About Me Project

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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

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# Project Overview

## Purpose

### Client

Elucidate is a small, private company that provides services and education for individuals with disabilities and organisations that employ, provide services for, or educate those individuals (Elucidate 2015a).

### Stakeholders

On the client side, the major stakeholder is Jean Stevens, the founder of Elucidate. The secondary stakeholders are the users of the proposed app. These users may be individuals with disabilities, their primary carers, other carers, or other people with a responsibility for the individual’s wellbeing.

On the development side, the main stakeholders are the developers – Jennifer Doherty and Stephen Manning. Additional stakeholders are Paul Woods, supervisor of the project team, and Southern Cross University, the organisation which Jennifer and Stephen implicitly represent.

### Concept

Communicating the specific, changing needs of individuals with the many people involved in their care can be a challenge, and the client has personally witnessed many cases where good intentions have been undermined by a lack of clear communication.

The About Me Project (AMP) is a cross-platform app that aims to address this problem by helping to elucidate the needs of individuals with disabilities and to consolidate the communications of those involved in their care.

## Scope

The scope will be limited to the production of a cross-platform app and its accompanying manuals, documentation and training. The platforms supported will be web, Android, and iOS.

## Objectives

The specific objectives of the About Me Project are to develop, test and hand-over a system capable of the following functions:

* Creation of a three-level profile of the individual with a disability:
  + Simple profile
  + In-depth profile
  + Planning profile (with planning templates)
* A method of connecting the individual to the people involved in their care
* A Twitter-feed-like history of changes to the profile, with free-text input support
* A notification system, either via push notifications or email notifications
  + The notification system will alert the network of the individual of any changes to their profile
  + The notification system also requires “read receipt” functionality, to record that changes have been viewed by the appropriate people in the network
* A system for allowing non-users to contribute to the individual’s profile
* Support for different levels of access to the individual’s profile and specific profile sections:
  + Read
  + Write
  + Contribute
* The profile should support the following additional features:
  + Simple profile should be viewable by anybody via a URL
  + Links to external sources
  + Emailing the profile to a specified email address
  + Viewing documents, e.g. PDF or Word files
* The user onboarding flow should include sample data to help the user understand what is required in each section

Other considerations:

* The app needs to be simple and responsive to provide cross-platform access to the broad cross-section of people providing care
* Users may be non-digital natives or people with cognitive disabilities.
* It should be upbeat and on-trend but not childish
* The app should be designed with accessibility in mind from the start, to allow for compatibility with accessibility tools such as screen readers

# Project Team

## Team Overview

The About Me Project Team consists of two university students, Jennifer Doherty and Stephen Manning. Jennifer and Stephen are distance education students with excellent academic records who are in their final year of study for the Bachelor of Information Technology course at Southern Cross University.

### Jennifer Doherty

Jennifer has a previous Bachelor of Arts degree in English Literature and Classics from Victoria University of Wellington, New Zealand. She currently works full-time as an IT Project Coordinator for an e-commerce company on the Gold Coast in Queensland, Australia. Jennifer’s major is Software Development, and she has strong management and organisational skills. Jennifer is available for all phases of the project. While she will be contributing to all phases of the project, Jennifer’s main focus will be on monitoring and managing the progress of the project to ensure it remains on schedule, and on documentation editing and proof-reading.

#### Skills

* Project management
* Documentation control
* Database management
* HTML
* CSS
* C#
* VB
* Java

#### Contact Details

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* Skype: ilaeria
* Phone: 0405 248 019

### Stephen Manning

After running into trouble whilst trekking in the Himalayas, Stephen resolved to do two things if he made back to Australia – make good software, and never travel again. Stephen has over five years of experience in IT Systems Administration and Support, with three years in the not-for-profit sector, where he has managed projects for software rollouts and NBN upgrades and provided network, software, and server troubleshooting. He is now in the final year of a Software Development major at Southern Cross University.

#### Skills

Stephen’s software projects have included:

* Online movie rental store (2016) – this project involved the creation of an IMDB-style film database in **MySQL**, and an application that allows customers to search for and hire films, and authorised staff to edit the database and manage inventory. The application was coded in **JavaScript** and **PHP**.
* Datafile Reader (2015) – this project involved creating a console application that displays a raw-data file (consisting of Bureau of Meteorology statistics in CSV format) in human readable form after removing delimiters. The programme was created in **C#.NET**.

#### Contact Details

* Email: [s.manning.15@student.scu.edu.au](mailto:s.manning.15@student.scu.edu.au)
* Skype: stevem0911
* Phone: 0424 136 635

# Client Overview

## Client

Elucidate offers custom solutions for organisations that employ, provide services for, or educate individuals with a disability (Elucidate 2015a). Elucidate was founded by Jean Stevens, a researcher, university lecturer, and clinician with over 30 years’ experience in the private, government, and community sectors (Elucidate 2015b).

