

CURTIN UNIVERSITY (CRICOS number: 00301J)
Faculty of Engineering and Science
Department of Computing
Human Computer Interfaces
Assignment 1, Semester 2, 2017

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.

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 ICTE3002/5001 HCI.

Your team should meet during the 2nd 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 9am, Monday 21 August 2017.** 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 students in the last 3 years). 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, 4th Ed.”

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

Assignment Teams

You have been placed into teams. 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
Data Analyst
Usability Engineer
Document controller
etc.

Although you each have a specific role, you can choose to work together on any specific aspect of the project. 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 but not limited to arranging for meetings, presenting reports by uploading them through Blackboard, etc.

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.

Everybody will act as a programmer to implement a prototype once your design passes the first round of approval.

Assignment Tasks

You are required to follow the design process discussed in the lectures and the book. Choose a lifecycle model that your group can use.

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 clients will require a number of non-functioning design prototypes in the first round. Please arrange to meet the clients and present your designs to them for their feedback. The clients can reject the design in this round and ask for alternatives. Hence please arrange for such client meetings early to give yourself more time in case changes are necessary. **There is no deadline for this round. It is your responsibility to contact the clients for meeting when you have something to present.**

After the first round of approval, you are required to create fully functional interfaces using Java NetBeans IDE. Usually the implementations do not provide the full function of the real interface which are completely bound with the real program behind. Up to 10% bonus point will be awarded if a fully functional interface is produced. The actual bonus point awarded is based on the complexity of the implemented GUI.

The final 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). 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.**

Submission and due date

A demonstration of your implementation will be conducted during tutorial time in Teaching Week 10. All Team members have to be present during the demonstration. **Failing to attend the presentation will result in a mark of "0" for Assignment 1, and possibly a "F-IN" for the unit.**

The complete report, with the complete code from every member for the implementation together with a description on its development environment are required to be submitted. They must be zipped together and electronically submitted **by the project manager only on Blackboard by 9am Monday 16 October, 2017.**

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)
HydraIRC
KeePassX
Data Display Debugger (DDD)
Zenmap
Media Player Classic
WinSCP
PuTTY
Youtube-DL
Process Dashboard
Bulk Rename Utility

MobaXterm
PDFsam.
Winamp
mIRC
7-Zip
Cider
FFmpeg
AbiWord
Mcpmap
Inkscape
Xtreme Media Player (XMP)
Pooka
PDFBox
µJava
Audacity
Freemake Video Downloader
SCP
fre:ac
tar
Xosview