About Me Project

Progress Review Report

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| Southern Cross University  Unit: ISY10221 Computing Project I |



Project Supervisor: Paul Woods

Project Client: Jean Stevens on behalf of Elucidate

Project Team: Jennifer Doherty and Stephen Manning

Project Team Member: Jennifer Doherty

# Introduction

All students enrolled in the Bachelor of Information Technology at Southern Cross University must undertake a “capstone” major computing project in a team over two sessions. In the first session, the team conducts the systems analysis and design, completing the necessary discovery to produce the project documentation. In the second session, the team implements the product in accordance with the documentation.

For my major project, I formed a two-person team with Stephen Manning, a fellow student I was already acquainted with from Web Development I. Our team chose a project provided by our supervisor, Paul Woods. The project, called “About Me”, is a website and app to assist people with disabilities to communicate with their care team and people in their community. The client is Jean Stevens on behalf of Elucidate.

The purpose of this document, prepared at the end of the first session, is to reflect on the project so far, in preparation for developing the product in the second session.

# Project description

The objective of the About Me Project is to create an app and website to assist individuals with disabilities in their daily communication needs. Individuals (or their primary carers) can create a profile which details their disability, how this may affect their communication, how to assist them to communicate effectively, their medication needs, and any other relevant information. The profile can be shared with other app users or non-users, or printed out.

The primary stakeholder is Jean Stevens, the founder of Elucidate and the project client. App users are the largest stakeholder group. Users may be individuals with disabilities, their primary carers, their secondary carers, or other people with a responsibility for the individual’s wellbeing. This last group may include people from their community, such as neighbours or shopkeepers. Other stakeholders include the development team (myself and Stephen Manning), our supervisor Paul Woods, and Southern Cross University.

The About Me Project comprises a responsive website and a native app for both iOS and Android. The website will be built with HTML and CSS and processed with JavaScript and PHP. The native app is a “wrapper” style app, inserting the website into an app framework using Cordova.

As of this report, the systems analysis and design phases of the project have been completed. The development team will shortly be moving in to the implementation phase, creating the deliverable product.

# Software product

In the analysis and design phases of the project, the development team has created several major documents:

* Preliminary Project Description
* Feasibility Study
* System Requirements Specification
* System Design Specification

In addition to the documentation, the team has also maintained a project timeline using OpenProj, and individual work logbooks.

The team collaborated on each major document. For each of these, I voluntarily took responsibility for setting up an initial formatted Microsoft Word template and for the final formatting, including referencing, internal cross-referencing, and tables and figures. It was important to me that the final documents had a professional look and feel.

In addition to creating the look and feel of the documentation, I also contributed sections to each major document. In the Preliminary Project Description, I contributed my own overview collaborated with Stephen on the other sections. In the Feasibility Study, Stephen conducted the main feasibility calculations, then I reviewed them, formatted the results, and assisted with the conclusion and executive summary. In the System Requirements Specification, my primary contributions were the sequence diagrams, user interface diagrams, and the technical constraints description, including an extensive table of supported browsers and operating systems. In the Software Design Specification, my primary contribution was the interface design and the revised sequence diagrams. I was also primarily responsible for maintaining the project timeline.

I felt that the first three major documents adhered well to guidelines and standards, and were detailed and complete. However, both Stephen and myself “lost steam” during creation of the final Software Design Specification document, and neither of us were completely happy with the final result. Although the document was extensive, more work could have been done to make it more complete.

Further, the documents were not extensively version controlled as we had not yet set up a GitHub repository for the project. While Google Drive maintains versions if the same document is uploaded in the same place, the team did not make complete use of this feature. However, a GitHub repository has now been set up and the team will use the repository going forward to maintain version controlled documentation.

# Development process

The analysis and design phases of the project are now complete. Going forward, the team needs to create a Prototype early in the implantation phase, as a proof-of-concept to ensure the client is happy with the direction. The team will then start on development of the Final Product. During product development, a Test Plan will be developed and the product will be tested against it to produce the Testing Documentation.

