COMPSCI 708 – Hypermedia and Multimedia Systems
First assignment – Writing a research report
Out: Thursday 2ⁿᵈ March
Due: Tuesday 14ᵗʰ March
Worth 7.5% of final mark

Worth:
> 7.5% of final mark

Due:
> 12 pm Tuesday 14ᵗʰ March at Emilia's office

Aims:

- Learn how to design a hypermedia application according to the DDD-E methodology.
- Learn how to work as a team.
- Write a Design document detailing the design of your group's hypermedia application.

Assignment description:

This is a group assignment.

The main components of this assignment are as follows:

- Outlining the content **(part 1)**
  - Project requirements:
    - A description of your project (e.g. what are the goals of your project?, what are the related areas to your main topic?)
    - Do you need to focus on specific aspects due to the target audience selected?
  - The target audience:
    - Who is going to use your hypermedia application? (e.g. specific age group?, specific gender?, do they require basic computer skills?, any specific interest?)
- Creating flowcharts **(part 2)**
  - A general flowchart of your application.
  - State what type of structure best represents the backbone of your application.
- Specifying screen design **(part 3)**
  - Here it is important to present all the different screen designs/templates your application will use.
  - Screen designs can be hand-drawn.
- Writing storyboards **(part 4)**
  - Storyboards for the application and also for each animation, video that is used.
  - Storyboards can be hand-drawn.
  - Storyboards should use the storyboard template available from http://www.cs.auckland.ac.nz/compsci708s1c/resources/
  - Present summary statistics for your design: total number of nodes/frames, total number of images, total number of animations, total number of sound files, total number of video files, total amount of effort spent doing the design (sum of all individual efforts).

Your project must provide the following:

1. You application and all its associated files must not be more than 80 MB is size.
2. All your Director movie files must be 800x600 pixels in size. A screen size of 640x480 pixels is also acceptable, as long as **all** Director movie files use the **same** screen size.
3. Video media should be saved in Quicktime format whenever possible. Use the Sorenson codec, rather than the ones that might only work on some platforms. AVI and MPEG movies can also be used with care.
4. If feasible, gather your media from a number of sources, not just one.
5. Images sourced from the Web may not be of sufficient quality for a Director project. Low resolution or obviously GIFed or JPEGed images are not acceptable here. Be prepared to scan some originals instead.
6. Sourcing everything from the Web and just throwing it together in Director is inappropriate. Think carefully about what it is that you want your application to do. Compared to a Web application, your hypermedia application can have more computer resources available (space, speed, etc).
7. At least one help screen should be available and clearly marked as a help screen.
8. Your application must also present a credits node/frame/screen, where you can say who did what and make any other acknowledgments required. Keep a bibliography-style list of the sources of all the material your group uses.
9. The volume control must be consistent from section to section and retain its settings. It should also control the volume of digital video. The volume control should be visible and obvious as to what it is.
10. Scroll bars should work like every other scroll bar users have experienced, not something weird you have devised. Page-turn buttons are acceptable if they fit in with your design metaphor, but are less desirable.
11. **All** buttons should indicate they are clickable, either by having the cursor change or (preferably) highlighting the buttons somehow when the cursor moves over them.
12. **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, users know that something is happening.
13. The application must always indicate what path has been followed, so users do not get lost.
14. Unless you have a major theme to your application, keep the screen graphics as simple as possible. Well designed plain images are better than fussy, badly created images.

Some of the items above are directly related to your next assignment, which is the development of the application. However, it is better to know in advance what they are as some of them will influence the application's design.

What to hand-in (all bundled and stapled together):
- A cover page with the name of your application, your group's name, the name and UPI of each group member.
- Parts 1 to 4.

Other related information important to know:
Scanners: Two are available. One is located on the first floor in the computer lab FCL, right beside the printer; another is located in the old tutorial lab OTL, which is connected to the old OCL.

Sound: Each lab computer has sound software on it, so you should be able
to record there. Otherwise, Chris Anderson has video, tape capture facilities where he is located (3rd floor), which can also be used.

Video, animations: Director is a bitmap based 2D environment, thus you can export a
director movie as a quicktime or other format movie.

In addition, the Macromedia suite of software is installed on the lab computers. This includes the Flash software, which is quite standard for 2D animation.
Chris Anderson can also help with capturing video, but you need to be organised and book it in advance. He also has a DV camera available.

Macromedia Director
There are books on Director programming and design available on desk copy at the library.

- Director 8 and Lingo authorized by Phil Gross.
- Special edition using Macromedia Director 8 by Gary Rosenzweig.
- Flash Web Design : the art of motion graphics by Hillman Curtis.

The book Macromedia Director MX2004 for Windows and Macintosh is available for short term loan from Chris Anderson. This has tutorial style lessons on using the latest version of Director.
Look at the example Director project Mike Loder - Live At The Covert (http://www.cs.auckland.ac.nz/compsci708s1c/resources/Live_at_the_Covert.dir) to see how an application can be put together. Save the file onto your hard drive before viewing (the file has been modified to disable the CD player function.). You will also need to download the accompanying video (http://www.cs.auckland.ac.nz/compsci708s1c/resources/Mike.mov) to be able to view it. Please save it in the same folder where you saved the file Live_at_the_Covert.dir.