

DEPARTMENT OF COMPUTER SCIENCE
UNIVERSITY OF TORONTO

CSC 318S

THE DESIGN OF INTERACTIVE COMPUTATIONAL MEDIA

Winter Term, 1997-98

Assignment 4

DESIGN AND PROTOTYPING OF TERM PROJECT AND OF ITS LOOK AND FEEL

HANDED OUT: Wednesday, February 11, 1:10 p.m.

DUE BACK IN: Friday, March 6, 1:10 p.m.

WORTH IN MARKING SCHEME: 12 points

The purpose of this assignment is to give you some experience in envisioning, designing, and prototyping a system using Director and/or other appropriate prototyping media.

PROTOTYPES

Webster's Third New International Dictionary defines "prototype" as follows:

"1a(1): an original on which a thing is modeled... b: an individual that exhibits the essential features of a later individual or species... c: an individual, quality, or complex that exemplifies or serves as a standard of the essential features of a group or type..."

The prototype should exhibit, exemplify, and make vivid and comprehensible the essential features of the proposed style of user interface and of its look and feel. It should show what the application will look like, what its essential characteristics are, and how it is to be used. It should ideally incorporate and illustrate a **small** but "**critical mass**" subset of system functionality, in other words, its most essential functionality. You will be testing and evaluating your design and interface concepts in Assignment 5 and revising these concepts and adding more functionality in Assignment 6.

PROTOTYPING

There are a variety of methods of prototyping. You should use whatever combination of methods are most appropriate and with which you can be maximally effective. These include:

- scenarios expressed in words
- sketches and storyboards
- physical models
- video sequences and animations
- interactive sequences expressed in computer prototyping media.

It is highly recommended that a significant part of your prototyping be done in Macromedia Director (or in some suitable alternative but only with the explicit permission of your TA).

Why is this?

- It is the most effective form of torture we have been able to devise :-)
- Director sequences are animations, thus incorporating sketches, storyboards, and graphical scenarios as special cases.
- Director sequences are programmable, thus enabling behaviours dependent upon the interactions and actions of the users.

Director is used within the industry for prototyping. For example, the Mac System 7 interface was mocked up and tested in Director before it was implemented in C++.

YOUR TASK

Your task is to prototype the design, look and feel, and a critical mass of the functionality of your application, and to write a brief (circa 6-12 page, double-spaced) report describing what you have done and what you have learned.

NOTE: If your project concept has changed significantly since you handed in Assignment 3, you are encouraged to redo portions of that assignment that have changed to get additional feedback from your TA that will be helpful to you in later stages of the assignment. Even if the concept has not changed, you may want to continue work on Assignment 3 because you have hardly had enough time to do the job well. If the improvements are significant enough, up to 2 additional points for assignment 3 may be awarded at the discretion of the TA.

KEEPING THIS ASSIGNMENT WITHIN BOUNDS

If you spend more than 15-25 hours on this assignment per person, you are spending too much time.

WHAT YOU SHOULD HAND IN

You need to hand in a disk containing your prototype and a brief report.

The report must be typed and submitted on 8.5"X11" paper. Structure and organization, spelling, grammar, word usage, and document appearance will count for roughly 15% of your total grade. Sketches, diagrams, and tables should be used where appropriate to assist in conveying concepts.

Each submission must include a title page with a meaningful title, your names, your student ID#s, your tutors' name, the course name and number, and the date.

A few words about the disk.

1. The name of the Macromedia director file representing your assignment should include your project name and "Assignment 4".
2. There must be a paper label stuck on your disk. On it you must **neatly print your names, the course number, the assignment number, and your tutor's name.**
3. Even if you do this on another computer, you must ensure that your stack runs on a DCS machine in CDF using its version of Director.

You must also post your report on the Web and point to it in a note to the newsgroup.