System Maintenance Document

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SENDER Project

System Maintenance Document

Lecturer: Dr. Torab Torabi

Supervisor: Suzan Majeed

Team

Colin Oakley

Daniel Bartholomew Thorne

Nam Nguyen

Luis Miguel Saenz Espitia

Sajan Gurung

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1.0 Introduction

1.1 System Overview

Sender Project is a system oriented to help sufferers of dementia through a mobile application that allows carers of the patients to locate medical services or other facilities oriented to the aid of these patients.

The application provides a search system which is used to find medical services near by or in a specific area.

The system is conformed by:

-Mobile Application(IOS & android) -->app users

-Web Portal Application --->Service Providers

-Restful API(Phalcon)—>Communication between mobile&web app with the database

-Database(My Sql)

for more detail regarding the interaction of the components go to the diagrams on section 5.

1.2 Audience Description

The audience of this project is primarily sufferers of dementia, carers and service providers offering services aimed to help dementia patients.

- Carers and Dementia patients looking for a service within a specific area and the following requirements:

  - Smart Phone
  - Sender's Mobile Application
  - Initial internet Access

- Service Provider, Registered practitioners or companies offering services oriented to provide aid or relief to dementia sufferers.
  To be a user of this application a service provider must have:

  -Created account on the web portal
  -An available registered service
  -Details of the service provided(location, phone number, practitioners ..etc)

1.3 Applicability Statement

Software

There is two versions of the mobile application:

IOS: Developed in Swift environment, the application ....and uses the API coded in Phalcon PHP to communicate with the database.

Android: Coded in Java, (details) and uses the API coded in Phalcon PHP to communicate with the database.

As for the Web Portal application:

Web Portal: The web portal was developed using HTML 5, Bootstrap v3.1.1, CSS 3 and Angular JS. It is sitting on an Amazon Server and uses the API coded in Phalcon PHP to communicate with the database.

1.4 Purpose Statement

The purpose of Sender project is to:
- Provide the dementia patients and carers with enough tools to reach assistance from professionals
- Provide the dementia patients and carers with enough information regarding how to access a service
- Provide the dementia patients and carers with tools to socialise with other patients regarding topics of common interest
- Provide the dementia patients and carers with communication channels to express themselves regarding services or preferences
- Allow Service Providers to be reached by patients through the application
- Allow Service Providers to make their services available to users of the mobile application
- Allow Service Providers to create and manage their own services within the application environment
- Provide the service provider with a communication channel among other service providers
- Provide the Web user with app usage statistics, facilitating the target market identification for service providers.

1.5 Document Usage Description

1.0 Introduction

This Section of the document provides information regarding the purposes of the app application and its functionalities.

Covering the targeted market of the application, this section contains an explanation of the system, conventions used and components together with the environments in which the developing process of the application took place.

2.0 Software Design Scope

This section contains information regarding the major software functions and its constrains. Covering the benefits this software provides to users,service providers and the health care business in this area.

3.0 Reference Documents

This section contains the support documents regarding the system design and software used. Including a description of the project itself, this section covers all the referencing of third party software and other tools used on the developing of the application.

4.0 User Stories

This Section contains the user stories regarding the application along with the definition for each user story and its behavior showing how the functionality of the app is implemented, the benefits provided to the user and the size of this task regarding the amount of work it required to be completed.

Supporting each user Story, in this section can be found:

- the user story definition explaining the user story
- a flow of interaction diagram to follow the steps the user story goes through
- wireframes for each user story describing the steps to go through a user story.
- the user story testing which describes the tests carried out for each user story in order to accomplish the acceptance criteria.

5.0 Object-Oriented Design

This section contains all the system design documents explaining behavior, relations among the system, components and architecture of the system.

In addition this section contains an object dictionary all the objects developed for the system, system designers and maintainers.

6.0 Software release report

This section contains all the processes and activities regarding the deployment of the system covering the usability tests of the system and a report that guaranties the implementation of the user stories and their perfect functionality.

7.0 Additional User Interface Design

In this section screens of the input, output and communication of data between the system and the user are provided.

8.0 Special Notes

Relevant information, descriptions or procedures that are not included elsewhere in the document.

1.6 Conventions

The conventions shared among the different components of the system are:

- Programming Style (Mapping of the class diagrams into interfaces and objects for the application using the Object-Oriented implementation with the API

1.7 Change Log

Date	Change	Person Responsible for the change
Apr 07, 2015	Creation of the Table of Contents	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Table of Figures	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	1.0 Introduction	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	1.7 Change Log	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	2.0 Software Design Scope	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	2.1 Major Software Functions	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	2.2 Major Design Constraints and other Requirements	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	3.0 Reference Documents	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	3.2 System Documentation	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	3.4 Other Documentation	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	4.0 User Stories	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	4.1 User Story Dictionary	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	5.0 Object-Oriented Design	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	5.1 High Level System Architecture	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	5.3 Use Case Analysis	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	5.4 Domain Model and Class Diagram	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	5.6 Sequence diagram	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	5.7 Object Dictionary	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	6.0 Software release report	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	6.1 Usability Test Report	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	6.2 System Test Report	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	7.0 Additional User Interface Design	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	7.1 Additional Input and Output Screens	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	7.2 Additional Data Display Screens	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	8.0 Special Notes	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Back Section	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Appendices	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Bibliography	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Glossary of Terms	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Reference Materials	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Index	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Statement of effort	• created by Luis Miguel Saenz Espitia
Apr 07, 2015	Class Diagram	• created by Luis Miguel Saenz Espitia
Apr 08, 2015	5.1 High Level System Architecture	• updated by Nam Nguyen
Apr 08, 2015	5.2 High Level Package Diagram	• updated by Nam Nguyen
Apr 08, 2015	3.1 Existing Software Documentation	• created by Luis Miguel Saenz Espitia
Apr 08, 2015	Domain Class Model	• created by Sajan Gurung

Apr 08, 2015	3.3 Vendor Documentation	• created by Luis Miguel Saenz Espitia
Apr 08, 2015	4.3.4 Integration Testing	• updated by Colin Oakley
Apr 20, 2015	2.2 Major Design Constraints and other Requirements	• updated by Colin Oakley
Apr 20, 2015	2.1 Major Software Functions	• updated by Colin Oakley
May 04, 2015	3.4 Other Documentation	• updated by Colin Oakley
May 18, 2015	4.X.1 User story definition	• updated by Colin Oakley
May 18, 2015	4.X.2 Flow of Interaction	• updated by Colin Oakley
May 18, 2015	4.X.5 Wireframe	• updated by Colin Oakley
May 18, 2015	4.X.4 Integration Testing	• updated by Colin Oakley
May 18, 2015	4.2 As a Service Provider I want to Register	• updated by Colin Oakley
May 18, 2015	4.2.4 Integration Testing	• updated by Colin Oakley
May 18, 2015	4.4.4 Integration Testing	• updated by Colin Oakley
May 18, 2015	4.4 As a Service Provider I want to add my address details	• updated by Colin Oakley
May 19, 2015	4.5.4 Integration Testing	• updated by Colin Oakley
May 19, 2015	4.6 As a Service Provider I want to delete my address details	• updated by Colin Oakley
May 19, 2015	4.7.4 Integration Testing	• updated by Colin Oakley
May 19, 2015	4.7.2 Flow of Interaction	• updated by Colin Oakley
May 19, 2015	4.7 As a Service Provider I want to add service details	• updated by Colin Oakley
May 20, 2015	4.X.3 User Story Testing	• updated by Colin Oakley
May 20, 2015	4.3 As a Service Provider I want to Sign in	• updated by Colin Oakley
May 20, 2015	4.6.5 Wireframe	• updated by Colin Oakley
May 20, 2015	5.5 Entity Relationship Diagram v2	• updated by Nam Nguyen
May 20, 2015	1.1 System Overview	• updated by Luis Miguel Saenz Espitia
May 21, 2015	4.8.4 Integration Testing	• updated by Colin Oakley
May 21, 2015	4.8.2 Flow of Interaction	• updated by Colin Oakley
May 21, 2015	4.8 As a Service Provider I want to delete service details	• updated by Colin Oakley
May 21, 2015	4.3.1 User story definition	• updated by Colin Oakley
May 21, 2015	4.3.3 User Story Testing	• updated by Colin Oakley
May 21, 2015	4.4.1 User story definition	• updated by Colin Oakley
May 21, 2015	4.4.5 Wireframe	• updated by Colin Oakley
May 21, 2015	4.2.3 User Story Testing	• updated by Colin Oakley
May 22, 2015	4.3.5 Wireframe	• updated by Colin Oakley
May 23, 2015	3.1 Existing Software Documentation	• updated by Colin Oakley
May 23, 2015	4.5.2 Flow of Interaction	• updated by Colin Oakley
May 23, 2015	4.4.2 Flow of Interaction	• updated by Colin Oakley

May 23, 2015	4.6.2 Flow of Interaction	• updated by Colin Oakley
May 23, 2015	4.5.1 User story definition	• updated by Colin Oakley
May 24, 2015	4.6.1 User story definition	• updated by Colin Oakley
May 24, 2015	4.8.1 User story definition	• updated by Colin Oakley
May 24, 2015	4.7.1 User story definition	• updated by Colin Oakley
May 24, 2015	4.6.3 User Story Testing	• updated by Colin Oakley
May 24, 2015	4.5.3 User Story Testing	• updated by Colin Oakley
May 24, 2015	4.7.3 User Story Testing	• updated by Colin Oakley
May 24, 2015	4.1 User Story Dictionary	• updated by Colin Oakley
May 25, 2015	4.9 As a user, I want to rate and review service providers.	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.11 As a user, I want to update my login details.	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.12 As a user, I want to contact service provider within the app.	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.13 As a user, I want to discuss with other registered users.	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.14 As a user, I want to find out map direction to a service provider from my current location.	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.16 As a user, I want to sign-out.	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.1 User Story Dictionary	• updated by Daniel Bartholomew Thorne
May 25, 2015	4.2.5 Wireframe	• updated by Colin Oakley
May 25, 2015	4.2.2 Flow of Interaction	• updated by Colin Oakley
May 25, 2015	4.3.2 Flow of Interaction	• updated by Colin Oakley
May 25, 2015	4.2.1 User story definition	• updated by Colin Oakley
May 26, 2015	4.7.5 Wireframe	• updated by Colin Oakley
May 26, 2015	4.8.5 Wireframe	• updated by Colin Oakley
May 26, 2015	4.8.3 User Story Testing	• updated by Colin Oakley
May 26, 2015	4.15 As a user, I want to use the app without sign-in.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.21 As a user, I want to be able to search without internet connection.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.20 As a user, I want to find service providers nearby me.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.10 As a user, I want to sign-in.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.19 As a user, I want to find service providers by name.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.18 As a user, I want to find service providers by service type.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.17 As a user, I want to find service providers by postcode.	• updated by Daniel Bartholomew Thorne
May 26, 2015	4.9 As a user, I want to rate and review service providers.	• updated by Sajan Gurung

May 26, 2015	4.14 As a user, I want to find out map direction to a service provider from my current location.	• updated by Sajan Gurung
May 26, 2015	4.12 As a user, I want to contact service provider within the app.	• updated by Sajan Gurung
May 27, 2015	4.13 As a user, I want to discuss with other registered users.	• updated by Sajan Gurung
May 27, 2015	4.11 As a user, I want to update my login details.	• updated by Sajan Gurung
May 27, 2015	4.15 As a user, I want to use the app without sign-in.	• updated by Sajan Gurung
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May 27, 2015	1.4 Purpose Statement	• updated by Luis Miguel Saenz Espitia
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May 27, 2015	1.6 Conventions	• updated by Luis Miguel Saenz Espitia
May 27, 2015	1.7 Change Log	• updated by Luis Miguel Saenz Espitia
May 27, 2015	2.2 Major Design Constraints and other Requirements	• updated by Luis Miguel Saenz Espitia
May 27, 2015	3.2 System Documentation	• updated by Luis Miguel Saenz Espitia
May 27, 2015	INDEX	• updated by Luis Miguel Saenz Espitia
May 28, 2015	4.15 As a user, I want to use the app without sign-in. Added wireframe.	• updated by Sajan Gurung
Aug 13, 2015	User Document	• created by Sajan Gurung
Aug 13, 2015	1.0 User Document Introduction	• created by Sajan Gurung
Aug 13, 2015	2.0 Introductory Kit	• created by Sajan Gurung
Aug 13, 2015	3.0 Getting Started Guide	• created by Sajan Gurung
Aug 13, 2015	4.0 User Manual	• created by Sajan Gurung
Aug 13, 2015	5.0 System Administration Guide	• created by Sajan Gurung
Aug 13, 2015	6.0 Installation Guide	• created by Sajan Gurung
Sep 15, 2015	4.1 Mobile (iPhone/Android)	• created by Sajan Gurung
Oct 9, 2015	Update User Stories 4.2 thru 4.9	• updated by Colin Oakley
Oct 10, 2015	Update User Stories 4.22 thru 4.27	• updated by Colin Oakley
Oct 11, 2015	Update 6.1 Software release	• updated by Colin Oakley
Oct 11, 2015	Update 6.2 Software release	• updated by Colin Oakley

2.0 Software Design Scope

2.1 Major Software Functions

Major software functions of the SENDER application are :-

- Service Provider Management
    - Add Service Provider
    - Search/View Service Provider
    - Update Service Provider

- Delete Service Provider

- Address Management
    - Add address
    - Search/view address
    - Update address
    - Delete address
    - Search - geolocation

- Service Management
    - Add service
    - Search/view service
    - Update service
    - Delete service

- Social Networking
    - Review/Rate
    - Sharing

- Log Management
    - Log activity
    - Reports

2.2 Major Design Constraints and other Requirements

The following list contains the constrains in the design and development of the system:

- The application must run in crossed platform
- Interface consistency between Android and IOS
- the system should be user friendly and easy to navigate through
- Web Portal and Mobile apps should agree on data handling with the API (terms, connections.. etc)
- Google API licenses
- Database consistency with Mobile APP.
- Application running without internet connection
- appropriate terms and interfaces for the targeted app users.
- Amount of data to be handled by the mobile app vs user's waiting time
- Tablets or other devices for which the app has not been designed

3.0 Reference Documents

3.1 Existing Software Documentation

Any existing documents related to the software being designed will be listed here:

-Project Description: SENDER.pdf

-First Client Meeting Notes:

ClientMeetingNotes.pdf

ClientInterview-Suzan'sNotes-230515-1341-72.pdf

3.2 System Documentation

- The software is not being developed from an embedded existing system.

3.3 Vendor Documentation

third-party software:

Amazon RDS: Amazon RDS is designed for developers or businesses who require the full features and capabilities of a relational database, or who wish

to migrate existing applications and tools that utilize a relational database. It gives you access to the capabilities of a MySQL, Oracle, SQL

Server, PostgreSQL, or Amazon Aurora database engine running on your own Amazon RDS cloud-based database instance.

Taken from(http://aws.amazon.com/rds/details/)

Amazon Rds WebPage:http://aws.amazon.com/rds/

Amazon EC2: Amazon EC2 presents a true virtual computing environment, allowing you to use web service interfaces to launch instances with a variety

of operating systems, load them with your custom application environment, manage your network's access permissions, and run your image

using as many or few systems as you desire. Taken From (http://aws.amazon.com/ec2/details/)

AmazonEC2 Webpage: http://aws.amazon.com/ec2/

Phalcon PHP: Phalcon is an open source, full stack framework for PHP 5 written as a C-extension, optimized for high performance. You don't need to learn or

use the C language, since the functionality is exposed as PHP classes ready for you to use. Phalcon also is loosely coupled, allowing you to use

its objects as glue components based on the needs of your application. Taken From (http://docs.phalconphp.com/en/latest/index.html).

