CS3283 Assignment #1

16th January 2003

Due by 5pm on Friday, February 7, 2003
Delivered to Hugh

You may work in groups of (upto) four students. Do not bother asking for a group of five. The group members do not have to be from your tutorial group, and it is up to you to ensure that everyone contributes equally. Email Hugh with your group members before Friday 24th January 2003.

This assignment is worth 25% of your assignment mark (about 9% of your final mark), and replaces the two first assignments proposed in the original lecture notes. It consists of the development of a design/analysis document, with some modelling of the proposed design.

Your task...

Your task is to develop the overall design of a system with a GUI interface, intended to assist students at NUS in selecting modules to take during a particular semester. A student can use your application to view descriptions of modules that he/she is allowed to take, and check for timetable collisions. You may also consider other functionalities that you think are appropriate.

Your submission will include a description of the overall system architecture briefly (1-3 pages), but the bulk of the submission will be a GUI design/analysis document concerned with the GUI interface.

Deliverables

- A title page containing your names and matriculation numbers.
- Table of contents...
- A one page introduction describing the application, including assessments of load, number of students, access to databases (which ones?), ease of use... all in a brief non-technical style.
- A one to three page section describing the overall system architecture. Give a brief justification for the architecture chosen, and be as specific as you can about the chosen system components. You can invent plausible systems if you do not have the genuine technical details - for example you could assume that the system records for students are kept in a single Oracle database server...
- A final section consisting of a five to fifteen page GUI design/analysis document containing
  - A brief summary of the user requirement, user profile and environment
  - An overview of the GUI interface design.

- A more detailed description of the interface design, including
  * Prototype screens given as screenshots
  * Functional specifications (that is - say what the interface intends to accomplish - and include sensible constraints, such as timing)
  * Behavioural specifications (that is - show the flow of operation of the interface - you may use words, or UML activity diagrams, or ad-hoc diagrams)
  * Any justifications you can make for design decisions made - relating a particular design decision back to a particular user requirement.
- A testing methodology for the interface (that is - how can you show that the interface is successful?)

Note that this assignment does not require you to implement the application, just to design one, and to model the design with prototype screens (You could use Java/Visual Basic/ a graphics editor... anything as long as you show screenshots.)

Assessment

The assessment will be graded with the following weightings:

Introduction	10%
System architecture	25%
GUI design	50%
Extra	15%

- The "Extra" component of the assessment is for submissions which show clear evidence of extra thought or care.
- In evaluating the "GUI design" component, I will also be looking for "justifications you can make for design decisions".

Try to achieve clarity in your writing and take care in the structuring of the document.

COOPERATING VERSUS CHEATING

You are allowed to discuss the problems with your friends, and to study any background material with them, but the assignment *should be your own group's work*. **Copying** and **cheating** will be grounds for failing the assignment.