of a product. Although there were not serious dangers to resolve in my project's creation, due to the fact that the school classroom has regulations which means it must be a safe learning environment, problems such as overworking and blocked aisles are issues which had to be considered and minimised.

Meeting with the Teacher

Meeting with the Multimedia teacher was extremely helpful and allowed me to gain knowledge and advice on how to approach my major work project. I received ideas on how to structure my folio and advice on what content my folio should contain. A major influence on the major project was the useful criticism I received from the teacher with this criticism I added to the places that I was lacking in order to give my folio and major work the best finish possible.

Presentation

DVDs, DVD cases, and a box were used to present the finalised copy of my product. The DVDs and cases were to give the project a professional look and quality, and the box was simply to present the entire package in a neat, effective manner.

Industrial Equipment

Industrial level equipment is used in this project and it is the Multimedia industry that sets the standard for these production tools. Using equipment which strays too far from the recommended equipment would make the project less practical and more time consuming. By following industry standards as much as possible, I was able to create a very high quality product.

Computers

Computers were not appropriate pieces of equipment, but rather necessary pieces of equipment, even on the most basic level in that the film would be produced on a digital format, DVD. Computers were used for almost all aspects of my project's creation, including animation, video editing, sound modification, research, and production of this portfolio with the use of word processing technology.

Software

Software is programs in which various aspects of the production stage take place. For example, some of the software utilised and their use include:

- After Effects – Combination of animated and filmed footage, as well as some video effects.

- Premiere Pro – The compilation of combined footage which is then synched with audio and exported to create the movie file.

- Photoshop – Used to capture screenshots and edit pictures for the portfolio and aspects of the production's design such as DVD case.

All these pieces of software were used appropriately for their intended purpose. However, they had an added advantage of all being created by a single company, Adobe. This meant there were useful features between the different programs such as real time editing of Encore menus in Photoshop and instant updates of exported video files from After Effects in Premiere Pro, which furthered the appropriateness of them in my short film's creation.

Digital Camera

Like the use of computers, this was also a necessity due to the nature of my product. As I was to animate characters over real footage, I had to have a way of capturing and recording my real footage. The digital camera I used allowed me to capture a large amount of footage and at a high quality, which are the two most important of a camera, and so it was appropriate for use in the production of my trailer. I also used it to take photos for the Safe Working Practices aspect of my Portfolio.

Printer

A printer was necessary in the physical production of my portfolio and certain features of my product's presentation such as the disc and DVD case design. In the multimedia industry, when a product that involves printed aspects is mass produced it is created at large factories which perform this task very quickly and at a high level of quality. The speed of the process is simply due to the sheer volume of production, and as my portfolio was only being printed once it wasn't an appropriate feature to follow up. However, the high quality is, as I wish to make the product as professional as possible, and so having the portfolio and designed aspects professionally printed is an appropriate decision.

DVD Burner and Discs

As my project was to be produced on a DVD, both a DVD disc and DVD burner were needed. The burner is used to write all the project files onto the DVD, and save them there in a format which can be read and interpreted by DVD players to display my film. Without either of these pieces of equipment, I would not have been able to produce my work in a DVD format.

Speakers

Speakers were used to monitor and test the audio output of my project. This first took place on my computer as it was easily accessible and acted as a rough guideline, but then was tested on the TV that would be used to present my film to the markers, so that I could fine tune the sound for optimum performance on that television. As the presentation of my work was controlled, optimising the sound output on that device was an appropriate decision to maximise my marks.

Removable Hard Drive & USB Stick

These pieces of equipment were necessary for the safety and transportation of my project's files. Although they can both perform each other's actions, where one is weak the other is strong. For example, a USB stick is light and easily portable while a removable hard drive is heavier and my model actually requires a source of power. However, a removable hard drive can hold a lot more data which can safely back up the project's files, while a USB doesn't have the capacity to do so. Both these pieces
of equipment are appropriate for their contribution to the project's safety, and accessibility on different computers.

My working environments consist of my room at home and the school classroom. As the classroom is a regular high school classroom, OH&S hazards are very small compared to the possible injuries and dangers that others are exposed to in the industry. However, the classroom is not void of hazards, though they aren't very dangerous. With the identification, acknowledgment and resolution of these health and safety issues, we can almost eliminate they could potentially impose.

Bird Flock Scene Screen Shot

Safe Working Practices and WHS Issues

By documenting potential safety issues in the classroom, as well as any means which are in place to prevent them, I can effectively evaluate the classroom in terms of student safety and well-being. The use of a risk assessment chart also helped to better analyse safety concerns in the classroom.