Because the development team are geographically dispersed, it will be critical to maintain strict version control and delineation of tasks to ensure that work is not duplicated or overwritten. I personally am comfortable working in a version controlled environment due to my work experience, and I have used version control for all my previous Southern Cross University assignments. However, I don’t think Stephen has as much experience in this regard. Therefore, it will be up to me to lead the team and enforce version control.

It has been difficult to develop the product following the Waterfall model for several reasons. First, the client is not technical and does not have experience in developing software projects, so she is not always aware of what’s possible or practical. While the client does have a strong overall vision of the product, the finer details are not completely fleshed out, so there are often additional suggestions. However, she is reasonable and understanding about deferring certain features to a future phase of work.

Second, the development team are not experienced at managing and delivering large software projects. Despite our university and real-world experience, this is still the first major project for us where we are the lead developers as well as the project managers. So we are also not always aware of what’s possible and have constantly rethought past decisions. The linear flow of the Waterfall model makes it difficult to iterate on previous documentation. However, the Waterfall model does provide a structured framework and guideline for next steps, which has helped to keep pushing the project forward.

The most important lesson for the implementation phase is for the development team to be more assertive, take more control, and offer more guidance to the client. We need to ensure that the prototype is thorough and provides the client with enough detail that she can understand what functionality is included and what will not be included in this proof of concept project.

# People management

My past experience at Southern Cross University with group assignments has given me a general negative view of this style of assignment. I was lucky to be able to form a two-person team with Stephen, who I was already acquainted with from a previous class and who I knew was at a similar level to me. However, because the team was only two people, it meant that there was much more responsibility on each person.

Early in the project we struggled as a team with the distribution of work. I would prepare to work on a section of a document only to find that Stephen had already completed it. I think we did improve on this over the session. However, it will be even more critical during the implantation of the phase to ensure that it is clear who is working on what.

Towards the end of the project (particularly with the System Design Specification), I was struggling with motivation and with the work. It was not coming together for me and I felt like I was letting the team down. I’m sure that my lack of motivation was affecting Stephen’s motivation also. Our lines of communication broke down and we were rushed and flustered.

It will be important during the implantation phase to maintain regular communication. I do not think one weekly team meeting will be sufficient. I will recommend to Stephen that we increase the frequency of our team meetings to ensure we remain on track and in communication with each other.

In contrast, I felt like our communication with the client (Jean Stevens) was very good. Her Client Feedback Report also indicated that she was very satisfied with our communication. I did struggle to express the browser and operating system restrictions we would be working with in a way she would understand. My second attempt, where I created a table, was much more clear and she was much happier with this explanation.

I would like to see us take more control of the project features now we have a deeper understanding of Jean’s vision and what the app should do. I believe Jean would be receptive to this due to her lack of technical expertise.

# Project control

The personnel, resources, and technology were settled fairly early in the project and have not undertaken any major changes. The requirements have had some changes due to the team developing a deeper understanding of the client’s vision, and the client understanding better what the team can achieve. However, these changes have been integrated in to the documentation as it has developed.

Our initial project timeline had to be pushed back as it took longer than expected to confirm the project with the client and arrange the first client meeting. The project also ran over the Christmas and New Year period, which was not suficciently accounted for in initial planning. This meant that documentation delivered after the New Year was later than expected, and the final documentation was delivered much closer to the end of the session than anticipated.

It was also difficult to maintain the project timeline in regards to inserting logbook entries. Neither Stephen or myself had access to Microsoft Project (or easy access to the University computer labs), so we decided to use OpenProj. Neither of us had extensive experience with this software. It was difficult to establish a process for inserting logbook entries to the timeline. Once the process was established, it was nearly impossible to collaborate on this task. I took full responsibility for maintaining the project timeline as it was simply too difficult to divide this responsibility.

When planning the timeline for the implementation phase, I will recommend to Stephen that we allow more time than we think we need for each deliverable. I will also recommend that we break down the major deliverable (the Final Product) as much as possible in to individual tasks so that it is easy to see what is outstanding at any time. However, I don’t see an easy way to divide the timeline maintenance and I may continue to do this myself.

As previously mentioned, the most critical project control tool for the implementation phase will be version control via the GitHub project that is now set up. Early in the project I will need to keep a close eye on this tool, to ensure that the team is using it correctly and that it is working as intended.