Phalcon WebPage: http://phalconphp.com/en/

Swift: Swift is an innovative new programming language for Cocoa and Cocoa Touch. Writing code is interactive and fun, the syntax is concise yet

expressive, and apps run lightning-fast. Swift is ready for your next iOS and OS X project — or for addition into your current app — because

Swift code works side-by-side with Objective-C. Taken From (https://developer.apple.com/swift/)

Swift Webpage: https://developer.apple.com/swift/

Angular JS: AngularJS is a structural framework for dynamic web apps. It lets you use HTML as your template language and lets you extend HTML's syntax

to express your application's components clearly and succinctly. Angular's data binding and dependency injection eliminate much of the code

you would otherwise have to write. And it all happens within the browser, making it an ideal partner with any server technology.

Taken From(https://docs.angularjs.org/guide/introduction)

WebPage:https://angularjs.org/

GoogleMaps: The Google Maps APIs give developers several ways of embedding Google Maps into web pages, and allows for either simple use or extensive

customization. (Taken From: https://developers.google.com/maps/faq#whatis)

Google Maps API WebPage: https://developers.google.com/maps/

3.4 Other Documentation

Australian Government - Usability Testing (Web Guide)

http://webguide.gov.au/accessibility-usability/usability-testing/

IFIN diagrams - "On The Move to Meaningful Internet Systems 2003: OTM 2003 ..., Volume 2"

page 230

4.0 User Stories

4.0 Android Unit Testing

TC1-1: MainActivity.java

Test Case ID	Test Objective	Test Input	Actual Input	Expected Result	Actual Result	Status
TC1-1-1	Validate activity is not null	N/A	Open the app and check whether all buttons are loaded	Content View is set to activity_main.xml	As expected	Pass
TC1-1-2	Validate launch of another activity	N/A	Click on Advance Search	AdvanceSearchActivity.class is loaded	As expected	Pass

TC1-2: AdvanceSearchActivity.java

Test Case ID	Test Objective	Test Input	Actual Input	Expected Result	Actual Result	Status
TC1-2-1	Validate activity is not null	N/A	Observe AdvanceSearchActivity.class is loaded	Content View is set to activity_advanceSearch.xml	As expected	Pass
TC1-2-2	Validate launch of another activity *searchButtonOnClick()*	N/A	Click on Search with default settings	ServiceProviderListActivity.class is loaded	As expected	Pass
TC1-2-4	Validate *checkSearchCriteria()*	Valid input text or searchType	input text: (Leave blank) searchType: Any	Return true	As expected	Pass
TC1-2-5	Validate *checkSearchCriteria()*	Valid input text with searchType	input text: "La Trobe" searchType: Name	Return true	As expected	Pass

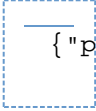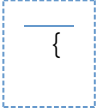| TC1-2-6 | Validate *checkSearchCriteria()* | Null input text with searchType | input text: "" (Leave blank) searchType: Name | Return message to enter name | As expected | Pass |
TC1-2-7	Validate *checkSearchCriteria()*	Valid input text with searchType	input text: 3000 searchType: Postcode	Return true	As expected	Pass
TC1-2-8	Validate *checkSearchCriteria()*	Null input text with searchType	input text: "" (Leave blank) searchType: Postcode	Return message to enter postcode	As expected	Pass
TC1-2-9	Validate *checkSearchCriteria()*	String input text with searchType	input text: "Melbourne" searchType: Postcode	Return message to enter valid postcode	As expected	Pass

TC1-3: ServiceProviderListActivity.java

Test Case ID	Test Objective	Test Input	Actual Input	Expected Result	Actual Result	Status
TC1-3-1	Validate activity is not null	N/A	Observe Service Providers are listed on the screen.	Content View is set to activity_service_list.xml	As expected	Pass
TC1-3-3	Validate launch of another activity	N/A	Click on Map button	MapActivity.class is loaded	As expected	Pass
TC1-3-4	Verify launched intent contains correct payload data	N/A	Observe all the listed Service Providers are displayed on map	Listed Service Providers are displayed as markers on map	As expected	Pass

TC1-4: MapActivity.java

Test Case ID	Test Objective	Test Input	Actual Input	Expected Result	Actual Result	Status
TC1-4-1	Validate activity is not null	N/A	Observe map is loaded properly	Content View is set to activity_maps.xml	As expected	Pass
TC1-4-2	Validate *setUpMapIfNeeded()*	N/A	Observe map is loaded and markers are present	Map is loaded and zoomed properly with markers	As expected	Pass
TC1-4-3	Validate launch of another activity	N/A	Click on List button	ServiceProviderListActivity.class is loaded	As expected	Pass
TC1-4-4	Verify launched intent contains correct payload data	N/A	Observe that the service providers on both map and list are same.	Markers on map and service provider list should match.	As expected	Pass

TC1-5: HttpManager.java

Test Case ID	Test Objective	Test Input	Actual Input	Expected Result	Actual Result	Status
TC1-5-1	Validate *getData()*	Valid url	http://54.153.247.58/API/general/providers	Service Provider with details in JSON	{ "p	Pass
TC1-5-2	Validate *getData()*	Invalid url	http://54.153.247.57/API/general/	Return exception	As expected	Pass
TC1-5-3	Validate *getData()*	Valid url with no internet connection	http://54.153.247.58/API/general/providers (with no internet)	Return exception	As expected	Pass

TC1-6: ServiceProvdierJSONParser.java

Test Case ID	Test Objective	Test Input	Actual Input	Expected Result	Actual Result	Status
TC1-6-1	Validate *parseFeed()*	Valid content	{	Return an *ArrayList* of *ServiceProvider*		Pass
TC1-6-2	Validate *parseFeed()*	Invalid content		Return an exception	As expected	Pass

4.1 User Story Dictionary

Web application User Stories for a Service Provider :-

Mobile device application User Stories :-

Web application User Stories for an Administrator :-

4.2 As a service provider I want to register

1. User Story Definition

As a service provider **I want to** register on the SENDER application **so that** I can log in to the application.

After I login I can add my details such as :

- my location (address details)
- details about the services that I can provide to dementia patients.

Carers of dementia patients will then be able to search for these services and if they find a suitable match they will be able to contact me.

Story Points	Acceptance criteria
Story points: 3	Valid data is accepted and invalid data is rejected as follows :- 1. Valid username/password combination will be accepted and registered in the database. 2. Username not unique - rejected 3. Username is null - rejected 4. Password is null - rejected

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Te st ID	Test Objective	Expected Output	Status (Pass/Fail)
4.2.3 .1	Test that a valid details allow a service provider to register to access the SENDER application.	Successfully registered as a service provider who is then able to login to the SENDER application.	
4.2.3 .2	Test that a username which is already in use can not be used to register	Error message	
4.2.3 .3	Test that a username can not be null	Error message	
4.2.3 .4	Test that a password can not be null	Error message	

4. Integration Testing

N/A

5. Wire frame

Please enter your details below:

Company Name

Username

Password   Confirm Password

Register

4.3 As a service provider I want to Log in

1. User Story Definition

As a service provider **I want to** log-on to the SENDER application **so that** I can use the application to add my details.

I can add my details such as :

- my location (address details)
- details about the services that I can provide to dementia patients.

Carers of dementia patients will then be able to search for these services and if they find a suitable match they will be able to contact me.

Story Points	Acceptance criteria
Story points: 3	1. Username/password combination are accepted when they are registered in the SENDER database, Dashboard page is displayed where other functions can be accessed. 2. Username/password combination are rejected with an error message when they are not registered in the SENDER database

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Te st ID	Test Objective	Expected Output	Status (Pass /Fail)
4.3. 3.1	Test that a valid username/password combination allows a user to sign into the SENDER application.	Successfully sign in to the application and access other functions from the SENDER application homepage	
4.3. 3.2	Test that a invalid username/password combination does not allow a user to sign into the SENDER application.	Error message	

4. Integration Testing

N/A

5. Wire frame

1. **Enter username and password and press Sign in**

Please sign in

Username

Password

Sign in

4.4 As a service provider I want to Log out

1.User Story Definition

As a service provider **I want to** sign-out of the SENDER application for security reasons **so that** other people can not use the application using my login credentials.

Story points	Acceptance criteria
Story points: 3	1. User is logged out of the SENDER application, anyone else using the same computer as the user who has logged out of the application will need to log in to the SENDER application to use it.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass/Fail)
4.4.3.1	Test that Log out button allows user to sign out of the SENDER application.	Successfully sign-out of the application	

4. Integration Testing

N/A

5. Wire frame

1. **Press Logout button**

4.5 As a service provider I want to add my location details

1. User Story Definition

As a service provider **I want to** add my address details on the SENDER application database **so that** users of the SENDER application's search function, will be able to find and contact me at my address.

Story points	Acceptance criteria
Story points: 8	Valid data is accepted as follows :- 1. When valid data is entered including all mandatory fields, the address details are saved in the database. These updated details are then accessible by the mobile application and can also be viewed by pressing the "locations" button on the dashboard menu. 2. Invalid data is rejected as follows:- • Address is null - rejected with an error message • City is null - rejected with an error message • State is null - rejected with an error message • Postcode is null - rejected with an error message

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass /Fail)
4.6.3.1	Test that saving address details is successful when entering mandatory fields	Success message and address details are updated on the database. These updated details are accessible by users of the mobile application.	
4.6.3.2	Test that saving address details which are invalid will be rejected as follows :-		
	missing mandatory field (address) will be rejected.	Error message	
	missing mandatory field (city) will be rejected.	Error message	
	missing mandatory field (state) will be rejected.	Error message	
	missing mandatory field (postcode) will be rejected.	Error message	

4. Integration Testing

N/A

5. Wire frame

1. Press Add new location button

2. Enter details and press save

3. Locations page displayed with new location

4.6 As a service provider I want to update my location details

1. User Story Definition

As a service provider **I want to** update my address details on the SENDER application database **so that** users of the SENDER application's search function, will be able to find and contact me at my correct address.

Story points	Acceptance criteria
Story points: 8	Valid data is accepted as follows :- 1. When valid data is entered including all mandatory fields, the address details are saved in the database. These updated details are then accessible by the mobile application and can also be viewed by pressing the "locations" button on the dashboard menu. 2. Invalid data is rejected as follows:- • Address is null - rejected with an error message • City is null - rejected with an error message • State is null - rejected with an error message • Postcode is null - rejected with an error message

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass /Fail)
4.6.3.1	Test that saving address details is successful when entering mandatory fields	Success message and address details are updated on the database. These updated details are accessible by users of the mobile application.	
4.6.3.2	Test that saving address details which are invalid will be rejected as follows :-		
	missing mandatory field (address) will be rejected.	Error message	
	missing mandatory field (city) will be rejected.	Error message	
	missing mandatory field (state) will be rejected.	Error message	
	missing mandatory field (postcode) will be rejected.	Error message	

4. Integration Testing

N/A

5. Wire frame

1. Press View button

2. Enter details and press save button

3. Details saved

4.7 As a service provider I want to delete my location details

1. User Story Definition

As a service provider **I want to** delete my address details on the SENDER application database **so that** users of the SENDER application's search function, will not find me listed at an incorrect address.

Story points	Acceptance criteria
Story points: 3	1. Selected address details are removed from the database.

On this page:

- 1. User Story Definition
- 2. Flow of Interaction
- 3. User Story Testing
- 4. Integration Testing
- 5. Wire frame

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass /Fail)
4.7.3.1	Test that selecting and deleting an address is successful.	The selected address details are removed from the SENDER database	

4. Integration Testing

N/A

5. Wire frame

1. **Press delete button**

2. **Details removed**

Locations

Office Name	Address	Services
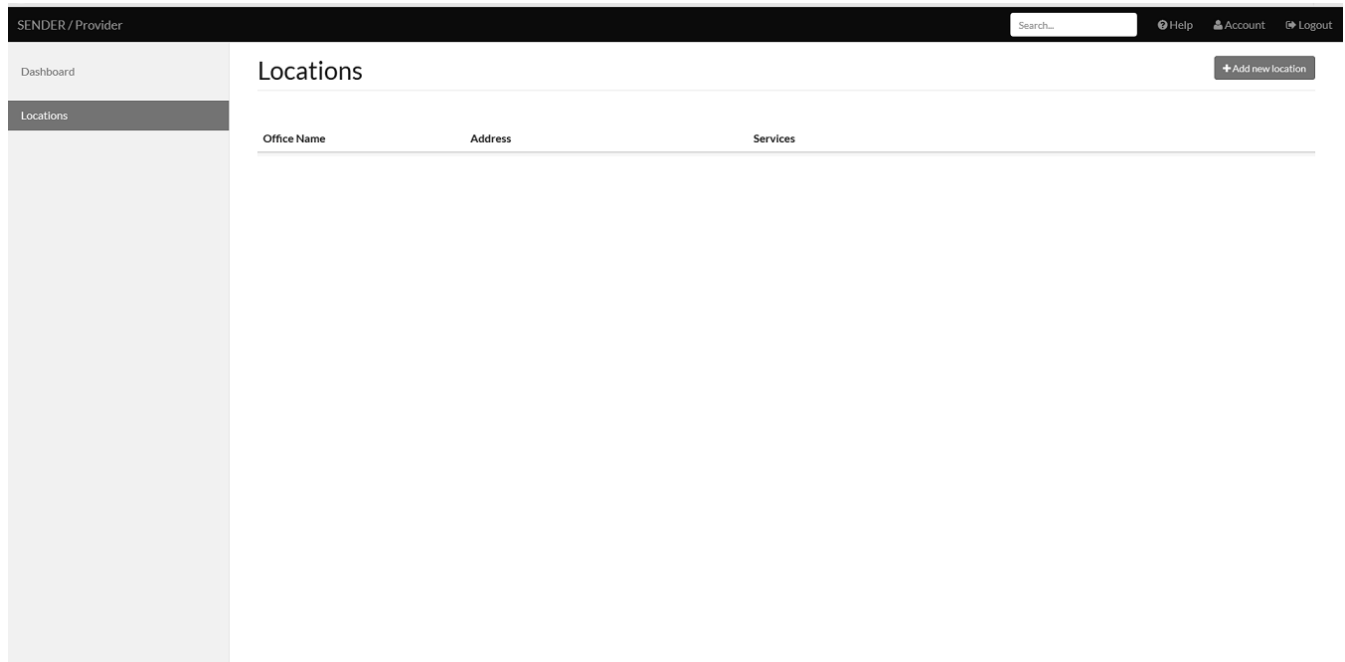
4.8 As a service provider I want to update service details

1. User Story Definition

As a service provider **I want to** update the services that I can provide to dementia patients,

so that users of the SENDER application's search function, will be able to search for these services.

If they then find a suitable match they will be able to contact me.

Story points	Acceptance criteria
Story points: 8	1. The selected services are added to the database for this Service Provider These details are accessible by the mobile application.

2. Flow of Interaction

Unknown macro: 'gliffy'
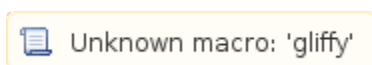
3. User Story Testing

Tes t ID	Test Objective	Expected Output	Status (Pass/Fail)
4.8.3.1	Test that selecting and adding a service is successful.	The selected services are added to the SENDER database for this Service Provider and a success message is displayed These services are then searchable by the users of the mobile application.	

4. Integration Testing

N/A

5. Wire frame

1. **Press View Detail**

2. **Check/Uncheck Services and press save**

3. Changes saved

4.9 As a user, I want to rate and review service providers.

1. User Story Definition

After visiting a service provider, users can rate and review service providers based upon their experience. Ratings can be given from 1 to 5 stars - 1 being poor and 5 being excellent. Along with rating, users can leave reviews. This will provide genuine insight to the quality of service providers which will help other users to decide whether to visit the particular service provider or not.

Story Points	Acceptance Criteria
8	• User needs to be registered and signed in. • User needs to select a valid rating of 1,2,3,4 or 5. • User needs to enter a valid review description.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.9.3.1	To test that a valid rating can be submitted.	Accept a rating of 1,2,3,4 or 5.	
4.9.3.2	To test that an empty rating cannot be submitted.	Do not accept an empty rating. Return a message to select a valid rating.	
4.9.3.3	To test that a valid review description can be submitted.	Accept a review of at least 20 characters.	
4.9.3.4	To test that an empty review description cannot be submitted.	Do not accept an empty review. Return a message to write a valid review.	

