Deliverable 2: Requirements and Designs

Requirements

In order to understand the tasks of your users better, you will need to conduct your own research into their tasks and activities. You should gather information about potential users and their tasks using questionnaires, interviews, and surveys, and conducting research on the web to understand potential users' backgrounds, motivations, tasks, as well as the properties of existing systems.

This is delivered and assessed as a written document. Your document should describe the requirements and design for your interactive user interface covering the following aspects:

- Descriptions of users, with analysis of their backgrounds, tasks, experience and so on including
  - A list of the following CUSTOM stakeholder groups including descriptions of each stakeholders' background, experience, and tasks:
    - Primary
    - Secondary
    - Tertiary
    - Facilitating
  - A matrix (table) of primary CUSTOM stakeholders detailing their:
    - Aims
    - Sources of satisfaction
    - Knowledge and skills
    - Attitudes to work
    - Work-group attributes
    - Nature of activities
    - Responsibility
    - Working conditions
- Description of how you went about collecting your requirements e.g. what techniques and sources you used.
- Two task models which describe the main weather related activity of two key primary stakeholders.
- Descriptions and evaluation of functions and interactivity of existing Weather Apps, with specific reference to the users you identified.

Design

You should iteratively design **two different** apps. Each app should support **a different** primary stakeholder. You should design each app for **two screen sizes** – large (1024x768) and small (320x480) based on original iPhone and iPad screen sizes. You should brainstorm possible conceptual designs and solutions, develop examples of use (*e.g.* storyboards, paper prototypes *etc.*), follow several ideas and consider the benefits of each. Your designs should provide possible solutions to support the stakeholders in their activities – do not feel constrained by your programming skills at this stage. You should also ensure that your design supports your task models. Your document should include:

- An outline of your design process - how you developed your designs, how your designs were informed by the requirements capture stage, how you used the design guidelines and principles, and your rationale for design decisions.

- User interface designs (Screen layouts and storyboards of use) for your 2 app designs. In total you should produce four sets of user interface designs:
  - i. App A for stakeholder X, small screen
  - ii. App A for stakeholder X, large screen
  - iii. App B for stakeholder Y, small screen
  - iv. App B for stakeholder Y, large screen

You can assume that you already have the necessary technology and back-end infrastructure for the system design idea you have - we are only interested in how your design would support the users' activities – *i.e.* how they would interact with it. We are interested in novel and usable designs.

Deliverable

Note - keep a copy of your work so that you can use it in the next stage

Submit Requirements and Design electronically as a single pdf file with the provided GUI First Page (see QMPlus). Please feel free to include scans or photos of hand-drawn sketches.

Word limit: 8000 words

Deliverable 2: Requirements and Designs Marking Scheme

The marks are broken down for this part of the coursework as follows:

Requirements (40% of the deliverable)
- Descriptions of users, and analysis of their backgrounds, tasks, experience, and so on (20 marks available)
- Description and evaluation of current systems in terms of their features and users (20 marks available)

Design and design procedure (60% of the deliverable)
- Screen layouts (2 apps) (30 marks available)
- Storyboards of use (2 apps) (30 marks available)

(Including an explanation of how the requirements influenced the design choices)

The report should be presented in a well written and professional looking manner. Clarity of presentation is considered when marking the coursework.

Marks are awarded as follows:

Category 5 (70+%)

The report meets all the criteria below:

Analysis

Stakeholder analysis

It identifies **a range of stakeholder groups** from both **primary and secondary sources/research** using more than one approach to gather data, and it **systematically describes and analyses** their characteristics.

An **overview matrix of primary stakeholder characteristics** is provided as well as **detailed task models** describing weather-related activity of two of these primary stakeholders. These are **systematically analysed** so that the reader can clearly see how they have informed the design of two different user-interfaces.

Existing systems analysis

It provides the reader with **a clear and user-centred analysis of several existing weather apps**.

Design

Screen layouts

Screen layouts show all user interface elements on each screen, and clearly detail what each element does. The layout is very well designed. It is clear which design processes have been used and design choices are identified and explained by drawing on the stakeholder analysis outlined earlier in the report.

Story-boards of use

Story-boards detail step by step how users interact with the design through example scenarios. The storyboards are clear and well-designed, and relate directly to the task models.

Presentation

The report is **very effectively organised**: it flows well and sentences are clearly linked. The **language is precise and appropriate** to the field. There are **no mistakes in spelling, punctuation and sentence structure**.

Category 4 (60-69%)

This report should still be very good in terms of meeting the criteria but it can be weaker than a 5 report in one area. For example, it may show **excellent analysis of existing products and stakeholder requirements**, but may **not clearly link these to the designs that are produced**. Or it may present **two excellent designs** in terms of screen layouts and story-boards, but **not show clearly how these are derived from a consideration of primary user requirements.** Or it may be **awkwardly organised**.

Category 3 (50-59%)

This report should still meet most of the criteria but it may **lack detail and evidence of analysis**, or **the designs and the reasoning behind them may not be convincingly presented**. Or it may be **disorganised with imprecise use of language.**

Category 2 (40-49%)

This report has **strength in at least one area of competence** but in other areas there will be **significant gaps, lack of clarity, and disorganisation**. There may have been **no primary stakeholder analysis**, or if there has, the analysis is very limited. There may be **little or no connection between the stakeholder analysis and the designs.** Designs may be **unclearly presented**. The writing may be **disorganised, unclear and conversational.**

Category 1 Fail

This report has **significant gaps, lack of clarity, and disorganisation** with no clear area of competence. There is limited identification of requirements and no analysis of these**.** Designs may be absent or **unclearly presented,** with few or no tasks identified. The report may contain inaccurate information. The writing may be **disorganised, unclear and conversational at multiple points in the report.**