Risk Assessment

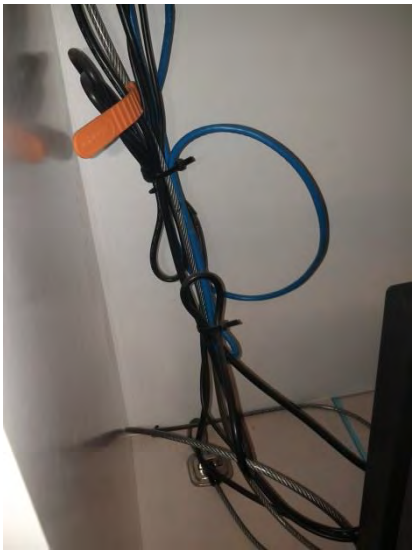
A risk assessment chart compares an events probability of occurrence with the consequences of its occurrence to determine whether it is a high or low risk. In the multimedia industry, the use of a risk assessment chart can help companies identify which working practices may require more focused and dedicated safety procedures. Below is an example of a risk assessment chart, and is the model used by the University of New South Wales.

Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Medium	High	High	Very High	Very High
Likely	Medium	Medium	High	High	Very High
Possible	Low	Medium	High	High	Very High
Unlikely	Low	Low	Medium	Medium	High
Rare	Low	Low	Medium	Medium	Medium

Definitions of Consequences

- **Insignificant** – Injuries not requiring first aid
- **Minor** – First aid required
- **Moderate** – Medical treatment required
- **Major** – Hospital admission required
- **Severe** – Death or Permanent Disability

Potential Hazard: Tangled Wires/Fire



Risk

Tangled wires can become heated during extended use, and in some cases have even caused fires. In the case of a fire, it could destroy large amounts of equipment, costing large amounts of money and time as the data contained on the hard drives will be lost. The fire could also injure or kill students in the classroom.

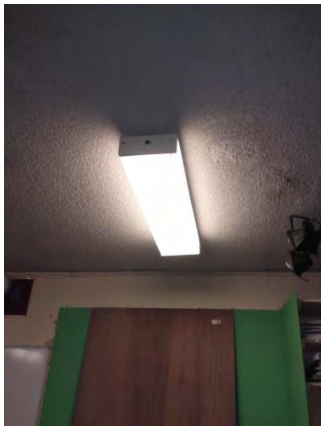
Risk Assessment

Likelihood: Rare **Consequence:** Moderate **Assessment:** Medium Risk

Solution

Keep wires untangled, and if possible use ties or cord tubes to maintain them. Precautions against fire such as evacuation plans and fire extinguishers are also recommended.

Potential Hazard: Lighting



Consequence

Without the availability of adequate lighting, eyes can become sore and worker morale also drops in a darker environment. It also decreases visibility, which can lead to further danger when coupled with objects lying on the ground. If only artificial lighting is used, workers may experience discomfort if the lights are fluorescent when exposed to them for long periods of time (due to their flickering nature)

Risk Assessment

Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk

Solution

By keeping a balance of natural and artificial light, the room can be efficiently lit and improve students' health, work quality, and mentality.

Potential Hazard: Lack of Ventilation and Temperature Control

Consequence

Without ventilation and temperature control, students can become very uncomfortable in their working environment. Whether it's hot, cold, or stuffy, if the proper working conditions are not met, it can damage the production speed of a project and also the student's wellbeing.

Risk Assessment

Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk

Solution

By making sure there is adequate ventilation in a room with the use of windows, and temperature is optimised by use of fans and are conditioners or heaters, a much more productive and student friendly environment is created. A properly controlled temperature can also make sure computers do not overheat and become damaged.

Potential Hazard: Ergonomics

Consequence

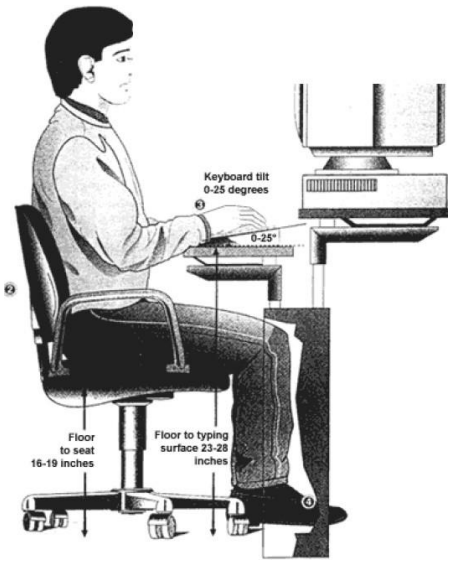
Students working in a non-ergonomic environment may face long and short term injuries. Short term injuries include muscle cramps, headaches and general discomfort, while long term injuries include frequent back aches, RSI, and arthritis.