4. Integration Testing

N/A

5. Wireframe

< Back **Write a review**

Rating: ★★★★☆ ▼

Title: Good

Description:

The experience was good, would definitely recommend to others.

Submit review
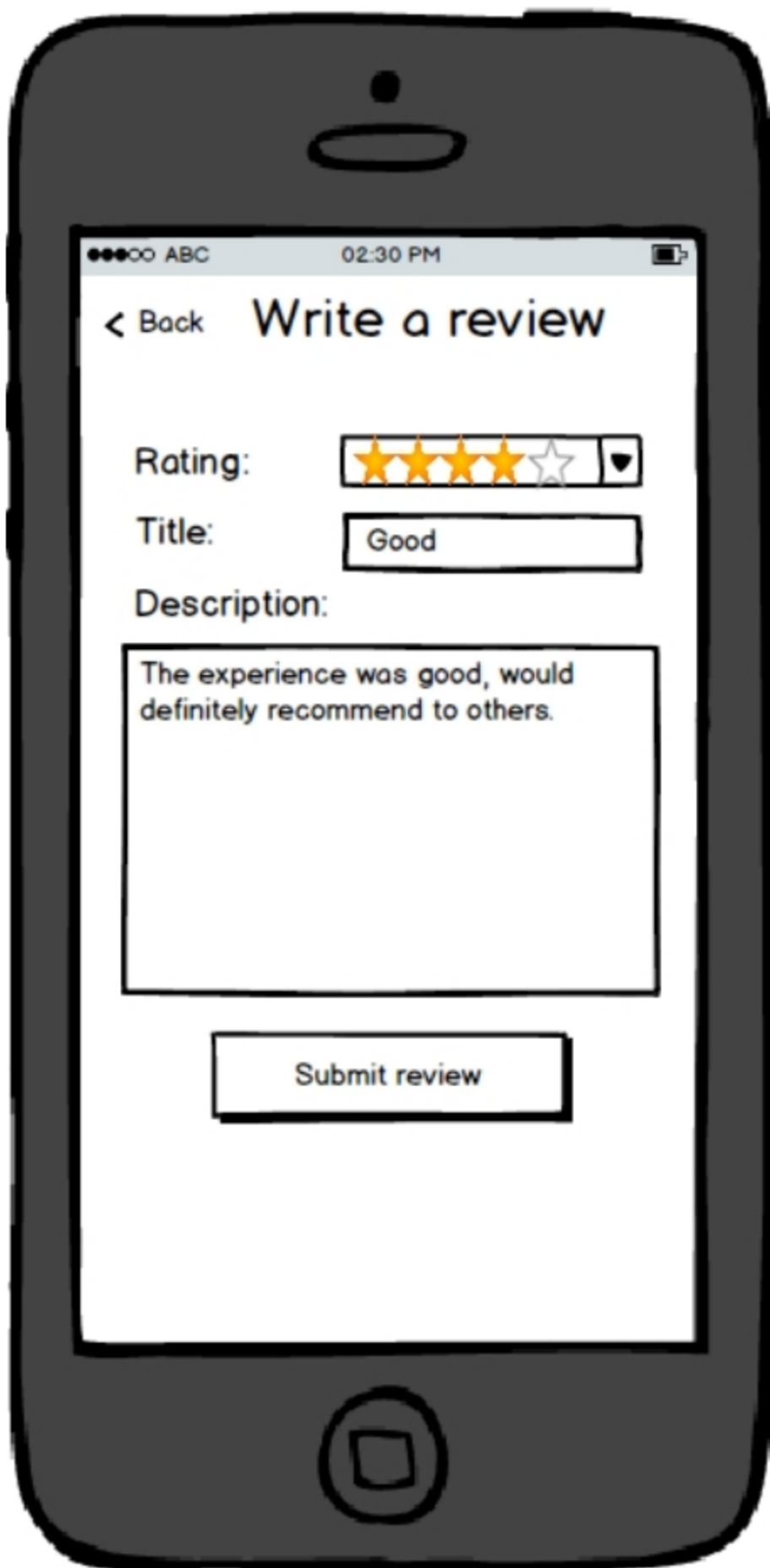
4.10 As a user, I want to sign-in so that I am able to write a review and talk to other users.

1. User Story Definition

If the user wants to write a review or comment on the forum they must be signed in. So the user would want to sign into the app providing they have an account. If the user doesn't have an account, they would have to register before signing in.

Story Points	Acceptance Criteria
2	- User can sign-in with their account - If user account doesn't exist, they can register

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.10.3.1	To test that valid user details can be submitted	Accept at least 6 characters with no spaces for username and password	
4.10.3.2	To test that an empty user details cannot be submitted.	Do not accept an empty user details. Return a message to enter the correct style of input.	
4.10.3.3	To test that valid user details can sign in	Accept a user with the correct matching username and password.	
4.10.3.4	To test that an invalid user details can't sign in	Do not accept them logging in. Display an error message saying invalid username or password.	

4. Integration Testing

N/A

5. Wireframe
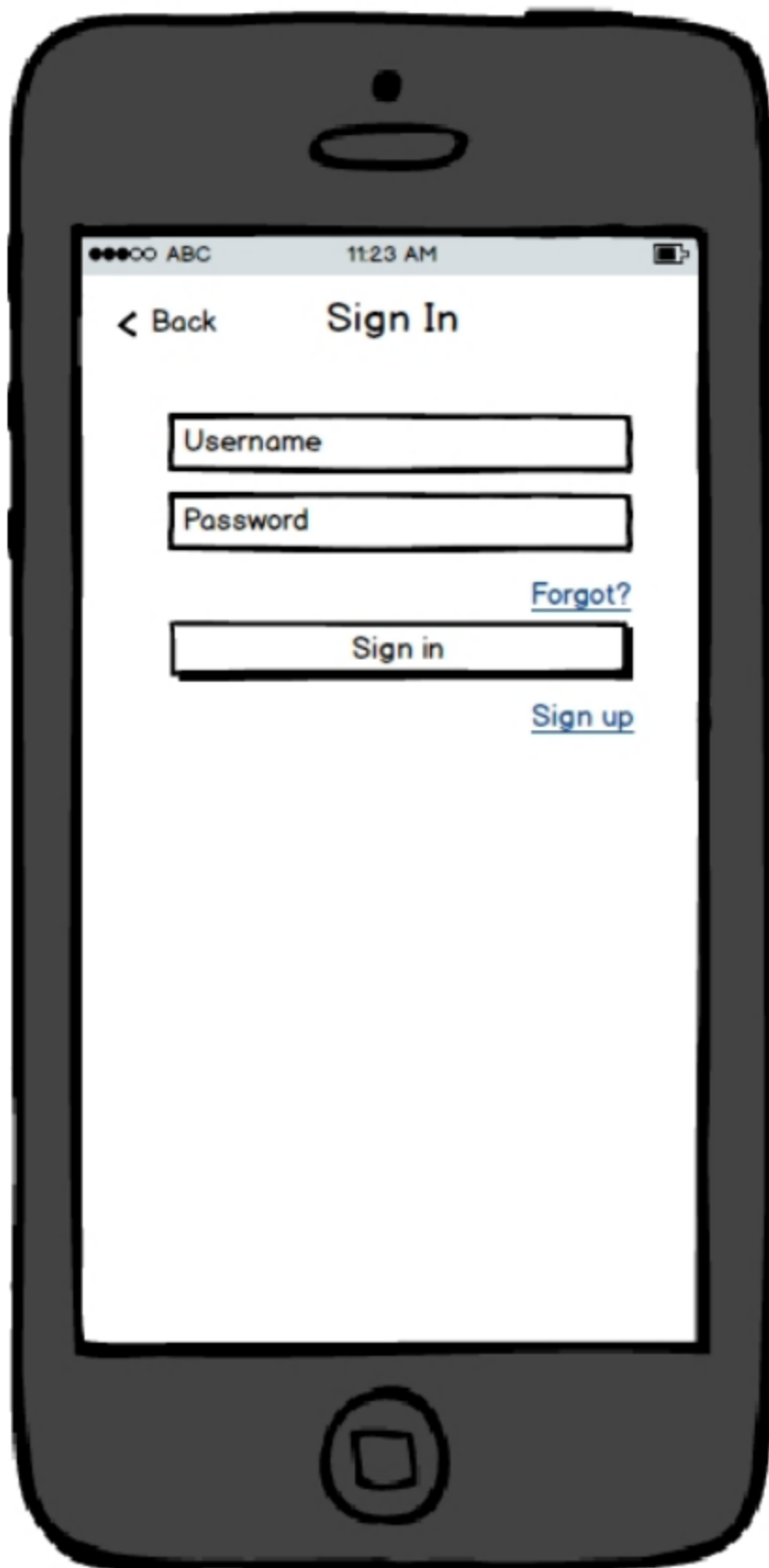
4.11 As a user, I want to update my login details.

1. User Story Definition

Users can change their email address and password for login.

Story Points	Acceptance Criteria
5	- Users can change their email address. - An email is sent to old email address regarding the change and a confirmation email is send to the new address. - Users can change their password. - An email is sent to the associated email address regarding the change.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Result	Status
4.11.3.1	To test that a user can change their email address.	Set new email address as default email. Send confirmation email to new email address.	
4.11.3.2	To test that a user can change their password.	Set entered password as password. Send confirmation email to current email address.	
4.11.3.3	To test that a user can change their username.	Set username as unchangeable.	

4. Integration Testing

N/A

5. Wireframe

N/A

4.12 As a user, I want to contact service provider within the app.

1. User Story Definition

Each service provider page has contact details. Users can make phone call or send an email to service provider without having to note down contact details.

Story Points	Acceptance Criteria
5	- The contact details (phone, email, website) are displayed. - User can click on phone number to make phone call. The app will invoke mobile dialer and make a phone call on the number. - User can click on email address to send an email. The app will invoke mobile default email client and set service provider's email as recipient address.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.12.3.1	To test that a user can click on phone number of a service provider.	Direct user to mobile dialer and dial service provider's provided phone number.	
4.12.3.2	To test that a user can click on email address of a service provider.	Direct user to mobile default email client and set service provider's email address as recipient address.	
4.12.3.3	To test that a user can click on website of a service provider.	Direct user to mobile default browser and open service provider's website.	

4. Integration Testing

N/A

5. Wireframe

N/A

4.13 As a user, I want to discuss with other registered users.

1. User Story Definition

As part of social networking feature of the app, users are able to start discussion on forum and make comments. Dementia patients and their caretakers can look for other users with similar conditions and seek advices online. This feature is designed to provide peer support to the users who are looking for advices online. The forum can be accessed directly from the home screen. Unregistered users will be required to register and sign in to start discussion or make comments. However, they are able to view discussion.

Story Points	Acceptance Criteria
8	- User is registered and signed in. - Registered user can start discussion topics. - Registered user can post comments to discussion. - Unregistered users can view discussion but cannot start discussion or post comments.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.13.3.1	To test that a signed in user can start a topic.	Signed in user can start discussion topic.	
4.13.3.2	To test that a signed in user can post comment to topic discussion.	Signed in user can post comment.	
4.13.3.3	To test that an unregistered user can view topics in discussion.	Unregistered user can view topics.	
4.13.3.4	To test that an unregistered user cannot start a topic.	Display a message showing user need to register/sign in to start a topic.	

| 4.13.3.5 | To test that an unregistered user cannot post comment. | Display a message showing user need to register/sign in to post a comment. | |

4. Integration Testing

N/A

5. Wireframe

N/A

4.14 As a user, I want to find out map direction to a service provider from my current location.

1. User Story Definition

In a service provider page, there is a link to view map direction to that particular service provider. The app detects the user's location via GPS and displays the available direction from the user's current location to the service provider.

Story Points	Acceptance Criteria
5	- User's location is detected automatically via GPS. - User is requested for permission to use his /her current location. - User can view the direction to a service provider. - User can view alternate directions if available.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Result	Status
4.14.3.1	To test that a service provider is selected.		
4.14.3.2	To test that user's location is detected.	Retrieve user's location and store in json format.	
4.14.3.3	To test that user is notified for permission to use his/her current location.	Display a message asking user for permission to use his/her current location.	
4.14.3.4	To test that direction from user's current location to service provider is displayed on map.	Display map with marker from user's current location to selected service provider.	

4. Integration Testing

N/A

5. Wireframe

4.15 As a user, I want to use the app without sign-in.

1. User Story Definition

It is not mandatory for users to sign-in to use the app. User can directly start searching for service providers by opening the app. The main purpose of this user story is to allow users to browse the app anonymously.

Story Points	Acceptance Criteria
1	- User can access the app without sign-in. - User can skip sign-in request, if prompted.

2. Flow of Interaction

Unknown macro: 'gliffy'
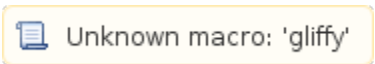
3. User Story Testing

Test ID	Test Objective	Expected Result	Status
4.15.3.1	To test that user can access home screen without sign in.	User can access the app without sign in.	
4.15.3.2	To test that user can skip sign in prompt to continue using the app.	Hide sign in prompt message.	

4. Integration Testing

N/A

5. Wireframe

Sender

Alert

Sign-in

| Skip | Yes |
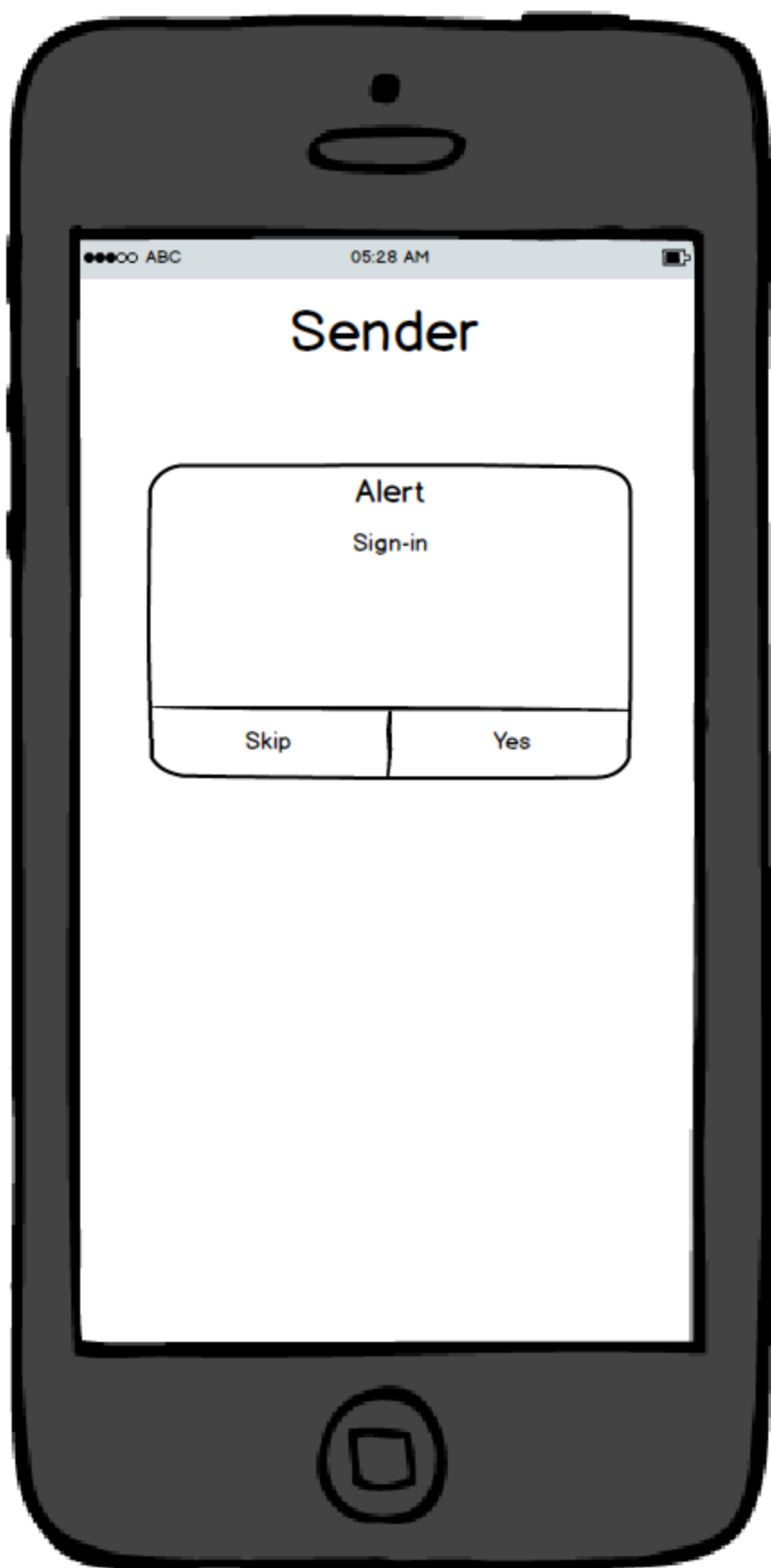
4.16 As a user, I want to sign-out so that another person can sign in via my device.

