Initial Plan An Android version of a Crowdsourcing Application

Project Description

The aim of this project is to create an Android version of a crowdsourcing application that has already been built for the IOS platform as part of the CorCenCC (Corpws Cenedlaethol Cymraeg Cyfoes – The National Corpus of Contemporary Welsh) project. This £1.8 million project is led by the School of English, Communication and Philosophy at Cardiff University 1st March 2016 and is funded by the Economic and Social Research Council (ESRC) and the Arts and Humanities Research Council (AHRC) (http://sites.cardiff.ac.uk/corcencc/). A corpus is a large collection of language data, and the CorCenCC project aims to create the first general corpus to represent modern Welsh language and capture data from real life conversations. This will allow researchers, teachers, language learners and translators to study the data and identify how the Welsh language is used. The IOS app was developed with aim to provide a seamless way for Welsh speakers to upload accurate and natural representations of their Welsh to the corpus by giving the users full control of the contributions they upload via a free app.

The purpose of the Android app is to widen the reach of the CorCenCC project so that the upload of spoken contributions to the corpus is not exclusively limited to users of the IOS platform. The app's functionality will include the recording and upload of the audio and video files themselves, the collection of metadata about these recordings and their contributors, and their uploads into a database for their management and easy retrieval. The main challenge of the project will be to create an Android version app that will have the same functionality, flow and structure of its IOS equivalent whilst incorporating appropriate features that users of Android applications are used to. In summary, the main aim is to provide a consistent and professional user interface for users across the IOS and Android platforms.

Ethical approval for the project is already in place and relevant disclaimers will also be displayed as user's personal data will be stored and processed.

Project Aims and Objectives

To ensure that the project delivers an Android app that meets the aforementioned expectations, the following aims and objectives have been identified in discussion with the supervisory team:

- Create an Android app that supports the Android 5.0 Lollipop SDK (software development kit) and onwards for a mobile device.
- Maintain consistent environment and user interface design across different operating systems (IOS & Android), but also use appropriate Android features where appropriate.
 - Do not include back button in user interface.
 - $\circ~$ Analyse IOS app behaviour, interactions and user interface through exploratory testing.
- Evaluate the user interface and interactions proposed for the Android app and suggest improvements.
- Replicate all the functionality available on the IOS app.
 - Allow users to record and upload both voice recordings and videos along with associated metadata to the database.

- Allow users to create accounts.
- Allows users to log into their accounts.
- Allow users to change personal data.

Work Plan

To ensure that the project makes steady progress the following work plan has been created along with defined milestones and deliverables to focus on the project goal.

| Fig 1.1 | | | | | | | |
|----------------------------------|-------------------------------------|---------------------------|----------------|--|--|--|--|
| Task | Start Date | End Date | Teaching Week | | | | |
| Analysis | 31 st Jan 2017 | 6 th Jan 2017 | 2-3 | | | | |
| Research into Android app | | | | | | | |
| development and IOS behaviour. | 31 st Jan 2017 | 3 rd Feb 2017 | | | | | |
| Create prototype wireframes. | 4 th Feb 2017 | 6 th Feb 2017 | | | | | |
| Milestone 1 & Deliverable 1. | 6 th Fe | 3 | | | | | |
| Design | 7 th Feb 2017 | 11 th Feb 2017 | 3-4 | | | | |
| Create design documentation. | 7 th Feb 2017 | 11 th Feb 2017 | | | | | |
| Milestone 2 & Deliverable 2. | 11 th F | 3 | | | | | |
| Implementation | 12 th Feb 2017 | 19 th Apr 2017 | 2-Easter Break | | | | |
| Create test cases & plan. | 12th Feb 2017 | 13 th Feb 2017 | | | | | |
| Create User Interfaces for each | | | | | | | |
| screen. | 13th Feb2017 | 16 th Mar 2017 | | | | | |
| Implement functionality for each | | | | | | | |
| screen. | 16 th Mar 2017 | 19 th Apr 2017 | | | | | |
| Milestone 3 & Deliverable 3. | 19 th A | Easter Break | | | | | |
| Testing | 20 th Apr 2017 | 25 th Apr 2017 | Easter Break | | | | |
| User testing. | 20 th Apr 2017 | 21 st Apr 2017 | | | | | |
| Unit testing. | 21 st Apr 2017 | 25 th Apr 2017 | | | | | |
| Milestone 4. | 25 th A | Easter Break | | | | | |
| Deployment & Maintenance | | | Easter Break | | | | |
| (Contingency period). | 26/04/2017 | 01/05/2017 | | | | | |
| Create user guide. | 26/04/2017 | 01/05/2017 | | | | | |
| Milestone 5 & Deliverable 4. | 1 st Ma | ay 2017 | 12 | | | | |
| Finalise Report | 28 th Apr 2017 | 5 th May 2017 | 12 | | | | |
| Deliverable 5. | verable 5. 5 th May 2017 | | | | | | |