Risk Assessment

Likelihood: Likely
Consequence: Minor
Assessment: Medium Risk

Solution

Although it is not practical for the school to provide each student with an ergonomic mouse, keyboard, chair and plenty of leg room, regular breaks and stretch exercises can help prevent both short and long term injuries. By utilising an ergonomic sitting position this problem's effects can be reduced. To remind students of this practice, signs could be placed around the classroom.



Ergonomic Sitting Position

Potential Hazard: Working for Extended Periods of Time

Consequence

Working at a computer screen for 75 minutes can have many physical effects such as RSI, strained eyes, and back pain, as well as negative mental consequences for the students.

Risk Assessment

Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk

Solution

By breaking up the time spent on the computers, students are able to prevent these problems from occurring. Some of the activities students can perform include:

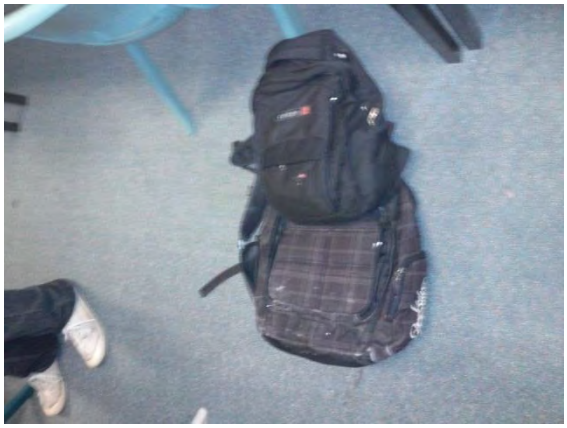
Stretching – Relieves muscle strain and gives the student a break from their work. Allows for a short amount of relaxation, meaning the student doesn't become bored.

Walking around the classroom – Gives students a break, relieving them from stress and boredom, and also allows them to see the work of other students, which can motivate them to continue theirs.

Socialising – By allowing students to talk among each other for short periods of time, they are able to remain social and happy in their working atmosphere

However, these activities must also take place in a controlled manner, as a balance has to be reached between work output and student happiness.

Potential Hazard: Blocked Walkways

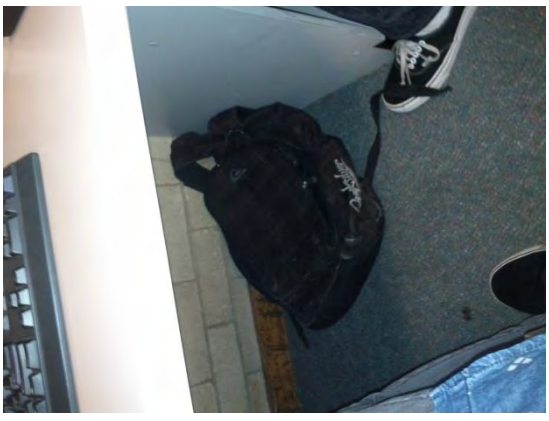


Consequence

Students may trip over and injure themselves on bags and other items left in the middle of the walkway.

Risk Assessment

Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk



Solution

Make it a standard procedure to put all chairs and bags under the desks so that people don't trip on them. Signs could be placed around the room to remind students of this procedure.

Potential Hazard: Accidents Whilst Filming

Consequence

During the filming of my project I had to focus on getting the right angle and distance in my shots, and my actor needed to focus on what she was doing during the shot. This meant that neither of us could accurately assess the safety around us which could lead to collisions with other people or obstacles.

Risk Assessment
Likelihood: Unlikely
Consequence: Minor
Assessment: Low Risk

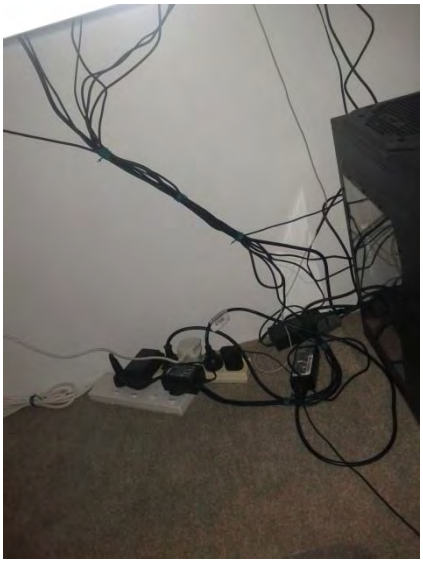
Solution
During the filming of my project there were always three people present; myself, my actor, and an observer to make sure we were safe during the filming. This meant that my actor and I could focus on the project's creation, and the observer could warn us of any potential safety issues we were about to encounter.