1. User Story Definition

If a user no longer wants to be signed in they will have the ability to sign out. This can be useful if someone else want to use their phone to connect to people.

Story Points	Acceptance Criteria
2	- While signed in the user can sign out - If not signed in there is no sign out ability

2. Flow of Interaction

Unknown macro: 'gliffy'
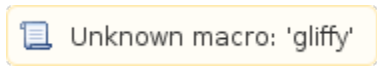
3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.16.3.1	To test that there is no sign out button when the user is not signed in	No sign out button being displayed	
4.16.3.2	To test that there is a sign out button after the user logs in	Sign out button is displayed	
4.16.3.3	To test that the user disconnects from the database correctly	Return to the homepage with no sign out button (hence logged out)	
4.16.3.4	To test that if there is an error with disconnecting it fails correctly	Returns to the homepage still signed in and an error message is displayed	

4. Integration Testing

N/A

5. Wireframe

4.17 As a user, I want to find service providers by postcode so that I can search for services near a families postcode.

1. User Story Definition

As a user, I would like to be able to type in a post code to look for services. As I am not next to the area, it would be handy to be able to search by postcode so I know what is around that location.

Story Points	Acceptance Criteria
5	■ Allows valid input of postcode ■ Invalid input fails ■ The results display for the correct postcode

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.17.3.1	To test that a valid input can be submitted	Accept an input of 4 numbers (for postcode)	
4.17.3.2	To test that an invalid input can't be submitted	Do not accept an empty rating. Return a message to select a valid rating.	
4.17.3.3	To test that the search results are for the right input	The service result are situated in the area of the postcode the user input	

4. Integration Testing

N/A

5. Wireframe

< Back   **Find a service**

Service Type :

| Nursing Care | ▼ |

Search By:

| Location | ▼ |

| Enter Suburb or Postcode |

| Search |

SENDER

🔍 search

Find a service

Near Me Now

Download State

Sign in
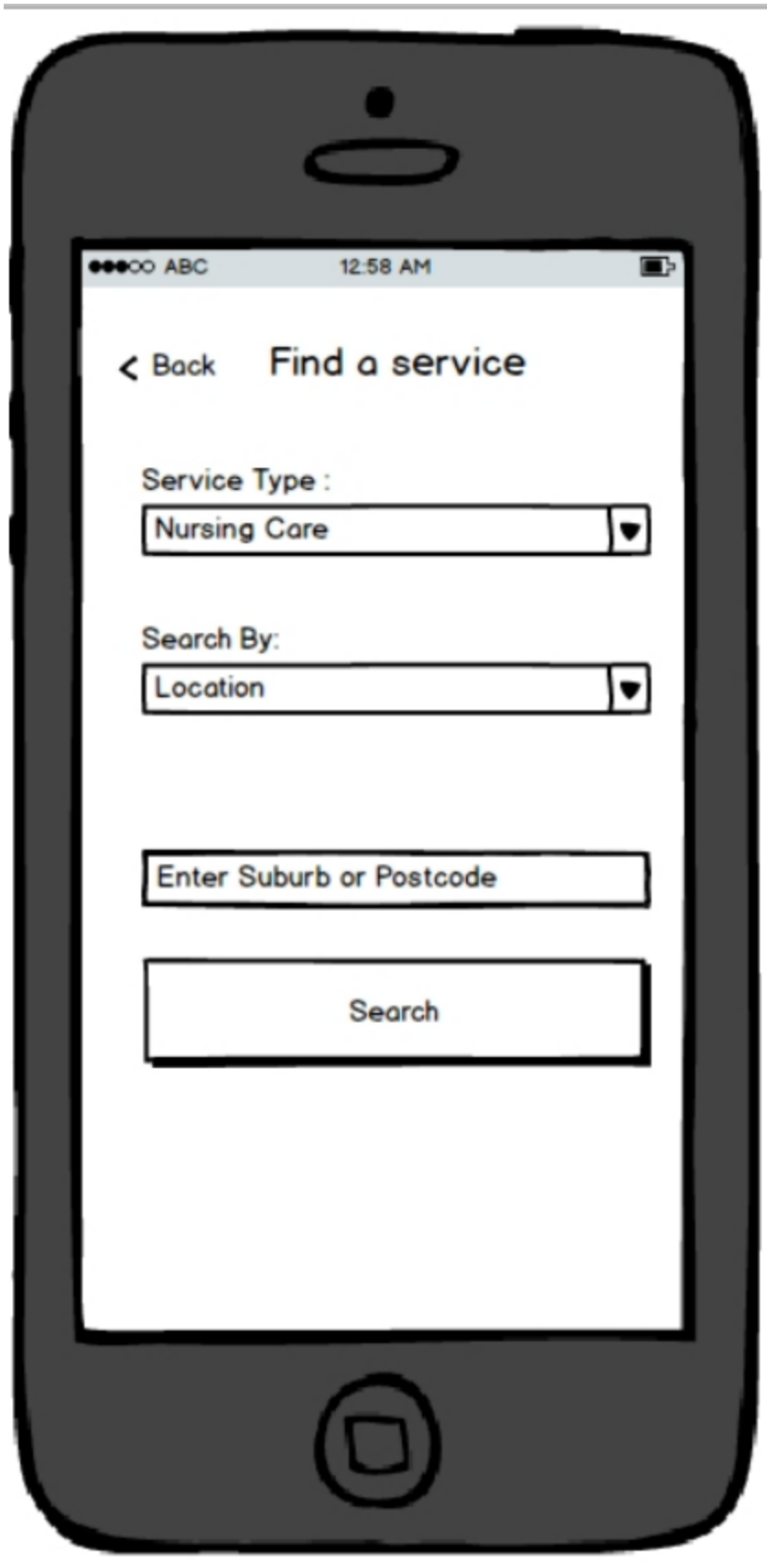
4.18 As a user, I want to find service providers by service type, so that I can find services relating to a particular type of service that I need.

1. User Story Definition

The users may not know of service names, however they do need a particular service. So being able to search by service type would make finding their desired service a lot easier.

Story Points	Acceptance Criteria
3	- They can type in a service category on the homepage - The service drop down contains their desired service - The results match their desired service type

2. Flow of Interaction
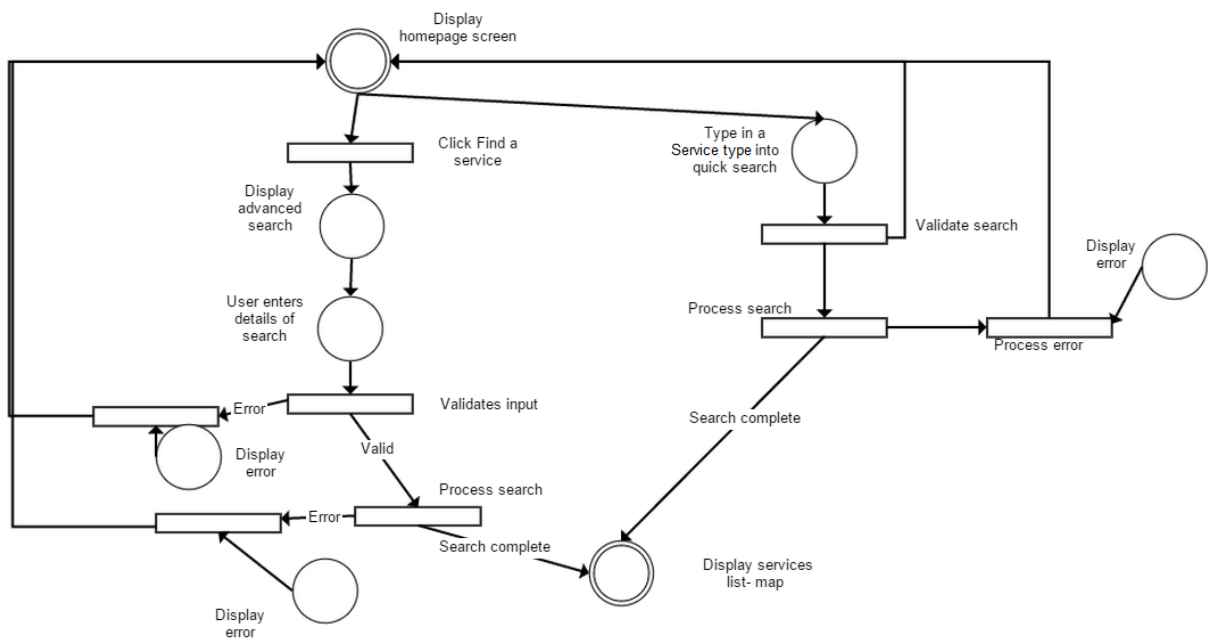
3. User Story Testing

Test ID	Test Objective	Expected Output	Status
4.18.3.1	To test that the user can type in a valid service type on the homepage	The screen goes to results page with the correct services being displayed	
4.18.3.2	To test that there is all service types listed in the dropdown	The service type wanted to be searched for is listed	
4.18.3.3	To test that the results match the searched service type	The results service type match the one the user chose/typed in	

4. Integration Testing

N/A

5. Wireframe

< Back   **Find a service**

Service Type :

| Nursing Care | ▼ |

Search By:

| Location | ▼ |

| Enter Suburb or Postcode |

| Search |
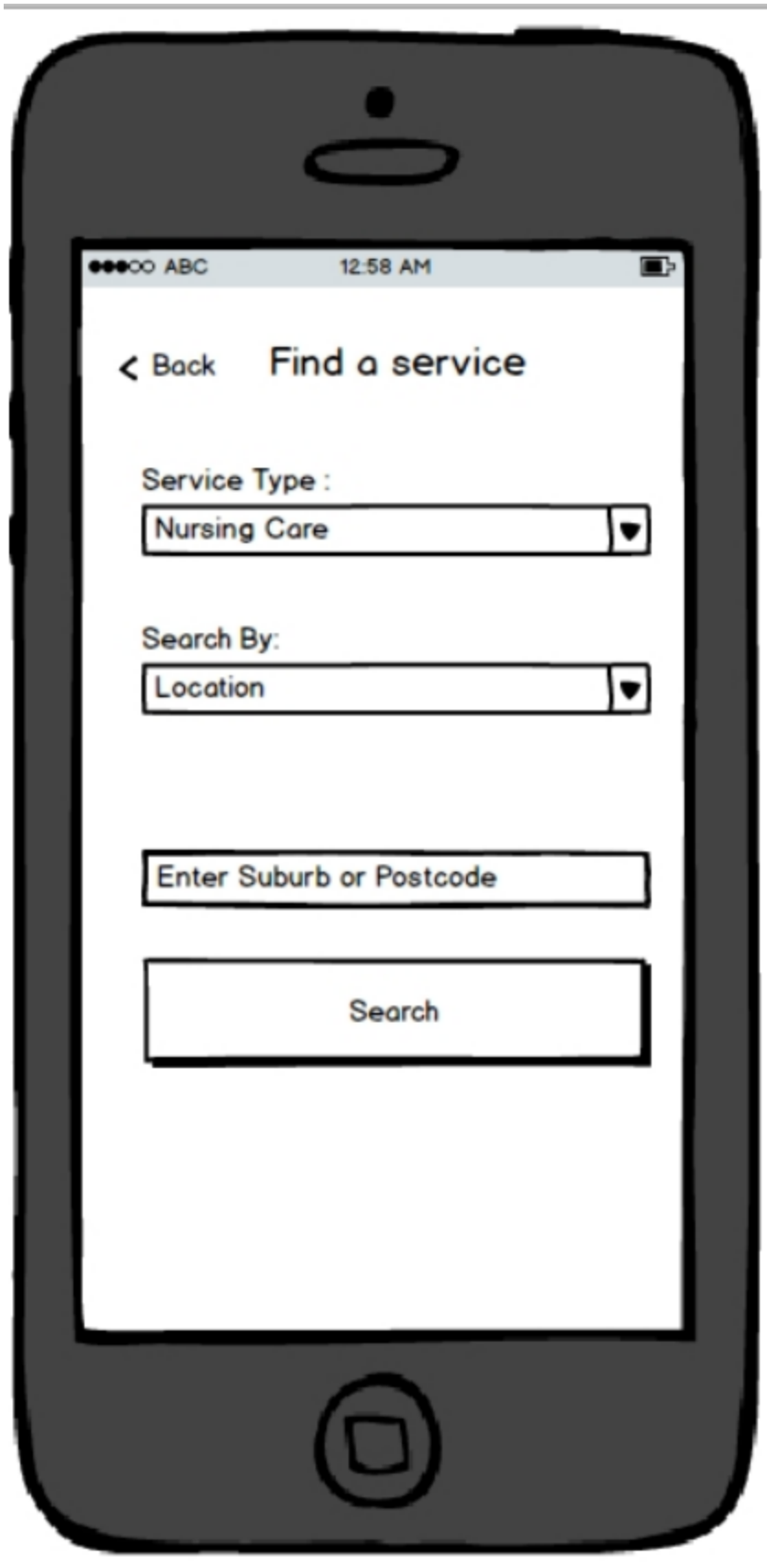
4.19 As a user, I want to find service providers by name so that if I have been told/know a service name I can directly search for it.

1. User Story Definition

As a user, I have been recommended a service by a friend. I would like to look up this service by name, so I can connect with this service easier.

