

CURTIN UNIVERSITY (CRICOS number: 00301J)  
Faculty of Engineering and Science  
Department of Computing  
**Human Computer Interfaces**  
**Assignment 1, Semester 2, 2015**

## Overview

Design a suitable interface for a program of your choice. You must choose a program that you are allowed to modify under copy write laws. This program must be Desktop computer based, and it may be for Linux or Windows.

## Aims

Your team is to design a user interaction for the system that you have chosen. The system interface must be sufficiently complex allowing you to demonstrate the knowledge required for HCI400.

Your team should meet during the 2<sup>nd</sup> teaching week to choose the name of your team and the program you will work on. **Once this has been chosen, you must email your professional written proposal to the company manager (lecturer/tutor) for approval by 6pm, Monday 17 Aug. 2015.** Your proposal should be up to 2 pages, written in a formal and professional manner including sufficient details to allow the company manager to decide if the project is viable. Contents should include (but not limited to): Why do you choose this program? What is wrong with the current interface? How many screens/windows do you plan to develop etc. Note: You cannot choose a project that has already been completed by this company (previous semester's students). The list of programs NOT allowed to be chosen is attached in Appendix 1. **Approval is mandatory.** You can choose to develop your own program, but remember it has to be sufficiently complex. The project manager in each group is responsible to submit the proposal to the lecturer/tutor to seek approval for the choice of group name and program.

You must follow good user centric design and usability principles as discussed in the lectures and the text book "Helen Sharp, Yvonne Rogers & Jenny Preece: Interaction Design: Beyond Human-Computer Interaction, 3rd Ed."

Whilst there is no requirement to implement a fully functioning system, additional bonus marks may be awarded for this. The minimum requirement is merely to show (some computer based graphical representation) what will happen when (and if) the rest of the system becomes available.

## Assignment Teams

You have been placed into teams (Appendix 2). Each team member will have one or more specific roles. You are free to choose the roles, however it is suggested these be:

Project Manager  
Graphic Designer  
Psychologist  
Statistician  
Document controller  
Programmer

etc.

The Project Manager is responsible for the smooth running of the project, but this role should not be dictatorial. This position is responsible for communication with management (Lecturer/tutor). This includes presenting reports by uploading them through Blackboard.

The project manager, in consultation with management, has the authority to hire and fire team members.

Not all “roles” will be required at all times, thus it will be necessary for the people in idle roles to assist others as directed by the project manager. You will need to research your role to ascertain the duties involved.

## **Assignment Tasks**

It is suggested that you follow the design process discussed in the lectures and the book. Choose a lifecycle model that your group can use. Chapters 9, 10 and 11 are particularly helpful for this assignment.

The lecturer will act as both the Manager of your software company, and as the client for the system. The tutor can also act as your client. Other staff members can be invited to act as clients from time to time. The client will require four non-functioning design prototypes from which they will select two for you to create fully functional interfaces. The prototypes will be passed to the client via the manager of your software company, so the prototypes must be accompanied by a full, professional report detailing all design choices and decisions.

Your team is required to document the design process from start to finish, including all decisions made, hurdles to overcome and milestones set and reached (minutes of all meetings should be included as an appendix). Each team needs to produce a professional, complete, detailed report. The format of the report is up to you, but it must be professional – i.e. as if your job depends on it! The report is the main part of the document, which means it should be the first thing the client sees. All other aspects should be attached as appendices, and referenced throughout the report. It needs to be clearly labelled in the report which team member has written which part.

## Part 1 submission and due date

Part 1 of the assignment is to provide the client with the four prototypes and a professional report discussed above.

This must be electronically submitted **by the project manager only on Blackboard by 6pm 25 September, 2015.**

## Part 2 submission and due date

In Part 2, the client will require implementation of two out of the four prototypes provided in Part 1. Part 2 of the assignment is to provide the complete assignment. A full professional report is required which covers some implementation details and descriptions of the final product, in addition to what you have done in part one. You can make improvement on Part 1 based on feedbacks given for it. The complete report is required which covers both Part 1 and 2. Again it needs to be clearly labelled in the report which team member has written which part.

Other than the report, the complete code for the implementation together with a description on its development environment is also required.

The above items must be zipped together and electronically submitted **by the project manager only on Blackboard by 6pm 25 October, 2015.**

**During the tutorials starting on the 26<sup>th</sup> Oct., you'll be required to demonstrate your two interfaces to the tutor. All team members have to be present during the demonstration.** Failing to attend will result in severe penalty in the individual score.

## Appendix 1 – Programs NOT allowed

OpenVPN  
Github  
Open Cloud Player  
xHydra  
Angry IP Scanner  
tTorrent  
JPCSP  
VLC  
ImageMagick Studio LLC 2012  
Xfig  
GNUplot  
XPDF  
FileZilla  
Rename Master  
JDB  
DXTory

Filebot  
HandBrake  
SoundCloud(desktop version)  
HydralRC  
KeePassX  
Data Display Debugger (DDD)  
Zenmap  
Media Player Classic  
WinSCP  
PuTTY