Meetings with the project supervisory team will be scheduled for a Tuesday on a fortnightly basis, as displayed in Fig 1.2 below:

| Fig 1.2 | | | | | | | | |
|---------------------------|---------------|--|--|--|--|--|--|--|
| Project Meeting Date | Teaching Week | | | | | | | |
| 7 th Feb 2017 | 3 | | | | | | | |
| 21 st Feb 2017 | 5 | | | | | | | |
| 7 th Mar 2017 | 7 | | | | | | | |
| 21 st Mar 2017 | 9 | | | | | | | |
| 4 th Apr2017 | 11 | | | | | | | |
| 18 th Apr 2017 | Easter Break | | | | | | | |
| 2 nd May 2017 | 12 | | | | | | | |

Fig 1.2

Milestones

The points listed below are major events in the project that will be used to monitor progress. The corresponding dates are listed in Fig 1.1:

- 1. Analysis phase of project complete.
- 2. Design phase of project complete.
- 3. Implementation phase of project complete.
- 4. Testing phase of project complete.
- 5. Release of app in google play store.

Deliverables

The points listed below are the tangible products that will be produced to ensure the objectives of the project are accomplished. The corresponding dates are listed in Fig 1.1:

- 1. Justification of methods document.
 - a. Non-functional & functional requirements
 - b. Prototype wireframes.
 - c. Risk Analysis.
- 2. Design documentation.
 - a. UML diagrams.
- 3. Developer release of app.
- 4. Release of app in Google Play store.
- 5. Final Report.

Gantt Chart of Work Plan

Fig 1.3

| Task Name | Jan | | | | | Feb | | | | Mar | | | | | Apr | | | | Мау | | |
|---|-------|-------|--------|--------|-------|--------------|--------------------|--------------|---------|---------|----------|--------|---------------|--------------|-------------|----------------|---------------------------|--------------|---------|--------------|---------|
| | Jan 1 | Jan 8 | Jan 15 | Jan 22 | Jan 2 | 29 Feb 5 | Feb 12 | Feb 19 | Fe | b 26 | Mar 5 | Mar 12 | Mar 19 | Mar 26 | Apr 2 | Apr 9 | Apr 16 | Apr 23 | Apr 30 | May 7 | May 14 |
| Analysis | | | | | | Analysi | s | | | | | | | | | | | | | | |
| Research into Android app development and IOS behaviour | | | | | | Research int | o Android ap | op developme | ent and | d IOS b | ehaviour | | | | | | | | | | |
| Create prototype wireframes | | | | | | Create | prototype wi | reframes | | | | | | | | | | | | | |
| Design | | | | | | | Design | | | | | | | | | | | | | | |
| Create design documentation | | | | | | | Create des | sign documer | ntation | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | Imp | lementation | | | |
| Create tests cases & plan | | | | | | | Create te | ests cases & | plan | | | | | | | | | | | | |
| Create User Interfaces for each screen | | | | | | | | | | | | c | reate User In | terfaces for | each screen | | | | | | |
| Implement functionality | | | | | | | Implement function | | | | | | | | | lement functio | tionality for each screen | | | | |
| for each screen | | | | | | | | | | | | | | | | | | | | | |
| Testing | | | | | | | | | | | | | | | | | | Testing | 1 | | |
| User Testing | | | | | | | | | | | | | | | | | | User Testing | | | |
| Unit Testing | | | | | | | | | | | | | | | | | | Unit Te | sting | | |
| Deployment & Maintenance | | | | | | | | | | | | | | | | | | | Deployr | nent & Maint | tenance |
| User Guide | | | | | | | | | | | | | | | | | | | User Gu | uide | |
| Finalise Report | | | | | | | | | | | | | | | | | | | | inalise Repo | ort |