Story Points	Acceptance Criteria
5	■ Allowed to search for the name ■ Error handling is correct ■ Search results match the input

2. Flow of Interaction
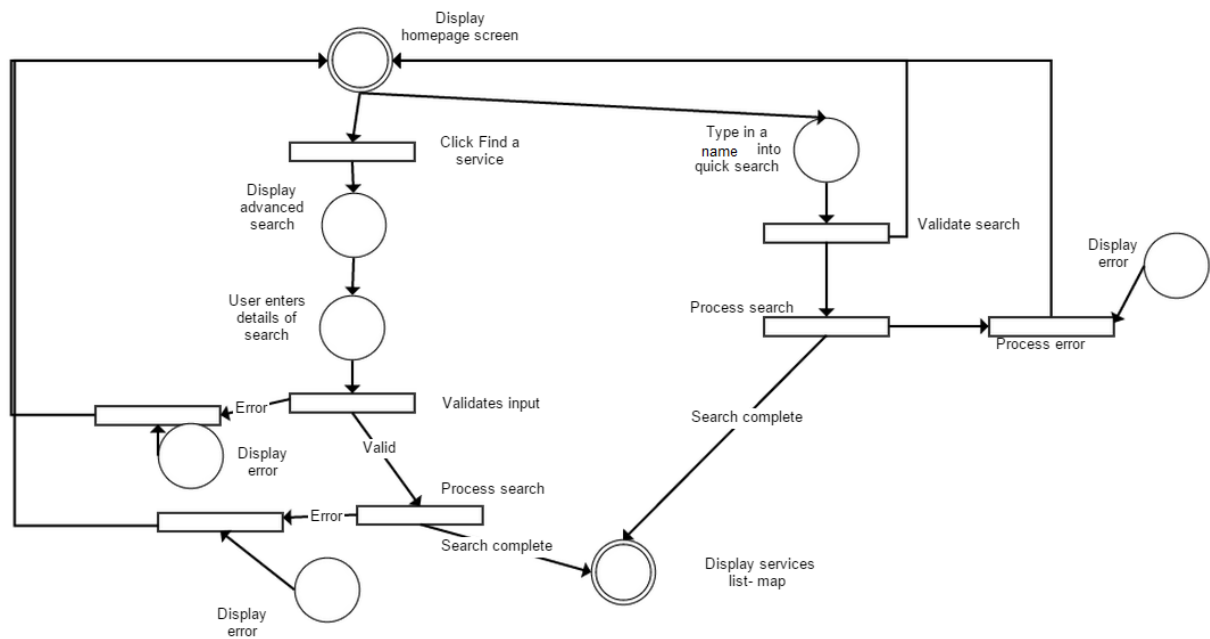
3. User Story Testing

Test ID	Test Objective	Expected Result	Status
4.19.3.1	To test that valid input can be submitted	Returned results that match the search for valid input	
4.19.3.2	To test that invalid input can not be submitted	Rejects invalid input staying on the homepage	
4.19.3.3	To test that errors are handled correctly	Error message would be displayed and the user is returned to/stays on the homepage	
4.19.3.4	To test that correct result	Service results match the input	

4. Integration Testing

N/A

5. Wireframe

< Back   **Find a service**

Service Type :

Support Group ▼

Search By:

Location ▼

Location
Name

Enter Suburb or Postcode

Search
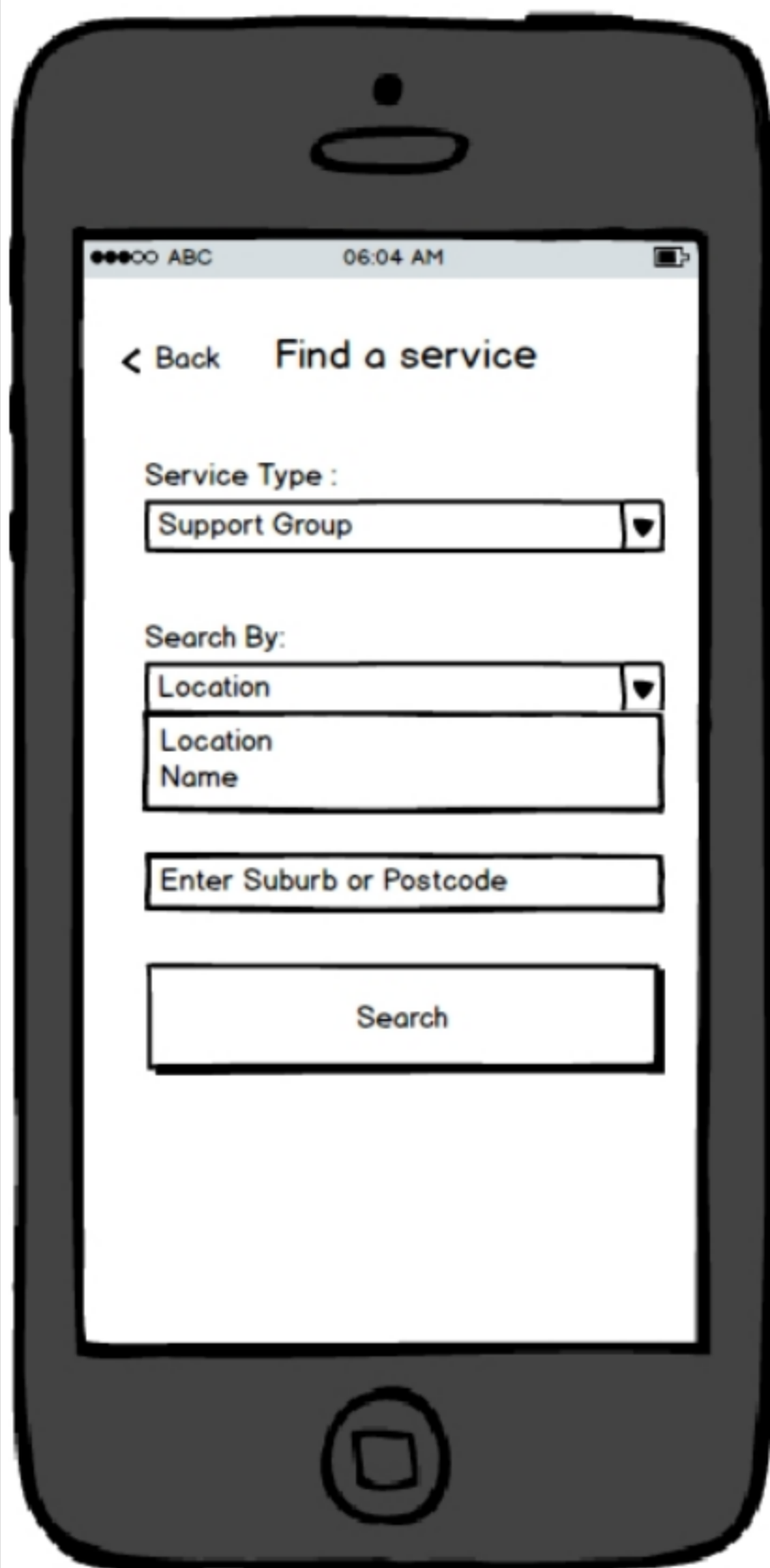
4.20 As a user, I want to find service providers nearby me so that I know what services are the most accessible to me.

1. User Story Definition

The user is currently wanting to find services available to them around their current location. These services would be the closest to them, so they would be the most accessible.

Story Points	Acceptance Criteria
3	- Shows result for the correct current location - Detection if an error occurs

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Result	Status
4.20.3.1	To test that the location is correct	The map being positioned around the users current location	
4.20.3.2	To test that correct error handling occurs	Returns to homepage screen and display error message	

4. Integration Testing

N/A

5. Wireframe
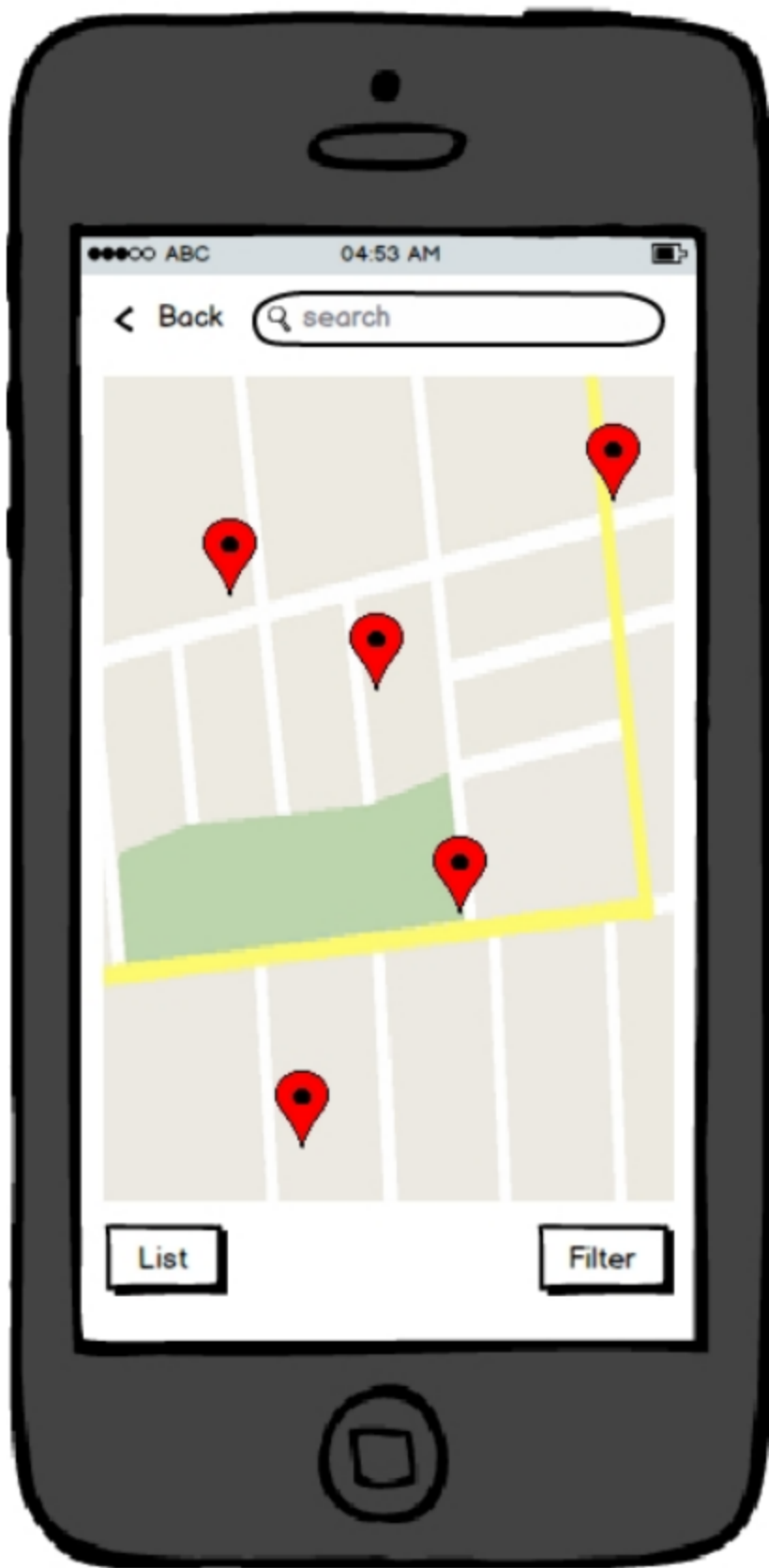
4.21 As a user, I want to be able to search without internet connection so that I can still find services when at home (areas without connection).

1. User Story Definition

As a user who lives in the outback Australia (or any area that doesn't have internet), where the internet is scarce, I would like to still be able to search for services without internet. As this would mean I don't need to travel to find internet to use the app.

Story Points	Acceptance Criteria
8	- Displays the correct available areas that can be downloaded - Notifying of user of potential out of date data when offline - Displays the areas searched by the user without internet connection

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Result	Status
4.21.3.1	To test that the results displayed are what the user searched	Returned results that match the search	
4.21.3.2	To test that the results are available to download	Return results are on the database and available to the users	
4.21.3.3	To test that errors are handled correctly	Error message would be displayed and the user is returned to the download state screen	
4.21.3.4	To test that data was downloaded	Message saying download complete and the correct files are present on the phone	

4. Integration Testing

N/A

5. Wireframe

```
●●●○○ ABC            11:27 AM              ▭▷

  ‹  Back    ⌕ search

        State/Territory available to download
  ┌─────────────────────────────────────────┐
  │ South Australia                          │
  │ Australia                                │
  ├─────────────────────────────────────────┤
  │ Queensland                               │
  │ Australia                                │
  ├─────────────────────────────────────────┤
  │ Victoria                                 │
  │ Australia                                │
  ├─────────────────────────────────────────┤
  │ Northern Territory                       │
  │ Australia                                │
  ├─────────────────────────────────────────┤
  │ New South Wales                          │
  │ Australia                                │
  ├─────────────────────────────────────────┤
  │ Tasmania                                 │
  │ Australia                                │
  ├─────────────────────────────────────────┤
  │ Australian Capital Territory             │
  │ Australia                                │
  └─────────────────────────────────────────┘
```

4.22 As an Administrator I want to log in

1. User Story Definition

On this page:

As an administrator **I want to** log-on to the SENDER application **so that** I can use the application.

After logging on, I can view service provider details, add new service types or access reports from the menu page.

Story Points	Acceptance criteria
Story points: 3	1. Username/password combination are accepted when they are registered in the SENDER database as an administrator. 2. Username/password combination are rejected with an error message when they are not registered in the SENDER database as an administrator.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass/Fail)
4.22.3.1	Test that a valid username/password combination allows a user to sign into the SENDER application.	Successfully sign in to the application - SENDER home page is displayed	
4.22.3.2	Test that an invalid username/password combination does not allow a user to sign into the SENDER application.	Error message	

4. Integration Testing

N/A

5. Wire frame

Login Page

Please Sign In

Username

Password

Log In

Admin Dashboard Menu page

SENDER / Admin   Search...   **?** Help   **&** Account   **→** Logout

Dashboard

Service Providers

Services

Statistics

Welcome to the Admin Portal

4.23 As an Administrator I want to log out

1.User Story Definition

As an administrator **I want to** sign-out of the SENDER application for security reasons, **so that** other people can not use the application using my login credentials.

Story points	Acceptance criteria
Story points: 3	1. User is logged out of the SENDER application, anyone else using the same computer as the user who has

	logged out of the application will need to log in to the SENDER application to use it.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass /Fail)
4.23.3.1	Test that Log out button allows user to sign out of the SENDER application.	Successfully sign-out of the application - login screen is displayed	

4. Integration Testing

N/A

5. Wire frame
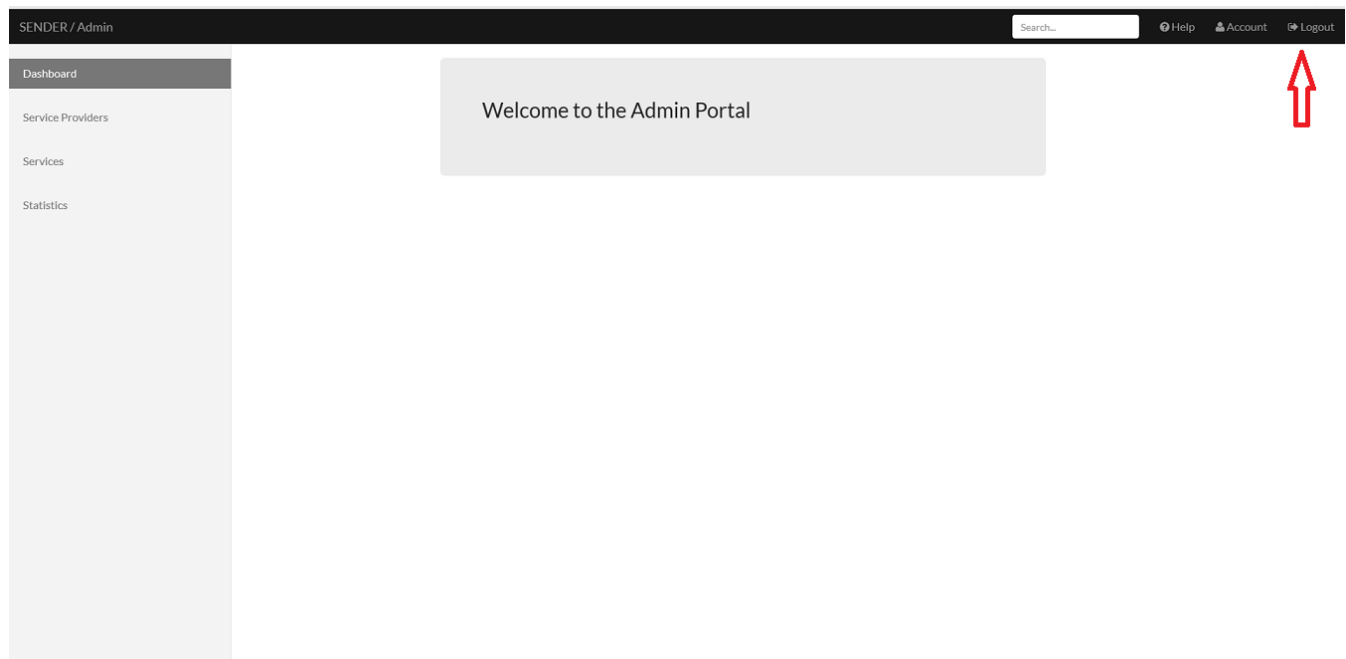
4.24 As an Administrator I want to see a list of service types

1.User Story Definition

As an administrator **I want to** see a list of Service Types in the system,

so that I will be able to see what service types are in the system and then add new ones if necessary.

Story points	Acceptance criteria
Story points: 5	1. A list of all the Service Types is displayed

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass/Fail)
4.24.3.1	Test that Service type details can be viewed.	List of service types is displayed	

4. Integration Testing

N/A

5. Wire frame

Services List

4.25 As an Administrator I want add a new service type

1.User Story Definition

As an administrator **I want to** add a new service type to the system **so that** Service Providers can add services using this new type and enabling users of the mobile application to search for these new types of services.