Signs and Information

Signs are an integral part of promoting a safe working environment by reminding people of practices which need to be followed and appropriate safety procedures in case of an accident.

Sign	Message conveyed and techniques
Fire Extinguisher Sign 	The sign clearly displays what the fire extinguisher can be used for, including "*paint oil, electrical and other liquid fires*" The sign is effective due to its simple design and easy legibility. This means that in a situation when the user may be panicking, they do not have to look through a document of tiny print to see if the extinguisher is suitable for their current emergency. The sign is also bright red in colour, which is useful in tense situations as it makes it easier to locate.
Evacuation Plan 	The purpose of this sign is to map the path that students and staff must take in the case of an emergency evacuation due to an event such as a fire. By using a map which clearly highlights the students' current location and the fastest path they must take, their attention is drawn to these bright yellow details over the rest of the information which has little importance to them. The sign also has a highlighted set of worded instructions, a cautionary step in case people find the map hard to interpret or follow.

WHS at Home



Potential Hazard: Tangled Wires/Fire

Risk

Tangled wires can become heated during extended use, and in some cases have even caused fires. In the case of a fire, it could destroy large amounts of equipment, costing large amounts of money and time as the data contained on the hard drives will be lost. The fire could also injure or kill inhabitants of the house.

Risk Assessment

Likelihood: Rare **Consequence:** Moderate **Assessment:** Medium Risk

Solution

Keep wires untangled, and if possible use ties or cord tubes to maintain them, as there is no fire extinguisher at home prevention is the best solution. In the case of a fire call 000.

Potential Hazard: Lighting

Consequence

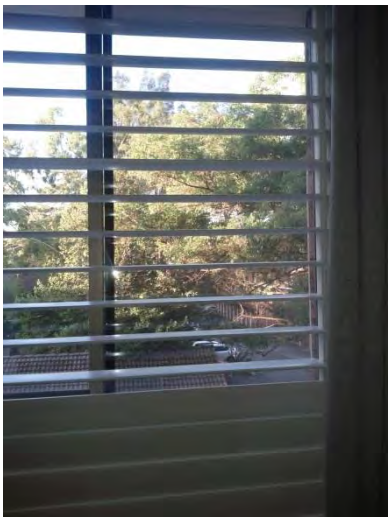
Without the availability of adequate lighting, eyes can become sore and worker morale also drops in a darker environment. It also decreases visibility, which can lead to further danger when coupled with objects lying on the ground. If only artificial lighting is used, workers may experience discomfort if the lights are fluorescent when exposed to them for long periods of time (due to their flickering nature)

Risk Assessment

Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk

Solution

By keeping a balance of natural and artificial light, the home can be efficiently lit and improve workers health, work quality, and mentality.



Potential Hazard: Lack of Ventilation and Temperature Control

Consequence

Without ventilation and temperature control, workers can become very uncomfortable in their working environment. Whether it's hot, cold, or stuffy, if the proper working conditions are not met, it can damage the production speed of a project and also the worker's wellbeing.

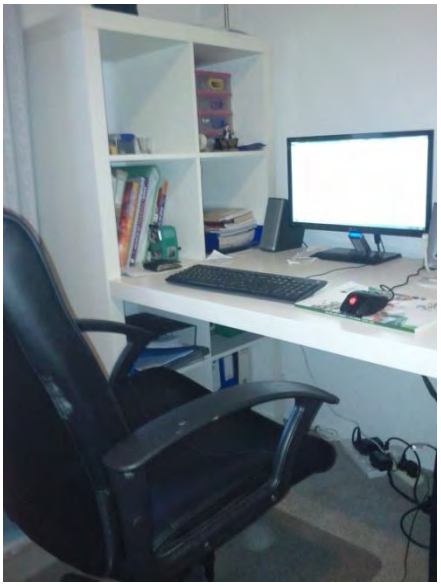
Risk Assessment

Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk

Solution

By making sure there is adequate ventilation in a room with the use of windows, and temperature is optimised by use of fans and are conditioners or heaters, a much more productive and student friendly environment is created. A properly controlled temperature can also make sure computers do not overheat and become damaged.