The nature of Elucidate’s work involves regular interaction with individuals with a disability. In Elucidate’s experience, one of the greatest challenges facing individuals with disabilities is in explaining their specific and changing needs to their caregivers. Communication is critical and issues with communication can have serious repercussions. Elucidate wishes to undertake the About Me Project to fill this gap in their suite of resources.

### Contact Information

Jean Stevens is the sole point of contact for this project and the only staff member involved. Her contact details are:

* Email: enquiries@elucidateinsight.com
* Phone: 0408 843 153

## Users

It is expected that the users will include the following groups:

* Individuals with disabilities
* Their primary carers
* Other people contributing to their care:
  + Educators
  + Aged care
  + Respite care
* Other people with a responsibility for the individual’s wellbeing:
  + Family
  + Friends
  + Neighbours

# Development Environment

## Planning and Collaboration Tools

* ProjectLibre
* Google Drive
* BitBucket or GitHub

## Communication Tools

* Blackboard Collaborate
* Skype
* Email
* Mobile (WhatsApp, voice calls)

## Software Tools

Because the client wishes the app to be available through web, Android, and iOS platforms, it will be developed as a responsive web application with a mobile app wrapper created in Cordova. The web application will be written in HTML, CSS, JavaScript, and/or PHP. User data will be stored in a MySQL database.

## Hardware Tools

### Workstations

* Jennifer and Stephen will be writing code on personal home computers.

### Servers

* Backend processing will be taken care of by a Linux Web Server (Red Hat Enterprise 6v 2.6.32-43) hosted by Southern Cross University.

### Testing

* Development Testing
  + Jennifer and Stephen will perform defect testing throughout the development phase, with the aim of finding and fixing bugs
  + Three types of tests will be used
    - Unit testing – testing of individual classes or methods
    - Component testing – testing component interfaces
    - System testing – testing system as a whole, with one or more components integrated
* User Testing
  + The app will be given to a small number of users to test in their own environment, across a range of different people (e.g., caregivers, decision makers) and platforms (e.g., Windows, Mac, iOS/Android mobile devices).

# Technical Considerations

It is important to the client that the app is accessible to a wide range of users. The app should be supported in major web browsers for Windows and Mac, and by both Android and iOS phones. It can be difficult to support every version of every browser and device operating system. A list of supported browsers and versions, and operating systems and versions, will need to be developed with the client.

Because the app is specifically targeted at individuals with disabilities, it is crucial that the app is built for accessibility and to be compatible with accessibility tools such as screen readers.

The app will be developed on the SCU Infotech server and hosted there until handover. The client will need to purchase a web hosting solution to host the app and the user database and have that prepared for handover.

Because the app is potentially storing personal information, it may need to comply with the Australian Privacy Principles (Office of the Australian Information Commissioner 2014). This will need to be discussed further with the client.

# Project Timeline

The project timeline has been developed as a Gantt chart in ProjectLibre. The planning stage of the project will be completed by 1 February 2017. The development stage of the project will be completed by 31 May 2017. Refer to the Gantt chart for detailed timeline information.

# Preliminary Feasibility Assessment

## Scope Feasibility

In order to make the project manageable given the limited time and resources available, it’s essential that the scope be kept narrow. This can be achieved by:

* Using a cross-platform approach
* Avoiding excess business functions
* Limiting the number of bindings to the APIs of other systems

## Resources Feasibility

Both Jennifer and Stephen work full-time and are studying part-time. They are both studying only ISY10221 Computing Project I in Session 3 2016, and are both studying an additional unit alongside ISY10222 Computing Project II in Session 1 2017.

However, both team members are confident that they will be able to devote sufficient time to complete this project within the expected workload of approximately 300 hours each across both sessions.

## Skills Feasibility

Whilst the project team have a proven record of high achievement and have studied languages like JavaScript and C#, they haven’t had direct experience with mobile app development. There are two semesters in which to research and gain the required skills, and the project team are committed to this additional learning for both the project and their personal development.

## Preliminary Feasibility Assessment

At this early stage of the About Me Project there is no obvious reason why it is not feasible, given the above feasibility factors. However, the next stage of the project involves a detailed feasibility analysis, and a final feasibility assessment will be developed during that stage.

Appendices

* 1. References

Elucidate 2015a, *About Elucidate*, Viewed 14 November 2016, <<http://www.elucidateinsight.com/about>>.

Elucidate 2015b, *About Jean Stevens*, Viewed 14 November 2016, <<http://www.elucidateinsight.com/jean-stevens>>.

Office of the Australian Information Commissioner 2014, *Privacy fact sheet 17: Australian Privacy Principles*, Viewed 24 November 2016, <<https://www.oaic.gov.au/individuals/privacy-fact-sheets/general/privacy-fact-sheet-17-australian-privacy-principles>>.