.

Story points	Acceptance criteria
Story points: 5	**1.** New Service type is added to the database The new Service type is accessible from the web app The new Service type is searchable by users of the mobile application

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass/Fail)
4.25.3.1	Test that a new service type can be added	The new service type is added to the database, and is accessible by the Web and the Mobile applications	

4. Integration Testing

N/A

5. Wire frame

1. **Press Add Service**

Search...   ❓Help   👤Account   ➡Logout

Dashboard

Service Providers

Services

Statistics

Services

+ Service

ID	Name
1	Allied Health and Therapy Services
2	Assistance with Care and Housing
3	Centre-based Respite
4	Cottage Respite
5	Domestic Assistance
6	Flexible Respite
7	Goods, equipment & assistive technology
8	Home maintenance
9	Home modifications
10	Meals
11	Multipurpose Services
12	National ATSI Aged Care Program
13	Nursing
14	Other Food Services
15	Personal Care
16	Social Support
17	Transition Care
18	Transport

54.153.247.58/Admin/service

2. Enter New Service details and press Add Service

New Service

❮ Back to List

Name

Name

Belongs To

ID

Add Service

localhost/Admin/service

4.26 As an Administrator I want to see a list of service providers and their location details

1.User Story Definition

As an administrator **I want to** see a list of Service Providers in the system **so that** I will be able to see who has registered as a Service Provider, their location and what services are being provided.

On this page:

- 1.User Story Definition

Story points	Acceptance criteria
Story points: 3	1. A list of all the Service Providers is displayed. 2. Details of a Service Provider are accessible from the list

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass/Fail)
4.26.3.1	Test that Service Providers can be viewed.	List of service providers is displayed	
4.26.3.2	Test that location details can be viewed	Location details are displayed when the view details button is pressed	

4. Integration Testing

N/A

5. Wire frame

1. **Press View Button**

2. Details are displayed, press ok to return to the list of locations.

4.27 As an Administrator I want to view statistics

1.User Story Definition

As an administrator **I want to** view statistics about the SENDER application **so that** I can see how many Service Providers

there are per state and how many page views are occurring. This will help me to evaluate if the application is being used

frequently.

Story points	Acceptance criteria
Story points: 5	1. Statistics page is displayed.

2. Flow of Interaction

Unknown macro: 'gliffy'

3. User Story Testing

Test ID	Test Objective	Expected Output	Status (Pass /Fail)
4.27.3.1	Test that Statistics can be viewed	Statistics page displayed with service providers in each state plus page view statistics	

4. Integration Testing

N/A

5. Wire frame

Statistics Page

Dashboard

Service Providers

Services

Statistics

Statistics

Service Providers

State/Territory	Count
QLD	0
NSW	1
VIC	18
TAS	0
ACT	0
SA	0
WA	0
NT	0
Total	19

Page views per month
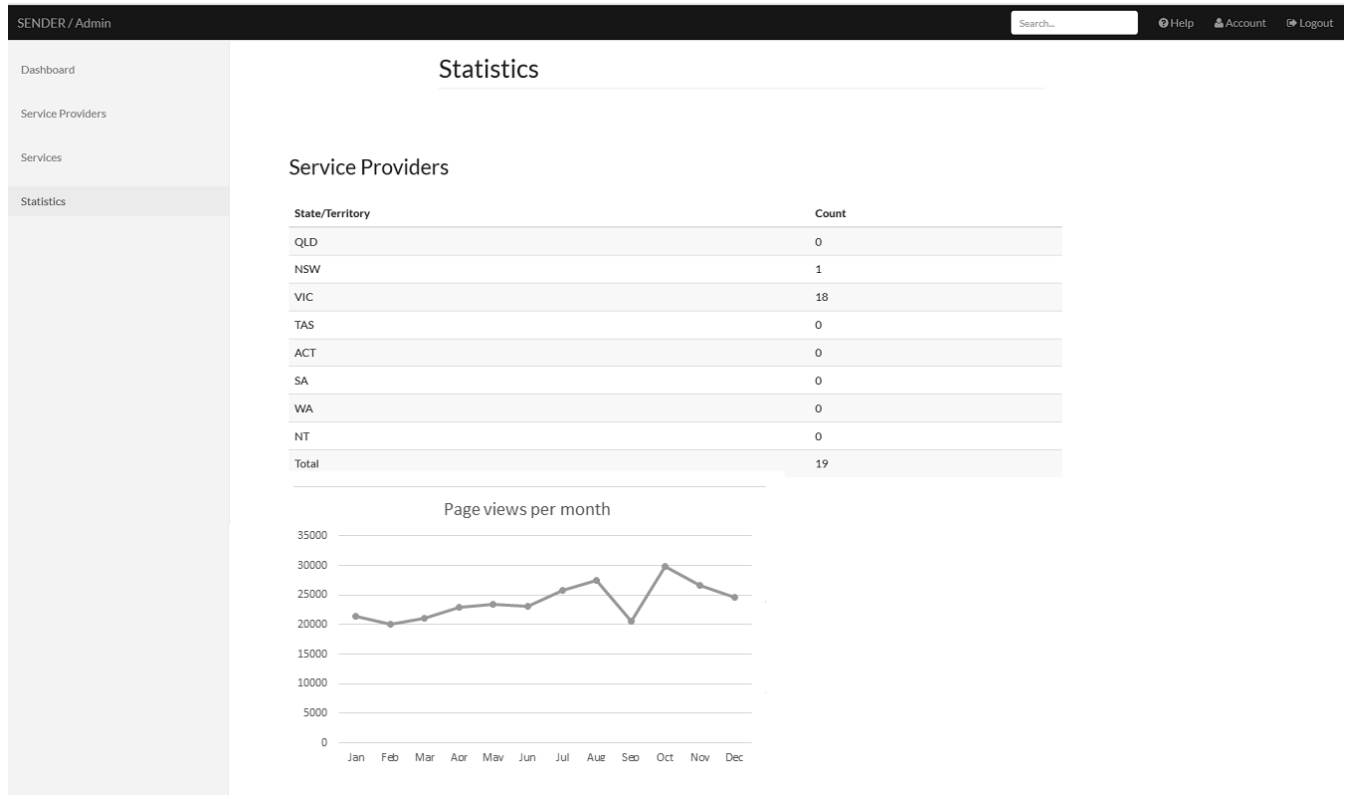
5.0 Object-Oriented Design

5.1 High Level System Architecture

This section provides an overview of the entire system breaking down into smaller sub-systems that are more easily understood.

A high-level architecture diagram depicts following:

- components, interfaces, platforms, services and networks
- work flows and/or data flows between components
- brief consideration of all significant commercial, legal, environmental, security, safety and technical risks, issues and assumptions

Since the SENDER project is a multi-platform development, it it crucial to make sure that each supporting component design will be compatible with its neighbouring designs and with the big picture.

Reference: http://en.wikipedia.org/wiki/High-level_design

High Level System Architecture
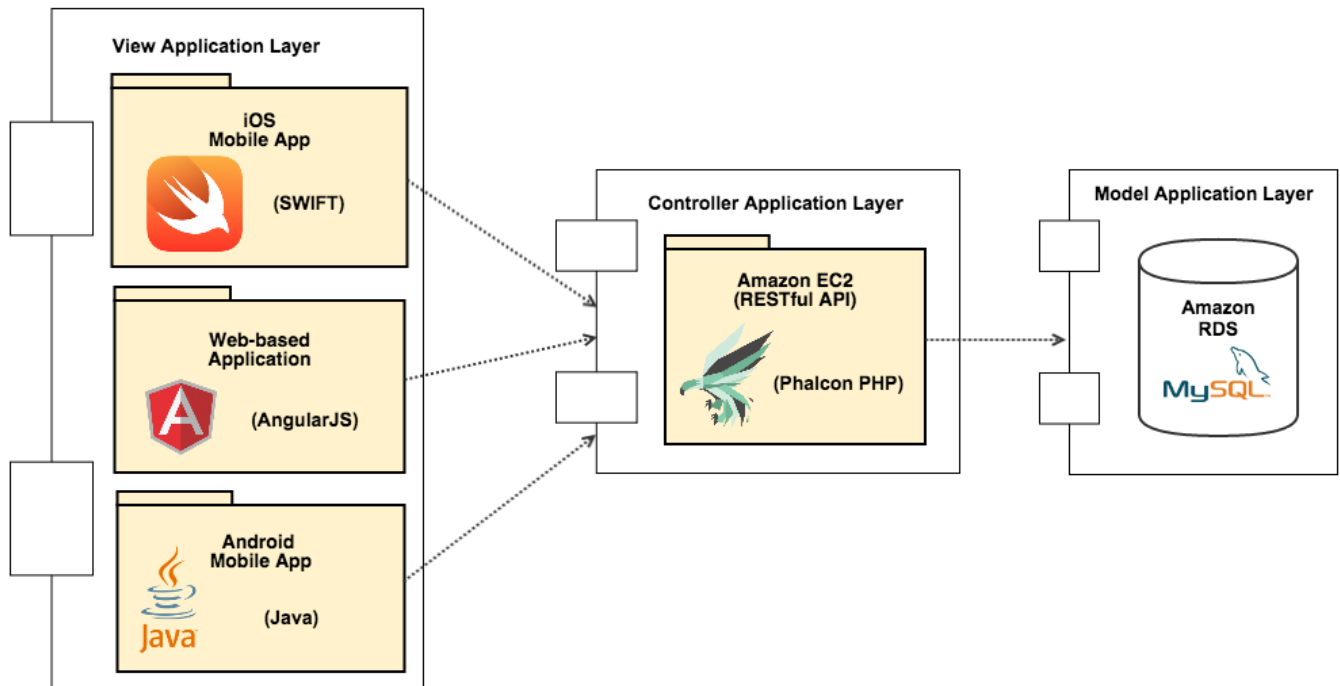
The system is designed in MVC architecture, which has 3 main layers:

- Model Layer: Use Amazon RDS (MySQL) service to store relational database
- Controller Layer: Use Amazon EC2 (CentOS Virtual Server) service to implement RESTful APIs
- View Layer:
  - iOS client, written in SWIFT
  - Web-based client, written in AngularJS (Javascript), HTML & SASS
  - Android client, written in Java (Android SDK)

5.2 High Level Package Diagram

📄 Unknown macro: 'gliffy'

5.3 Use Case Analysis

5.4 Class Diagram

📄 Unknown macro: 'gliffy'

5.5 Entity Relationship Diagram v2

📄 Unknown macro: 'gliffy'

[Old] Establishment of the Database Objects and Data Access Strategy

caretaker
- id INT(7)
- name VARCHAR(20)
- password VARCHAR(15)
- email VARCHAR(60)
- Indexes

serviceprovider
- id INT(7)
- name VARCHAR(20)
- password VARCHAR(15)
- phone VARCHAR(20)
- email VARCHAR(60)
- Indexes

review
- id INT(7)
- title VARCHAR(20)
- description VARCHAR(140)
- rating TINYINT(4)
- address_id INT(7)
- Indexes

address
- id INT(7)
- street VARCHAR(60)
- city VARCHAR(40)
- state VARCHAR(3)
- postcode VARCHAR(4)
- latitude DECIMAL(10,7)
- longitude DECIMAL(10,7)
- serviceprovider_id INT(7)
- Indexes

log
- page_accessed VARCHAR(15)
- date_accessed DATE

service
- address_id INT(7)
- categorytype_id VARCHAR(20)
- Indexes

categorytype
- id VARCHAR(20)
- description VARCHAR(100)
- Indexes

5.6 Sequence diagrams

5.6.1 Login

5.6.2 As a service provider I want to add a service

5.6.3 As an admin I want to check the usage statistics of the mobile app

5.6.1 Login

Unknown macro: 'gliffy'

5.6.2 As a service provider I want to add a service

Unknown macro: 'gliffy'

5.6.3 As an admin I want to check the usage statistics of the mobile app

📋 Unknown macro: 'gliffy'

5.7 Object Dictionary

Objects

API

Name	Package/Service	Type	Description	Signature
Provider	Service Provider Management	Object	represents a Provider, creates an instance of a Service Provider in memory and contains all the attributes and methods that model and handle its information	Provider()
User	User Management	Object	represents a User, creates an instance of a user in memory and contains all the attributes and methods that model and handle its information	User()
Location	Location Management	Object	represents a Provider's Location, creates an instance of the Location in memory and contains all the attributes and methods that model and handle its information	ProviderLocation()
Review	Review Management	Object	represents a review written by the user, creates an instance of a review in memory and contains all the attributes and methods that model and handle its information	Review()
Service	Service Management	Object	represents a service, creates an instance of a service in memory and contains all the attributes and methods that model and handle its information	Service()

Object Attributes

Provider

Name	Object	Package/Service	Type	Description	Signature
ID	Provider	Service Provider Management	Attribute	Contains the user ID as an integer of the user in memory	$id
name	Provider	Service Provider Management	Attribute	Contains the username of the Provider as a string in memory	$name
Username	Provider	Service Provider Management	Attribute	Contains the username of the Provider as a string in memory	$username
Password	Provider	Service Provider Management	Attribute	Contains the password of the user as a string in memory	$password_hash

Registration Date	Provider	Service Provider Management	Attribute	Contains the registration date of the user in memory as a string (if provided)	`$joined_time`

User

Name	Object	Package/Service	Type	Description	Signature
ID	User	User Management	Attribute	Contains the user ID as an integer of the user in memory	`$id`
Social Plataform	User	User Management	Attribute	Contains the name of the social platform used by the user as a string in memory	`$social_platform`
Username	User	User Management	Attribute	Contains the Username of the user as a string in memory	`$social_id`
Email	User	User Management	Attribute	Contains the email of the user as a string in memory	`$email`
Password	User	User Management	Attribute	Contains the Password of the user as a string in memory	`$password_hash`
Name	User	User Management	Attribute	Contains the name of the user as a string in memory	`$name`
Registration Date	User	User Management	Attribute	Contains the registration date of the user as a string in memory	`$joined_time`
access Login	User	User Management	Attribute	Contains the unique token created to maintain the user logged in	`$access_token`

Location

Name	Object	Package/Service	Type	Description	Signature
ID	Location	Location Management	Attribute	Contains the Location's ID as an integer of the user in memory	`$id`
Provider Id	Location	Location Management	Attribute	Contains the Provider's ID as an integer of the user in memory	`$provider_id`
Division	Location	Location Management	Attribute	Contains the Division as a string in memory	`$division`
Address	Location	Location Management	Attribute	Contains the Address as a string in memory	`$address`
City	Location	Location Management	Attribute	Contains the City as a string in memory	`$city`
State	Location	Location Management	Attribute	Contains the State as a string in memory	`$state`
Postcode	Location	Location Management	Attribute	Contains the Postcode as a string in memory	`$postcode`
Latitude	Location	Location Management	Attribute	Contains the Latitude as a double in memory	`$latitude`
Longitude	Location	Location Management	Attribute	Contains the Longitude as a double in memory	`$longitude`
Services	Location	Location Management	Attribute	Contains the Services as a string in memory	`$services`

Phone	Location	Location Management	Attribute	Contains the Phone as a string in memory	$phone
Email	Location	Location Management	Attribute	Contains the Email as a string in memory	$email
Website	Location	Location Management	Attribute	Contains the Website as a string in memory	$website
Description	Location	Location Management	Attribute	Contains the Description as a string in memory	$description

Review

Name	Object	Package/Service	Type	Description	Signature
ID	Review	Review Management	Attribute	Contains the review's ID as an integer of the user in memory	$id
user Id	Review	Review Management	Attribute	Contains the user 's ID as an integer of the user in memory	$user_id
location id	Review	Review Management	Attribute	Contains the Location's ID as an integer in memory	$location_id
rating	Review	Review Management	Attribute	Contains the rating as an integer in memory	$rating
title	Review	Review Management	Attribute	Contains the title as a string in memory	$title
message	Review	Review Management	Attribute	Contains the message as a string in memory	$message
date of revision	Review	Review Management	Attribute	Contains the date of revision as a string in memory	$reviewed_on

Service

Name	Object	Package/Service	Type	Description	Signature
ID	Service	Service Management	Attribute	Contains the review's ID as an integer of the user in memory	$id
Location Id	Service	Service Management	Attribute	Contains the Location's ID as an integer in memory	$parent_id
Name	Service	Service Management	Attribute	Contains the name of the service as a string in memory	$name

Methods/Functions

Provider

Name	Object	Package/Service	Type	Description	Signature	Parameters(Input)
signupAction()	Provider	Provider Management	Post	Registers Provider in database and provides a session token to login or logout	signupAction()	* @apiParam {String} username Mandatory Username of the provider. * @apiParam {String} password Mandatory

Name	Object	Package/Service	Type	Description	Signature	Parameters(Input)
						Password. * @apiParam {String} name Mandatory Name (Company, Organization) of the provider.
loginAction()	Provider	Provider Management	Post	Logs the user and provides a session token to login or logout	loginAction()	* @apiParam {String} username Mandatory Username of the provider. * @apiParam {String} password Mandatory Password.
getLocationsAction()	Provider	Provider Management	Get	gets the locations for the logged user, identifying the user through the token of the session	getLocationsAction()	* @apiHeader {String} Token Provider unique access token
addLocationAction()	Provider	Provider Management	Post	Adds a location to Provider locations list	addLocationAction()	* @apiParam {String} [division] Optional Division of the provider. * @apiParam {String} address Mandatory Address. * @apiParam {String} city Mandatory City. * @apiParam {String} state Mandatory State. * @apiParam {String} postcode Mandatory Postcode. * @apiParam {String} phone Mandatory Phone. * @apiParam {String} email Optional Email. * @apiParam {String} website Optional Website. * @apiParam {String} description Mandatory Description about service provider.
addServiceAction()	Provider	Provider Management	Post	Adds a service to a provider's location	addServiceAction()	* @apiParam {String} service Mandatory Name of the service.