Potential Hazard: Ergonomics



Consequence

Worker working in a non-ergonomic environment may face long and short term injuries. Short term injuries include muscle cramps, headaches and general discomfort, while long term injuries include frequent back aches, RSI, and arthritis.

Risk Assessment

Likelihood: Likely **Consequence:** Minor **Assessment:** Medium Risk

Solution

When at home it is important to use an ergonomic chair adjusted to the right height so that feet are flat on the ground, elbows and arms level with work height. Another solution is ensuring adequate space between thighs and base of the desk. Ensuring a viewing distance of at least 6-7 inches from the monitor and adjusting the keyboard to allow proper forearm angle of about 90 degrees.

Potential Hazard: Working for Extended Periods of Time

Consequence

Working at a computer screen for 75 minutes can have many physical effects such as RSI, strained eyes, and back pain, as well as negative mental consequences for the workers. Particularly when working at home it is easy to forget to take breaks to eat and stay hydrated

Risk Assessment

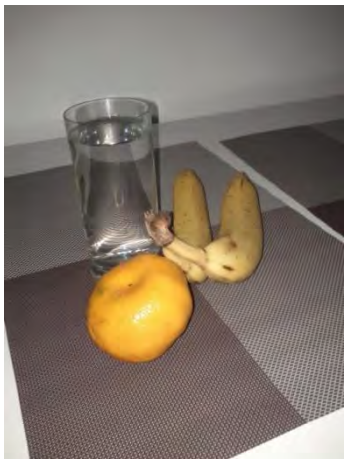
Likelihood: Possible
Consequence: Insignificant
Assessment: Low Risk

Solution

By breaking up the time spent on the computers, taking regular snack breaks and staying hydrated students are able to prevent these problems from occurring. Some of the activities students can perform include:

Stretching – Relieves muscle strain and gives the worker a break from their work. Allows for a short amount of relaxation, meaning the student doesn't become bored.

Walking around the home or outside – Gives workers a break, relieving them from stress and boredom and is also a good form of exercise, overall benefiting health and quality of work



Regular snack breaks - Relieves hunger and regulates sugar levels. Also healthy snacking instead of eating a lot in one sitting is more benefitial to lifting energy levels and not feeling sluggish after a big meal

Drinking Water – It is important to drink water throughout the day around 6-8 glasses at least as it quenches thirst and prevents dehydration, light headedness and exhaustion. Thus better wellbeing leading to a better quality of work.

Evaluation of Major Project

Statement of Intent:

"For my Industrial Technology Multimedia Year 12 Major Work, I plan to film and edit a movie trailer with special effects, which I will design, film and edit."

I believe I met my intentions well. For my major work I planned, designed and edited a movie trailer with special effects and met my proposal well.

Research and Planning:

Due to good **planning** and time management skills I was able to achieve a high quality major work in the allocated time, I used tutorials and various website as **research** for me to gain knowledge which would aid me in the production of my major work project. However there were certain limitations I had to overcome:

Limitations:

- In school and out of school commitments
- I do not have access to a high quality camera so I will either have to borrow a high quality camera or just make use of using camera of lesser quality
- What can be regarded as PG content e.g. weapons, sexual content or violence cannot be included due to guidelines from the ace manual

My major limitation for this project was the second major work I was working on in parallel with this one and study for other subjects. This led to a lack of consistency in producing my movie trailer as other projects and homework would come up and get in the way. Availability of resources, meaning access to cameras and equipment, was not as big of a limitation as I had first though. This limitation resolved mainly around the Canon DSLR camera which I didn't own, however my friend was always fine with me using the camera. I was easily able to come up with a storyboard without the use of weapons, sexual content or violence with ease and therefore was able to abide by the rules of the ace manual.

Motivation:

- As I am a fan of movies, I have watched many trailers for anticipated movies, and would like to design and create a trailer so I can learn the skills it takes to make a trailer professionally.
- In the past year, I have gained experience in 3d modelling, After Effects and Photoshop. I would like to see if I can use those skills to create a trailer using the skills that I have learnt.
- I have always been intrigued by the way trailers and films are compiled and have chosen to study and research the mechanics of 3d modelling and After Effects, as they are simpler and are more at my level of experience. I have often wondered how they work, the process involved in making a movie/trailer and how difficult it is to create at a high quality.

