

COMPSCI 345 / SOFTENG 350

Human-Computer Interaction

Assignment Two: Requirements and Low-Fidelity Design

Worth 6% of your final grade

This assignment is due on Tuesday 28th April 2015 at 11.59pm

This assignment must be done in groups of 4

Aims

The aim of this project is to give you experience with the early stages of user interface design, and user interface design within a group environment.

Background

In the Muggle (non-wizard, non-magical) community, sports such as rugby, tennis and netball hold, of course, a great attraction both for watching and for participation. In the wizarding world, particularly in the UK, quidditch is far and away the dominant sport. While the main season of UK quidditch aligns to the Northern Hemisphere academic year (September to May or June), it's very popular to play recreational games of quidditch in the summer.

The UK Summer Quidditch Recreational League (SQRL) organises a 13 week season each year, starting with a Sorting week in June, which is used to rate candidate teams and allow the organisers to decide their placement in Divisions. Each division has 6 teams, each of which get to play each other twice during the main 12 weeks of the season. Each team consists of 7 players (three Chasers, two Beaters, one Keeper and one Seeker). Teams participate at the levels of: Kids (age 16 and under), Adult Casual (aged 17-34, interested in play mostly for enjoyment), Adult Serious (also aged 17-34, but really out to win!), Seniors (age 35+) and Legends (ex-professionals and a few individuals who showed exceptional talent in their school days). The number of divisions varies from year to year, depending on the amount of interest. Last year, for instance, the Midlands region had an Adult Serious Division B, and for the better players had an Adult Serious Division A which was shared between the Midlands and Eastern regions.

There are 8 recreational quidditch pitches used by SQRL: one each in Scotland, Northern Ireland and Wales, and 5 in England (one each for the Greater London, Northern, Midlands, Eastern and Southern regions). Recreational pitches have markings perpendicularly across the larger official oval to allow two simultaneous matches. Recreational matches thus are played two to a pitch (except for the Legends, who play the full pitch). Moreover, matches are only 30 minutes in duration (and just 15 minutes on Sorting week). Summer days are long in the UK, allowing quite a lot of recreational quidditch to be played on a single pitch. Generally all recreational play for the week is on a Saturday, starting with Seniors in the cool of the early morning, then Kids and then the other levels.

The Application

Use of computers and the Internet has picked up greatly in the wizarding world in recent years, facilitated by government initiatives such as the Ministry of Magic's Web-to-Owl service (see <http://mom.gov.uk:9.75/owl>). Nearly all wizarding households in the UK now have a desktop PC providing 1920x1080 resolution with reliable Internet connection and Chrome browser. (Smartphones and tablets, on the other hand, have been slower to catch on.)

In preparation for the 2015 season, SQRL has asked you to design a website that will support two main classes of user:

1. **Players.** Players need to find teammates matching their level and region, form a team to submit for Sorting week, and then receive their schedule of play for the season; they also, of course, like to monitor results of each weekend's play and check their team's ranking in their division!
2. **Organisers.** Organisers need to develop schedules for Sorting week based on team submissions, and then create tournament schedules for the main 12 weeks of play (which occasionally need modification for unexpected events, such as bad weather, disruption by trolls, etc.); week by week they also need to post the results of play and current rankings of each team.

And, in case you were wondering, although he has played in Legends a couple of summers passed, Harry Potter (who turns 35 this year) has announced that he and his friend Ronald Weasley will be organisers this year. In addition to their duties as outlined above, they are expected to take to the pitch as match referees.

Your website won't need to embed any information about the game of quidditch itself, other than that a team has seven players in four positions as mentioned above. However, if you'd like some background, see <http://en.wikipedia.org/wiki/Quidditch>.

Scope of Assignment

You are responsible for coming up with a low-fidelity design for the UK Summer Quidditch Recreational League web site. As there is no implementation aspect to this assignment you can free yourself from considerations of the difficulty to implement whatever your low-fidelity solution may be! We suggest you design for a display size of about an A4 piece of paper as this will be a good size for a desktop screen. Focus on achieving a great user experience.