User

Name	Object	Package/Service	Type	Description	Signature	Parameters(Input)
signupAction()	User	User Management	Post	Registers Provider in database and	signupAction()	* @apiParam {String} email

				provides a session token to login or logout		Mandatory Email of the user. * @apiParam {String} password Mandatory Password. * @apiParam {String} name Mandatory Name of the user.
`loginAction()`	User	User Management	Post	Logs the user and provides a session token to login or logout	loginAction()	* @apiParam {String} email Mandatory Email of the user. * @apiParam {String} password Mandatory Password.
saveLocationAction()	User	User Management	Post	saves a preferred location in a user's profile	saveLocationAction()	* @apiParam {String} location_id Mandatory Location ID.
`getLocationAction()`	User	User Management	Get	Obtains all the info of a location	`getLocationAction($location_id)`	* @apiParam {String} location_id Mandatory Location ID.
`deleteLocationAction()`	User	User Management	delete	deletes a location from favorites	`deleteLocationAction($location_id)`	* @apiParam {String} location_id Mandatory Location ID.
`savedLocationsAction()`	User	User Management	Get	Gets all the list of already saved Locations	`savedLocationsAction()`	* @apiHeader {String} Token User unique access token.
`createReviewAction()`	User	User Management	Post	Creates a review on a location	createReviewAction()	* @apiParam {String} location_id Mandatory Location ID. * @apiParam {Integer} rating Mandatory Rating range 1 to 5. * @apiParam {String} title Optional Title. * @apiParam {String} message Optional Message.
`providersAction()`	User	User Management	Get	Gets a list of providers filtered by parameters	`providersAction()`	* @apiParam {String} [keyword] Optional Keyword: parameter used only for quick search. * @apiParam {String} [name] Optional Name. * @apiParam {String} [latitude] Optional Latitude of location. * @apiParam

						{String} [longitude] Optional Longitude of location. * @apiParam {String} [distance] Optional Distance within the location. * @apiParam {String} [services] Optional Services.
`providerDetails Action()`	User	User Management	Get	Gets the details of a selected provider	`providerDetails Action($id)`	* @apiParam {String} id Mandatory ID of the location.
`servicesAction()`	User	User Management	Get	gets a list of all the services	`servicesAction()`	

6.0 Software release report

6.1 Usability Test Report

6.1 Usability Test Report

Overview

The testing was done in two sessions, the first was done during OPEN day and the second was done in week 8 of semester 2.

The first testing session involved explaining the application to users and then asking them to use and evaluate the application.

The emphasis was on getting feedback in the form of what improvements could be made to the application

From the feedback from the first usability test, the test was redesigned to be more specific about features of the application, these changes include :-

- Increasing the number of questions.
- Changing from a 4 item "Likert Scale" to a 10 item "Likert scale" to increase the "granularity" of responses.
- add "age group" to the survey.

These changes were incorporated in the second usability test session which was held in the Agora at Latrobe University's Bundoora campus.

See section 6.1.1 and 6.1.2 for detailed descriptions of these Usability testing sessions.

6.1.1 Usability Test 1 - (Open Day)

6.1.1.1 Methodology

1. Aim/Objective

The aim of the usability test report is to obtain an independent assessment of the SENDER application which is being developed by Team X.

This will be done by conducting a survey of independent users, who will provide feedback about using the application.

This assessment will then be used to evaluate and improve the design of the application before the application goes into production.

Because the application is not 100% complete, we will demonstrate part of the application to visitors on OPEN-Day and then ask them to use the application and give feedback on a small part of the application.

e.g. Find Service Providers that are close to the University

They will then be asked to rate the application by agreeing or disagreeing with a statement about a feature of the application.

The ratings will be using a 4-item "Likert Scale" :-

    1. I strongly disagree with the statement

    2. I disagree with the statement

    3 I agree with the statement

    4. I Strongly agree with the statement

2. Approach

The approach to be used is that we will ask each person to evaluate/perform a user story of the application listed in section 4 of the System Maintenance Document.

They will then fill in a survey form (see 6.1.4) for the user story, where they will rate and comment on their experience using the SENDER application.

The features to be assessed for each user story is as follows :-

Feature	Description
Ease of use	Navigation, page headings, links, depth required to find thing steps to complete a task
Understanding	Understanding the application and it's purpose
UI Design	Page design, readability, layout, suitability of graphics

2. Survey to be completed by reviewers with the help of Team X personnel.

Date
9th August 2015

Task Description

Step 2. Rate the application

Features	Statement	Rating	Comments
Ease of use	The application was easy and fast to use to complete the task.	Do you strongly disagree or agree with this statement ? 1. Strongly disagree - (e.g. I was not able to complete the task) 2. Disagree - (e.g. It was hard to use or I completed the task with considerable assistance or it took a long time to perform) 3. Agree - (e.g. I completed the task quickly but I needed some assistance) 4. Strongly agree - (e.g. I completed the task myself quickly without any assistance)	
Understanding	The application was easy to understand and learn	Do you strongly disagree or agree with this statement ? 1. Strongly disagree - (e.g. I do not understand what the application is for and it appears to be very complicated) 2. Disagree - (e.g. I understand what the application is for, but it seems too complicated to learn) 3. Agree - (e.g. I understand what the application is for and I would be able to use it after some instruction) 4. Strongly agree - (I understand what the application is for and it is very straight forward to learn and use)	
UI Design	I like the look and feel of the application	Do you strongly disagree or agree with this statement ? 1. Strongly disagree - (e.g. It looks terrible, navigation is confusing, I keep getting confused when I try and use the application) 2. Disagree - (e.g. Overall it looks o.k. but navigation is	

		not intuitive)	
		3. Agree - (e.g. Navigation is intuitive, the interface looks o.k but it is not consistent on different pages of the application)	
		4. Strongly agree - (e.g. The look and feel of the application is very good and the navigation is intuitive and the application is consistent on different pages of the application)	

6.1.1.2 Analysis

OPEN Day Usability Test - Suggestions/Comments from Users

1. Summary

Overall the users were pretty happy with the application and they made a number of suggestions to improve it.

2. Comments left by participants of the Survey:

- "When demonstrating the application it would be appropriate to have more data loaded in the database".
- "Downloaded states button label - what does it mean?"
- "Can Billing Information be included in the description of a Service Provider? i.e. whether they bulk-bill medicare etc"
- "Merge the Google map with the list of services".
- "Have a marker/tag to show my current location on the map"
- "More information available on Google map markers"
- "When selecting service type, display it in the selection field"
- "quick search" is hard to read on the tablet because of the background colour.

3. Analysis

Table contains a summary of the reviews completed by users at the University OPEN Day.

Ratings are from 1 to 4, where 1 is equivalent to poor and 4 is equivalent to very good.
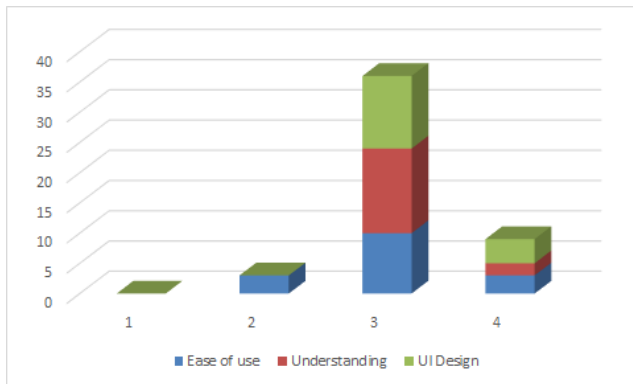
Rating from 1 to 4 (low to high)

Review #	Ease of use	Understanding of Application and it's purpose	UI Design
1	4	4	4
2	3	3	3
3	2	3	3
4	3	3	3
5	4	3	3
6	3	3	3
7	2	3	3
8	2	3	3
9	4	3	3
10	3	3	3
11	3	3	3
12	3	3	4
13	3	3	3
14	3	3	4
15	3	4	3
16	3	3	4

6.1.2 Usability Test 2 - (Week 8 Semester 2)

6.1.2.1 Methodology

1. Aim/Objective

The aim of the usability test is to obtain an independent assessment of the SENDER application which is being developed by Team X.

This assessment will be used to evaluate and improve the design of the application before the application is finalized.

The usability test was held in the Agora of Latrobe University.

2. Methodology

Location: Latrobe University: Agora

Date: 16/9/2015

Time: 12:00 – 3:00pm

Steps involved were as follows:-

- Invite a person to evaluate the application.
- Explain the purpose of the application.
- Demonstrate how the application works.
- Ask the user to use the application to complete a simple task e.g. find service providers in Bundoora
- Observe the user using the application and note any problems encountered
- Ask the user to complete a survey about his/her experience using the application.
- Thank the person for their participation.

3. Survey

The survey aimed at evaluating 4 features of the application:

Design, navigation, understanding and the performance of the search function.

Feature	Description
Design	Page design, readability, layout, suitability of graphics
Navigation	Navigation, page headings, links, depth required to find things
Understanding	Understanding the application and it's purpose
Search	Quality and usefulness of search results

After the assessment by the users, the results will be collated and analyzed. Those parts of the application which receive a poor rating will be identified.

By comparing these, with parts of the application which score highly we will determine what improvements need to be made.

These changes will be added to the JIRA backlog and will be implemented in the next Sprint.

(See chapter 6.1.2.2 Analysis)

4. Sample Format of Survey to be completed by reviewers

Online survey is available at http://goo.gl/forms/4Cfh7Q3r0i

Date	Circle Age group (optional)				
	50	<20	21-30	31-40	41-50 >
User Story/Task Description:					

Feature	Question	Description	Circle Rating (disagree) (agree) 1 10
Design	1	The user interface was clear and uncluttered	1 2 3 4 5 6 7 8 9 10
	2	The buttons were of the appropriate size	1 2 3 4 5 6 7 8 9 10
	3	The buttons were easy to read	1 2 3 4 5 6 7 8 9 10
	4	The buttons were labelled consistently	1 2 3 4 5 6 7 8 9 10
	5	Input fields were easy to read	1 2 3 4 5 6 7 8 9 10
	6	The graphics/icons were clear	1 2 3 4 5 6 7 8 9 10
Navigation	7	The application responded quickly	1 2 3 4 5 6 7 8 9 10
	8	Navigation was straight forward	1 2 3 4 5 6 7 8 9 10
	9	I did not get confused or lost using the application	1 2 3 4 5 6 7 8 9 10
	10	The page headings were clear and easy to read	1 2 3 4 5 6 7 8 9 10
Understanding	11	I understood the purpose of the application	1 2 3 4 5 6 7 8 9 10
	12	I can explain how to use the application to others	1 2 3 4 5 6 7 8 9 10
Search	13	Searching for information was quick	1 2 3 4 5 6

			7 8 9 10
	14	Searching for information was accurate	1 2 3 4 5 6 7 8 9 10
Comments/Suggestions			

6.1.2.2 Analysis

1.Analysis

The results from the "Survey Results" and from "Comments left by participants", indicate that some parts of the

navigation led to some users being confused by the application.

Also the "search input field" was hard to read.

2. Recommended changes to the Application

Changes to the application to be implemented in the next Sprint.

- Change background colour of "search field" to make input more readable
- Make page headings distinguishable from buttons
- Improve navigation
- Change "search" to return a map as a default rather than a list of service providers.

3. Survey Results

Low Scores

Question 8 : "Navigation was straight forward" - low score of 7.8 indicated that some users had difficulty navigating the application.

Question 9: "I did not get confused or lost using the application" - low score of 7.9 indicated that some users were confused by the application.

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q 10	Q 11	Q 12	Q 13	Q 14
Me an	8.4	8.8	8.8	8.7	8.4	9.2	9	7.8	7.9	9.3	9.7	9.8	9.4	8.9
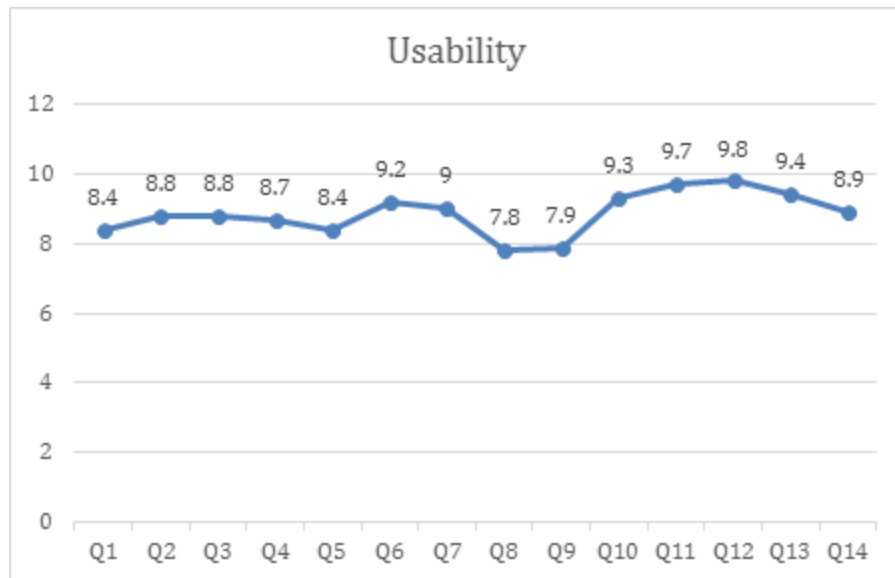
Comments left by participants of the Survey:

- "Can facilities like "car parking" be added to the description of Service providers?"
- "suggested improvement -> user not having to click 'done' after selecting the assistance type"
- "quick search should have a more obvious button"
- "quick search text not readable"
- "Downloaded states…. what does it mean?"
- "search button was difficult to find"
- "selecting service filtering was non-intuitive … suggest checkboxes"
- "the survey has too many questions"

4. Suggested Improvements to the Our Usability test

Improvements to our usability test if we did it again would be:-

1.Consider reducing the number of questions to 10 by merging some of the questions

e.g. merge question 3 & 4 into a single question "The buttons were easy to read and labelled …"

2. Be more proactive in asking people to evaluate our application

3. Have a prepared script to describe our application.

4. Have a written task list for the person who is evaluating the application to follow

E.g.

Step 1. Find the service providers in Bundoora

Step 2. Find their contact details.