In conjunction with receiving top marks, a huge motivator was being a fan of movies as this kept me intrigued with my major works and made the task seem less tedious as it was something I enjoyed. Through this major work I was able to gain experience in 3D max and trailer compositing that will without a doubt assist me in the future if I choose to pursue a job in the Multimedia industry.

Construction

I used a variety of multimedia skills and technologies to aid me in the **construction** of my major work. On a scale of 1-5 I rated the difficulty of the skills I used:

Skill	Rating
3d Modelling	5
Motion Tracking	2
Animating Solids	3
Masking	2
Roto scoping	2
Texturing	2
Scene Titles	4
Special Effects	5
DVD Menu	3
Video Compiling/Editing	2
Audio Compiling/Editing	2
Image Manipulation	2
Camera Dolly Construction	4

Use of Intended Software:

- Video Editing Software
- Audio Editing Software
- Photo Manipulation Software
- Word Processing Software
- DVD Menu Designing Software
- Video Compositing Software

I used all the software listed as I intended to use them throughout my major work. My extensive knowledge of the software, computer technology and multimedia processes meant I was able to establish my intentions for the software accurately.

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Target Audience:

"Focused mainly at an older audience with its action packed content"

The ultimate factor to the success of my intended target are the viewers, however, I believe I have successfully produced a movie trailer that will entertain an older audience e.g. young with its action packed content.

Conclusion

I commenced this project with the knowledge of what is expected and the amount of work required to produce a quality short film, however I underestimated the amount of time and effort needed for the portfolio. I knew the extent of the practical side of my project and so I was able to plan and allocate time accordingly to complete everything by the due date. However there were stressful moments where I had to rush bits of my major work folio in order to allow more time for study for other subjects.

Appropriateness of Design and Design Modification

Although I initially had a clear understanding of how I wanted my project to come together, there were many aspects I ended up adjusting or changing through the course of the project.

Filming Location Selection/Modification

The initial location I was going to take a photo for my 'Smoke Trail' effect was the top of Sydney Tower as it was a point of high elevation and allowed me to take a photograph of the city landscape. I had allowed for this in my storyboard and was all ready to record the shot. The problem was when I called up to check up on pricing and any restrictions; they informed me that there were many restrictions of what I could bring up there. I described the type of shot I wanted and they informed me that the shot would not be possible on the $20 observation deck as with that package you are restricted to the view of the deck which has a few obstructions and in order to take a clear view of the city landscape from the very edge I needed to purchase the skywalk package which was very expensive.

I had to change this in my final film and ended up using a stock image of the Sydney City landscape. The dramatic effect of the shot was the same as I was going for a top down view of the city, so it turned out to be more practical, cheaper and better quality of shot.

Camera Dolly Modification

For my major work project I needed to design and construct a camera dolly as I needed it for my video, there were a variety of possible camera dolly designs, ranging from a crane dolly and a wheel on track dolly. Originally I decided to construct the wheel on track camera dolly as it was a simple and versatile design however my design changed to a dolly that used a slide system that resembles skis.

The final design of the dolly proved to be useful and actually slide smoother than the dolly with the wheels on a track.

Production

Quality of Product

I wanted my movie trailer to be of the highest quality I was capable of so I could use it as part of a portfolio for entry into future schools and colleges. My project will be compared with hundreds of other major works coming from across the state, so producing something different and unique was important in making my film stand out and receiving those few extra marks from my ATAR.

Time I'd spent looking at videos and movie trailers, and my knowledge of video production, gave me ideas as to what would engage an audience. I used all this knowledge to plan out and constantly tweak my short film until I was happy with the result. With my knowledge of Aftereffects I experimented with new ways of achieving a desired effect. If an effect wasn't working I would move it to the I would move it to the side and come back to it later, most often with a fresh mindset and a new idea to try out.

One important aspect I strived to maintain was the visual quality of all the footage and the final exported film. I employed several different procedures to make sure that the quality was maintained. I made sure that all footage I used was recorded at 720pHD or at a higher resolution so that when I imported my footage it didn't lose quality. When overlaying effects I made sure to render out the finished compositions in lossless .mov formats so that the quality loss associated with repeatedly rendering out videos in a lossy format didn't occur. I also made sure any graphical elements that appeared in my film were exported at high resolutions so that when they were imported into Aftereffects or Final Cut, the was no pixilation.

Another way I maintained the quality of my major work was through the ways I edited the audio. Sometimes it's quite easily overlooked, but putting in as much effort on the audio as you do with the video is important. The way I achieved this was by always editing my short film while listening through my headphones. I also made sure any audio track I worked with was exported as lossless. WAV files right up until the final output of the film to avoid quality loss.