Your group must produce the following deliverables:

1. Personas – one persona for each main class of user (players and organisers) which you are focusing your design on.
2. Scenarios – three scenarios describing key uses of the Website to be tested by those personas, Include a PACT analysis (PACT = People, Activities, Context, Technologies) header for each scenario; you may see a given scenario as applying to one or both of your personas (each persona should be envisioned as the user for at least one of your scenarios).
3. Requirements – High-level functional requirements of the software, tightly aligned to the scenarios (only consider those functions that will be used by our end users directly related to their tasks). Cover both main classes of user.
4. Low-fidelity paper prototype and description of use. A collection of hand drawn screens and dialog elements – label each element on the back (e.g., A, B, C, etc.) for reference. Provide a description for the marker of how the prototype is meant to be used to meet functional requirements; e.g. "A' is the opening screen; pressing the 'schedule' button brings up 'B'. You may include photos or scans of the paper prototype in the instructions for use.
Note: the prototype must be hand-drawn onto paper, with no pre-printed parts. This is due in the Wednesday lecture at 11.05am.
5. Rationale – a 500-800 word summary explaining your main design decisions. Pick three to four major decisions you made and explain how they came from the personas, scenarios and requirements. This could include explaining why you choose the overall user experience, why the prototype implements certain functionality, etc. This should tie in your low-fidelity prototype with the personas, scenarios and requirements.

In Assignment Three you will be individually implementing a prototype system for SQL. Note that you will be allowed to follow the low fidelity design your group develops for the present assignment *but you will not be obliged to do so* (i.e. you will not be marked on how closely your working prototype corresponds to your low-fidelity design).

Group Formation

The tutorial in Week Four is dedicated to group work strategies and during this tutorial you will be advised as to how to go about forming a good group. Groups will be registered in a google doc – we will email you the link. Please DO NOT randomly start a new group – form your group and then register it. If you do not sign yourself up to a group the tutors will assign you to a group. Likewise, if you form a group of 3 expect to have another random person assigned. There will be no groups of 2, 3, 5, etc. – do not ask (of course we may end up with one odd group but this will probably be people who have dropped out 😊)

Group Marking

Each member of the group will submit a confidential allocation of percentage of work done by all group members. This will be submitted through a Google doc form, URL to be published later. Your mark for this assignment will consist of the marker's grade modified by the average group specification of your contribution.

Deliverable Materials

You should provide the following deliverables for this assignment:

1. A set of hand-drawn sketches of the interface (the 'paper prototype').
2. A single Word or PDF document which contains all the write-up for the assignment (including the description / instructions for use of the paper prototype).

You should plan to spend no more than 15 hours each on this assignment.

Submit the electronic copy of your write-up through the web drop-box (one per group). You can make as many submissions as you like, only your last submission will be marked.

Hand in the low-fidelity prototype sketches at the start of the lecture on Wednesday 29th April. Place this in a plastic wallet and ensure that the contents will not fall out. Put the group number, names, UPIs and course (COMPSCI/SOFTENG) of your group members on the front of the document and note which UPI was used for the dropbox submission. <https://adb.auckland.ac.nz/>

Questions Direct questions about this assignment to Reshmi (rrav495@aucklanduni.ac.nz)

Markers will assess your deliverables as follows:

<i>Deliverable</i>	<i>Features</i>	<i>Marks</i>
Personas	Complete, believable and memorable, with a structure as discussed in the tutorial.	10
Scenarios	Cover key tasks, believable and memorable, with a PACT analysis and structure as discussed in lectures.	12
Functional Requirements	Drawn from research and scenarios, complete, clear. This should list what functionality the Website will offer (perhaps as bullet lists). [<i>Remember, these are the functions as seen by the end user.</i>]	8
Low-Fidelity Prototype	Meets functional requirements, clear (i.e., marker can tell how it is meant to work), attractive, well suited to task.	20
Rationale	Evidence of coherent structure and arguments and sound conclusions. Should explain the major elements of the prototype. Focus on what your system looks like and does, and why that is important.	6
Overall Presentation	The assessment overall is attractive and understandable. This includes using correct grammar and spelling.	4
Total		60