Step 3. Find service providers who provide …

This will help the evaluation to be more focused.

5. Observe the user **very** closely and record in detail their actions, this will help later in identifying specific parts of the application which are causing problems.

6. Have a comments column for each question as well as a suggestions section at the end. This will also help to identify specific problems.

6.2 System (User Story) Test Report

The Web application is hosted on an Amazon Web Server: http://54.153.247.58

The database has been pre-populated with data to allow testing.

Administrator portal

Administrator log in: http://54.153.247.58/Admin/login

The User Story and Test ID's correspond to the user stories and acceptance tests which are defined in section 4.22 thru 4.27 of this document.

4.22 As an Administrator I want to log in

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Actual Output	Status (Pass/Fail)
4.22.3.1	Test that a **valid** username/password combination allows a user to sign into the SENDER application as an administrator. The administrator will then be able to access other functions of the application. Access to these other functions can be verified by executing user stories 4.24, 4.25 & 4.26	At the log in screen enter the following: username=admin and valid password = 123456	Successfully log in to the application and the SENDER home page is displayed where other functions can be accessed.	Logged into the application and the homepage is displayed.	Pass
4.22.3.2	Test that an **invalid** username/password combination does not allow a user to sign into the SENDER application.	At the log in screen enter the following: username=adminX and any password	Error message	"Unauthorized access" error message is displayed.	Pass
	Test that a **valid** username and an **invalid** password combination does not allow a user to sign into the SENDER application.	At the log in screen enter the following: username=admin and password = abc	Error message	"Unauthorized access" error message is displayed.	Pass

4.23 As an Administrator I want to log out

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Actual output	Status (Pass/Fail)
4.23.3.1	Test that Log out button allows user to sign out of the SENDER application.	Log in as an administrator and then press the "log out" button on the top menu bar	Successfully log-out of the application and the log in screen is displayed.	Logged out of the application and the log in screen is displayed.	Pass

4.24 As an Administrator I want to see a list of the service types

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Actual output	Status (Pass/Fail)
4.24.3.1	Test that after logging in as an administrator, Service Types can be viewed.	Log in as an administrator and then press the "services" button on the side-bar menu	A list of the service types that are in the database is displayed	List of service types is displayed.	Pass

4.25 As an Administrator I want to add a new service type

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Actual output	Status (Pass/Fail)
4.25.3.1	Test that after logging in as an administrator, I can add a new service type. Adding a new service type can be verified by querying the database table and also by User Story 4.24.	Log in as an administrator and press the "services" button on the side-bar menu. A list of services is displayed. Press the add new button, add the new details of "Radiology", belongs to "Allied Health" and press save.	Success message and the new service type details are added to the database.	"Radiology Added" message and can be seen in the list of service types.	Pass

4.26 As an Administrator I want to see a list of service providers and their location details

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Actual output	Status (Pass/Fail)
4.26.3.1	Test that after logging in as an administrator, a summary list of Service Providers can be viewed.	Log in as an administrator and press the "service providers" button on the side-bar menu	A list of the service providers that are in the database is displayed in name order	List of service providers is displayed. Order can be changed by pull down menu.	Pass
4.26.3.2	Test that location details for a specific Service Provider can be viewed	Log in in as an administrator and press the "service providers" button on the side menu. A list of service providers will be displayed. Select a Service Provider and click on the "view details" button.	A list of service providers is displayed. When the "view details" button is pressed details about a particular service provider is displayed	List of service providers is displayed. Details about a service provider are displayed when the "view details" button is pressed.	Pass

4.27 As an Administrator I want to view statistics

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Actual output	Status (Pass/Fail)
4.27.3.1	Test that after logging in as an administrator, I can view statistics about the application.	Login as an administrator and press the "statistics" button on the side-bar menu.	Page displaying statistics is displayed.	Statistics page is displayed.	Pass

Service Provider Portal

The User Story and Test ID's correspond to the user stories and acceptance tests which are defined in section 4.0 of this document.

4.2 As a service provider I want to register

4.3 As a service provider I want to Log in

4.4 As a service provider I want to Log out

4.5 As a service provider I want to add my location details

4.6 As a service provider I want to update my location details

4.7 As a service provider I want to delete my location details

4.8 As a service provider I want to update service details

Service Provider Web Portal Signup:

http://54.153.247.58/Provider/signup

Service Provider Web Portal LogIn:

http://54.153.247.58/Provider/login

4.2 As a Service Provider I want to Register

Test ID	Test Objective /Acceptance Criteria	Instructions & Input	Expected Output	Status (Pass/Fail)
4.2.3.1	input of a valid username, Password and company name will be accepted and registered in the database sign into the SENDER Service Provider Portal	At the SignUp screen enter the following: username=AnyNewUsername and valid Password = Any	Successfully registered in the database and logged in to the application and the SENDER home page is displayed where other functions can be accessed.	Pass
4.2.3.2	Test that an alredy created username does not allow a user to register a new user.	At the log in screen enter the following: username=rodolfo and any Password	"Username is already been taken" - Error message	

4.3 As a Service Provider I want to LogIn

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Status (Pass/Fail)

4..3.3.1	Test that a valid username /Password combination allows a user to sign into the SENDER Service Provider web portal.	At the log in screen enter the following: username=rudolf and valid Password = 123	Successfully log in to the application and the SENDER home page is displayed where other functions can be accessed.	Pass
4..3.3.2	Test that an invalid username/Password combination does not allow a user to sign into the SENDER application.	1.At the log in screen enter the following: username=rodolfo and any Password 2.At the log in screen enter the following: username=rudolf and any Password(not "123")	1."Username is not found" - Error message 2."Password is incorrect" - Error message	Pass

4.4 As Service Provider I want to log out

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Status (Pass/Fail)
4.4.3.1	Test that Log out button allows user to sign out of the SENDER application.	Log in at the Service Provider Web Portal and then press the "log out" button on the top menu bar	Successfully log-out of the application and the log in screen is displayed.	Pass

4.5 As a Service Provider want to add a new Location

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Status (Pass/Fail)
4.5.3.1	Test that after logging in as a Service provider I can add a location to the service and it is available in my list of locations	Log in as a Service Provider and press the "add new location" button on the screen. A list of the user's locations is displayed and in the right upper corner press add location. input the data requested and press add location.	The new location details are added to the database. This can be verified by checking the services list of the logged user	Pass
4.5.3.2	Test that after pressing add location in the services page, the location cannot be added after the input of a wrong data.	Log in as a Service Provider and press the "add new location" button on the screen. A list of the user's locations is displayed and in the right upper corner press add location. 1.input the data requested but in address type an address that does not exist and press add location. 2. input the data requested but in the email field type an address that does not contain "@"	1."latitude is required"," longitude is required"" - Error message 2.Please include an '@' in email address.	Pass

4.6 As an Service Provider want to update a Location's details

Test ID	Test Objective /Acceptance Criteria	Instructions & Input	Expected Output	Status
4.6.3.1	Test that after logging in as a Service provider I can update the details of an	Log in as a Service Provider and press the "locations" button on the left side-bar.	The new location details are added to the database.	Pass

| | already existing location | A list of the user's locations is displayed with an | This can be verified by checking the services list of the logged user | |
| | | input the data requested and press add location. | | |

4.26 As a Service Provider I want to see my list of locations

Test ID	Test Objective /Acceptance criteria	Instructions & Input	Expected Output	Status (Pass/Fail)
4.26.3.1	Test that after logging in as a service Provider the list of locations of the user are listed on the locations page	Log in as a Service Provider and press the "Locations" button on the side-bar menu	A list of the service providers that are in the database is displayed in name order	Pass

7.0 Additional User Interface Design

7.1 Additional Input and Output Screens

7.2 Additional Data Display Screens

8.0 Special Notes

Glossary of Terms

A

Android is an operating system based on the Linux kernel with a user interface based on direct manipulation, designed primarily for touchscreen mobile devices.

Amazon web services (AWS) provide cloud computing platform to build scalable web services.

Angular JS is an open source web application framework from Google that provides a framework for client side MVC architecture.

API is a set of functions and procedures that allow the creation of applications which access the features or data of an operating system, application or other service.

B

Bootstrap is a free collection of tools for creating websites and web applications.

C

CSS is cascading style sheets is a style sheet language used for describing the look and formatting of a document written in a mark-up language.

D

Database is information organized in such a way that a computer program quickly select pieces of data.
Domain Model defines appropriate objects or classes or new internal methods or attributes.

H

High Level package Diagram outlines the major components to be designed for the system.
High level system architecture explains the various components identified in the system.
HTML - HyperText Mark-up Language is the standard mark-up language used to create web pages.

I
IOS is a mobile operating system developed by Apple Inc.

J
JavaScript is an object-oriented computer programming language commonly used to create interactive effects within web browsers.

M
MySQL open-source relational database management system

MVC is a software architecture that divides a software application three interconnected parts - Mode, View, Controller.

O
Object Dictionary is a reference for all objects developed for the systems designers and maintainers.

P
Phalcon is a web development framework for PHP written in C.
PHP - is a server-side scripting language designed for web developed but also used as a general-purpose programming language.

R
RESTful (Representational State Transfer) is a software architecture developed by W3C . RESTful systems typically communicate over Hypertext Transfer Protocol.

S
Server, a system that responds to requests across a computer network to provide or help to provide, a network service.
Sequence Diagram is an interaction diagram that shows how processes operate with one another in what order.
SQL is a special-purpose programming language designed to managing data held in a relational database management system.

T
Testing is an investigation conducted to provide stakeholders with information about the quality of the product or service under test.

U
User Story is a concise, written description of a piece of functionality that will be valuable to a user of the software.

V

W
Web is a system of interlinked hypertext documents accessed via the internet.

X
Xpirit is the development team creating the SENDER application.

Statement of effort

Statement of Authorship

Department of Computer Science and Computer Engineering
STATEMENT OF AUTHORSHIP FOR GROUP

ASSIGNMENTS
Please read the following instructions and associated University documents before completing and submitting this form with your item of assignment.

- A Statement of Authorship must be completed for all items of assessment where the assessment is worth ten percent (10%) or more of the total for the unit.
- The Academic Misconduct Policy found at http//www.latrobe.edu.au/policies
- Statute 16 found at [http//www.latrobe.edu.au/legalservices/statutes.html|http://www.latrobe.edu.au/legalservices/statutes.html]
- Regulation 16.2 found at [http//www.latrobe.edu.au/legalservices/regulations.html|http://www.latrobe.edu.au/legalservices/regulations.html]

We each certify that our own contribution in the attached material is original work and that we have no knowledge of an act of plagiarism committed by any member of this group. We declare that no other person's work has been used without due acknowledgement. Except where we have clearly stated that we have used some of this material elsewhere, it has not been presented by us for examination in any other course or unit at this or any other institution.

We have read the Academic Misconduct Policy, Statute 16 and Regulation 16.2 relating to Student Discipline and Academic Misconduct, which are available on the University's web site and understand that we are bound by such Policy, Statute and Regulation and that we may be subject to student discipline processes in the event of an act of plagiarism by us.

We understand the nature of plagiarism to include the reproduction of someone else's words, ideas or findings and presenting them as our own without proper acknowledgement. Further, we understand that there are many forms of plagiarism which include direct copying or paraphrasing from someone else's published work (either electronic or hard copy) without acknowledging the source; using facts, information and ideas derived from a source without acknowledgement; producing assignments (required to be independent) in collaboration with and/or using the work of other people; and assisting another person to commit an act of plagiarism. We understand that the work submitted may be reproduced and/or communicated by the University or a third party authorised by the University for the purpose of detecting plagiarism.

- Unit Code **CSEPRA**
- Unit Name **INDUSTRY PROJECT A**
- Lecturer/Tutor's Name **Dr Torab Torabi**
- Assignment No.1
- Name of Document **System Maintenance Document**

Family Name (Block Letters)	GURUNG
Given Name	Sajan
Student No	17526858
Signature	Sajan
Date	29/5/2015

Family Name (Block Letters)	THORNE
Given Name	Daniel Bartholomew
Student No	17691385
Signature	Daniel Thorne
Date	29/05/2015

Family Name (Block Letters)	NAM
Given Name	Nguyen
Student No	15213925
Signature	Nam Nguyen
Date	29 May 2015

Family Name (Block Letters)	SAENZ ESPITIA
Given Name	Luis Miguel
Student No	17970487
Signature	Luis
Date	29 May 2015

Family Name (Block Letters)	OAKLEY
Given Name	Colin

Student No	75925342
Signature	Colin
Date	30 Jul 2015

1.2 Plagiarism

One form of academic cheating is plagiarism, the reproducing of someone else's words, ideas or findings and presenting them as one's own without proper acknowledgment.

There are many forms of plagiarism, including the following:

1. Direct copying of sentences, paragraphs or other extracts from someone else's published work (including on the Internet and in software) without acknowledging the source;
2. Paraphrasing someone else's words without acknowledging the source;
3. Using facts and information derived from a source without acknowledging it;
4. Using ideas directly derived from an identifiable author without acknowledging the source;
5. Producing assignments which should be the student's own, independent work in collaboration with and/or using the work of other people (e.g. a student or tutor).

Assisting another person to plagiarise material may be punished as severely as is plagiarism itself. Assisting plagiarism may involve a student lending work (or by posting it on the Internet for sale) which is intended for submission for assessment, or which has already been submitted, so that it can be copied and handed in by another student as that student's own work.3

Students may find it helpful to discuss assignments with other students and their tutors. The University encourages students to communicate with one another in constructive ways about the learning process. Students may choose to assist each other, for example in discussing the approaches that might be taken to assignment topics, or helping with the availability of reading materials. They should, however, write their assignments independently, except when they are asked to work on a project as a member of a group which is to submit a joint report, as equal contributors. In this case, except where the final written work consists of sections for which particular individuals take sole responsibility, the group as a whole assumes responsibility for it and the proper acknowledgment of any use made of the words or ideas of people outside the group.

The increased vigilance of the University in regard to plagiarism is in response to the perceived growing incidence of plagiarism. The new recommended penalties reflect the value the University places on academic honesty and how seriously it regards plagiarism offences. The University will protect its reputation for academic integrity by ensuring that serious and serial offenders, who wish to obtain an unfair advantage through cheating, are given penalties proportionate to the offences committed.

A summary of the current legislation is attached in Appendix A. This legislation will be amended if the Working Party's recommendations are approved.

Section	Members
Section 1.0	Luis Miguel Saenz Espitia
Section 2.0	Luis Miguel Saenz Espitia
Section 3.0	Luis Miguel Saenz Espitia
Section 4.0	All
Section 5.0	Luis Miguel Saenz Espitia, Nam Nguyen, Colin Oakley
Section 6.0	Colin Oakley
Section 7.0	Luis Miguel Saenz Espitia
Powerpoint Slides	All
Handout	Sajan Gurung
Workshop	All
Mobile Prototype	Sajan Gurung, Daniel Bartholomew Thorne, Nam Nguyen
Web Prototype	Colin Oakley, Luis Miguel Saenz Espitia
Logo	Luis Miguel Saenz Espitia, Nam Nguyen
Web UI	Luis Miguel Saenz Espitia, Colin Oakley
Database	Colin Oakley, Nam Nguyen (revised)
User Stories (on Confluence)	Colin Oakley, Sajan Gurung, Daniel Bartholomew Thorne
RESTful API	Sajan Gurung, Nam Nguyen

Android App	Daniel Bartholomew Thorne, Sajan Gurung
iOS App	Nam Nguyen
Integrate API	Nam Nguyen

Statement of Effort PRB

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- Unit Code **CSEPRB**
- Unit Name **INDUSTRY PROJECT B**
- Lecturer/Tutor's Name **Dr Torab Torabi**
- Assignment No.1
- Name of Document **System Maintenance Document**

Family Name (Block Letters)	GURUNG
Given Name	Sajan
Student No	17526858
Signature	Sajan
Date	16 Oct 2015
Family Name (Block Letters)	THORNE
Given Name	Daniel Bartholomew
Student No	17691385
Signature	Daniel Thorne
Date	16 Oct 2015
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Given Name	Nguyen

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