I also maintained quality throughout my production by constantly showing my friends and teachers progress of my short film. By showing off what I've done I was able to receive continuous feedback which I used to constantly improve my major work. Also, by showing my film to the age group that I was producing for, I was able to tweak and adjust my film to further engage my proposed target audience.

I believe my ear and eye for detail played a big part in maintaining the quality throughout my major work. By using all these different procedures and strategies for quality control, I have produced something which I am proud of and I am confident I have met my statement of intent.

Evidence of a Range of Skills

Filming
In order to achieve 100% when filming I had to storyboard my idea, plan out locations, organise with the actor when there available for filming and then choose the right angle and lighting when on location. I also had to organise my time effectively on location as some scenes had to be filmed in similar lighting and weather conditions.

Video Creation and Editing
Editing and producing the short film required many different skills including video and sound capture, video and sound editing, colour corrections, cropping, footage to music synchronisation, title and credits design. It also required knowledge of appropriate video and audio codecs to be able to both edit and then export the finished film properly and without quality loss.

Special Effects
Creating all the special effects seen in the film required a wide knowledge of Aftereffects and its tools and tricks. Skills such as masking, particle effects, optical flares, rotoscoping, 2D, 3D point tracking, adjustment layering and displacement effects were all used in my movie trailer.

Image Creation/ Manipulation
I used my knowledge of Photoshop to product and manipulate some of the graphical elements in my short film and all of the graphics in my folio. Some of these specific Photoshop skills included cropping, drawing, and layering, colour alterations such as contrast, curves, saturation and hue. The images I created ranged from simple edits such as reducing the size of an image to complex edits like the portal design.

3D Modelling
Creating certain special effects seen in the film require knowledge of 3D Max in order to create models to use in effects like the Meteor Crash Scene. Skills such as modelling, particle effects, and texturing were all used in creating the 3D model which was ultimately used in my movie trailer.

DVD Menu Design
Professional grade DVD menus usually accompany finished video productions. To make the entire project stand out, I decided to produce a DVD menu that contained a play option for the film, and ‘ extras’ menu containing several time lapsed videos of me creating different effects and an ‘about’ page which contained some background information of the project.

Degree of Difficulty

Movie trailers require a lot of planning and production time to complete, even if there is a group of people all sharing the work load. In order to complete my major work on time I had to realise my limits and level of skill and effectively plan out all parts of my project. Throughout the production I was constantly learning new ways to achieve something and so I always went back over content and revamped or up hauled it to the new level. The effects I had envisioned for my project were simple yet required a lot of skill and knowledge on Aftereffects, 3D Max and Sony Vegas.

Video Editing and Special Effects
Cutting, cropping and moving footage around in Sony Vegas is relatively simple, but streamlining these processes, aligning audio with footage, integrating multiple layers of content and applying effects, transitions and titles raise the level of skill and knowledge needed.
Creating special effects in Aftereffects is complex task that takes many years of learning. I only had around 2 years of experience with Aftereffects and so I was constantly going back over tutorials to refresh my mind on certain skills and techniques that I needed to use.

Image Manipulation and Creation
Creating and manipulating high quality images in Photoshop can take years of experience to achieve. All the techniques and skills take time and significant concentration to learn. My major work required the two years of experience using Photoshop to achieve the level of graphics that are present in my portfolio and short film.

3D Modelling
3D modelling in 3D Max can take years of experience to achieve. All the techniques and skills take time and concentration to understand. My knowledge of using 3D max was acquired over three years when I had used this program to create past projects for Multimedia and further developed in the months of producing my major work.

Meteor Crash Testing Screen Shot

Use of Industrial Processes

Storyboard

Storyboards are always used in the multimedia industry, even if it's as simple as displaying the relationships between pages of a website. The purpose of a storyboard is to present the complete order of events of a project to every team member to create a universal sense of understanding. Storyboards often allow flaws and issues to be easily spotted and corrected before time and money is spent on production. I followed my storyboard relatively closely to make sure I stayed on task and focused on the end result.

Motion Tracking

Motion tracking is a very common process used throughout the industry. Tracking can be done in 3D or 2D but both allow digitally created elements to be linked to captured footage. The standard method for tracking is known as point tracking. Point tracking is based on the luminance and colour of pixels to detect motion and can be used with up to 4 points in 2D space. In 3D space, point tracking follows a similar method but many more tracking points. 3D track also uses algorithms to define the 3D space once its' been tracked.

