COMPSCI 708 – Hypermedia and Multimedia Systems
Second assignment – Implementing a hypermedia App.
Out: Tuesday 14th March
Due: Thursday 23rd March
Worth 7.5% of final mark

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Due:
> 12 pm Thursday 23rd of March at Emilia's office

Aims:
- Learn how to implement a hypermedia/multimedia application.
- Use industry standard Macromedia Director and other media applications.
- Gain experience preparing media for use.
- Learn how to work in a team.
- Optionally, learn some elements of the Director programming language, **Lingo**.

Assignment description:

This is a group assignment.

You should treat this assignment as if you were supplying a product for a client. This means that you must make sure all media and navigation works, and that the content provided makes sense. This is the minimum you would expect if you were to buy a hypermedia application.

In addition to your specifications in Assignment 1, your project must conform to the following:

1. You project and all its associated files must not be more than 80 MB is size.
2. The main or starting Director file must be called the same name as your project. eg. war_of_the_worlds.dir It must also appear at the **top** level of your project directories. Your whole project must be placed in a directory with the name of your project.
3. All media, Director files and directories must be named **consistently**. The names should be less than 32 characters long. Do not use capitals or special characters. The underscore character should be used instead of spaces. eg. main_menu.dir
4. All non-Director files should be stored in one or more sensibly labelled sub-directories.
5. All your Director movie files must be 800x600 pixels in size and aligned to the top-left of the screen. Remember to turn guidelines off in the final version. A screen size of 640x480 pixels is also acceptable, as long as **all** Director movie files use the same screen size.
6. Video **should never be scaled** in Director. Just like scaling images in a Web browser, if you want the movie with a different size, resize it in Premiere or using another software tool. The only exception to this rule is making the video **exactly** double its original size.
7. Video media should be saved in Quicktime format whenever possible. Use the Sorenson codec. AVI and MPEG movies can also be used with care.
8. Gather your media from a number of sources, not just one.

9. Images sourced from the Web will not generally be of sufficient quality for a Director project. Low resolution or obviously GIFed or JPEGed images are not acceptable here. Scan some originals instead.
10. Similarly, sourcing everything from the Web and just throwing it together in Director is inappropriate. A hypermedia application in Director should be different from a Web application. In addition, you have more computer resources available (space, speed, etc).
11. The user must be in control **at all times**. This means that **all** animations and transitions, which might take some time and bore the user, should be able to be skipped either by clicking on the screen during the animation, or by setting up an option somewhere.
12. Volume controls must be consistent from section to section and retain their settings. They should also control the volume of digital video. The volume control should be visible and obvious as to what it is.
13. All scrollable text fields must be reset to the top every time the user comes back to that screen.
14. Scroll bars should work like every other scroll bar users have experienced, not something weird you have devised. Page-turn buttons are OK, but are less desirable.
15. Movies, large sound files and JPEGed images should be kept as **external linked files**, not imported entirely into casts. This allows easier alterations later. It also means Director won't decompress all the media and store it full size internally.
16. **All** buttons should indicate they are clickable, either by having the cursor change or (preferably) highlighting the buttons when the cursor moves over them.
17. **All** buttons should indicate when they have been clicked, either visually, aurally or (preferably) both. This indication should be given before the action of the button is taken, so that if there is a delay, the user knows that something is happening.
18. Buttons should be properly aligned and not jiggle about on rollovers or activation, unless a "pushing the buttons in" animation effect is actually desired.
19. At least one help screen should be available and obviously marked as a help screen.
20. The project must always indicate what section (and subsection) the user is in, so they don't get lost.
21. If uncommon (i.e. non-System) fonts are used, they should be imported into the project (unless you want things to look really ugly with default fonts). Alternatively, use the "save as bitmap" cast option, to retain the original look. If in doubt test your project on a Macintosh computer.
22. Make sure there is sufficient extra space around all text fields to allow for minor variations in font sizes and spacing on different systems. Otherwise carriage returns might be added mid word, which looks ugly.
23. When you have finished your project, use the Director "Save and Compact" option on all Director files. This will compact everything down and save between 10-50% in the file size.

The following are not *requirements* but would be nice to have anyway.

- Things which should be absolutely static on the screen should not move around slightly from section to section. It looks very amateurish when they move.
- A "site layout" screen is a nice idea for users to navigate around with.
- Pop-up help on buttons and controls is helpful.
- Keep your Paradigms and metaphors consistent. Putting a photo of a television in your project to play videos may not represent 'keeping with your style'. Be consistent.

- Unless you have a major theme to your project, keep the screen graphics as simple as possible. Well designed plain images win over fussy badly created images.

Method:

- Create your application using the collected and prepared information and based on the templates, flowchart and storyboards from Assignment 1. You should **not** deviate from your original design, only if circumstances dictate.
- If you have used any media that you did not create, you **must** credit it. Either credit the original creators on the same screen as the media (preferable) or on your credits screen (less preferable).
- Test and re-test all aspects of your application to check that it works correctly. Test it again. Test it at home. Test it on your friend's computer. Test, test, test.
- Let other users or 708 students test your application whenever possible.
- Hand in your project, in person to Emilia. Projects can be handed in on a CD-R, CD-RW. CDs must be formatted in ISO 9660 format with Joilet long file names enabled. CDs formatted in a dodgy Windows only format will loose marks.

Note:
You must submit the original Director (.dir) files, casts (.cst) and any movies, sounds, images, etc. required by the project. Intermediate or build files are not required (e.g. we don't want the image template files used to build screen backdrops). A projector application (.exe) is **not** required. But if you don't submit the .dir files, we can't mark your project properly.

Assessment Criteria:

Your work will be marked on:
- Fulfilment of all the specifications.
- "Good" design (as covered in class).
- Consistency and clarity of ideas.
- Innovative use of your chosen development medium.
- Consistency.
- How well your project matches your target audience.
- Adherence to "usability first" principles.
- How much Chris and Emilia liked your project (X-factor).

A broad **guide** to the marking breakdown is (out of 30 marks):
- Aesthetics (Professional look, Originality, Clean layout, Consistency, Visual appeal, Colour use, Appropriate sound use, Impact, Content, Help) 1 mark each, total 10 marks
- Navigation (Paradigms, structure, Buttons, flow) 1.5 mark each, total of 6 marks
- Technical (Consistency, Interactivity, Programming, User friendliness, Response time, Content, Use of media, Bugs/errors) 1.25 marks each, total of 10 marks
- X-factor (Creativity, emotion, etc) 4 marks