Footage Compilation

Filmed footage can be compiled through many different programs such as Sony Vegas, Final Cut and Premier Pro. I took the compiling process further by synchronising my footage to flow in time with the music, essentially creating a music video. The process of timing video with audio is popular in the industry in both music video productions and even film/trailer productions.

Continuity

A major part of any film production is ensuring that clothing, items etc. stay constant if filming is dragged out over long periods. I made sure that every time I went filming, Hugh and Robbie were wearing the exact same clothes as they were previously wearing. This makes my production look like it was produced in one day whereas it was in fact filmed over several months.

Safety/Crisis Management

Safety is an important factor when filming on set in the multimedia industry. If an actor becomes injured or hurt whilst acting on unsafe sets, the director and associated helpers can be sued. Medics are often kept on hand as well in case of an emergency. When filing on set I took safety into mind and made sure the locations I filmed at were clear of hazards. In case of severe emergency we all had mobile phones with connection on hand to ring 000.

Catering

When shooting on set with physically active cast members, catering is an important thing. Actors can dehydrate easily and lose energy when performing intensive acts, so water and food is essential. Whenever I went out to film I made sure to bring a water bottle and remind others the importance of bringing their own water. Food wise, I encouraged my team to bring snacks that they could eat during filming.

Use of Industrial Technologies

Cameras

Cameras, whether they are for photography or filming, are always used in the multimedia industry. I used one camera throughout the production of my major work. I made sure to film in high definition widescreen to ensure a high level of quality in my project.

Computers

Computers are essential for all aspects of the multimedia industry. Both my computer and the school computer were able to meet my demands and allowed me to produce a high quality short film and portfolio.

Printing

Printing is a process used throughout the multimedia industry for planning, production and advertising. I used a printer to create a hard copy of my portfolio to submit alongside my finished major work.

Software

Sony Vegas, Photoshop CS5, Aftereffects CS4 Encore CS5 and 3D Max are all industry level products that I have used to create every aspect of my short film. I am fortunate to have had access to these programs both at school and at home

Links Between Planning and Production

In order to use the given time effectively, I used several planning methods to map out and control the production of my movie trailer.

Time Plan

The time plan allowed me to see the entire length of the project and all associated components as a whole and how they linked to each other. By planning out when certain elements needed to be completed by I was able to follow it as closely as I could within the limitations I had.

Storyboard

Storyboarding my movie trailer was one of the most important methods of planning everything else. Without my idea solidly defined and sketched I would not have been able to plan out days, locations, actor, props and any other associated elements for filming

Finance Plan

The finance plan allowed me to control what I spent and ensured that I didn't spend all my money on one specific area of the project.

Diary

The progress diary and ongoing evaluation outlined the processes I went through and issues I faced. I used the diary to write down what I learnt from my mistakes and how I fixed them, allowing me to avoid those issues further into the production of my

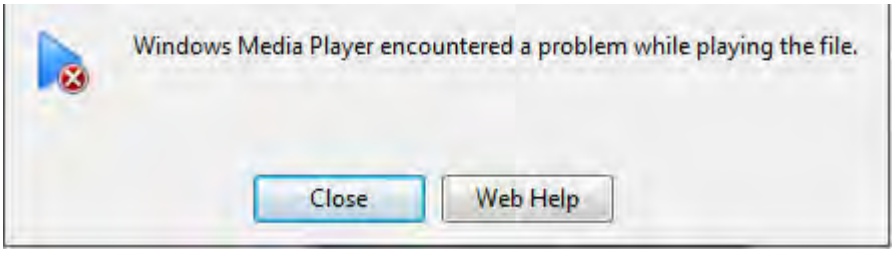
Research

The research gave me a better idea of what I wanted to achieve and provided some inspiration for my trailer. Research was needed throughout my production, whether to learn new techniques and/or refresh/ enhance skills I already had.

Evidence of Practical Problem Solving

Screen Recording Issues

As part of the 'extras' on my DVD I wanted to include a couple of tutorial type videos demonstrating how I achieved the different effects seen in my movie trailer. The recorded screen captures were saved as .AVI and I had assumed they would play after they were recorded. However when opening the file it failed to open because of the large file size.



After noticing this as an issue, whenever recording I made sure to monitor the increasing file size and stopped the recording if the file size began to grow over 1500mb and started a new recording. To assist in controlling the file size I altered a few settings in Cam Studio. After I had done all this the problem was resolved.