



INSTITUTE of  
TECHNOLOGY  
CARLOW

Institiúid Teicneolaíochta Cheatharlach



# Functional Specification

**Student Name:** Michelle Bolger

**Student Number:** C00242743

**Supervisor:** Dr. Chris Staff

**Submission Date:** 25/4/2022

## **Abstract**

The inspiration behind this project was to discover more information about migraines, their triggers and symptoms and also to discover information about tracking migraines and the benefits of keeping a journal of migraines.

The purpose of the “migraineHub” app is to develop a cross platform mobile application that will allow people who suffer from migraines to record their migraines (the frequency, type of migraine, pain scale, medications, triggers and symptoms).

Users will also be able to view statistic about their past migraines and email this information to themselves for future reference or for review by their doctor/neurologist.

This functional specification document provides information about the necessary requirements needed to deliver the “migraineHub” application.

# Table of Contents

Table of Figures.....	3
1. Introduction .....	4
2. Application Definition .....	5
3. Target Audience .....	6
4. Context Diagram .....	7
5. Use Case Diagram .....	8
6. Brief Use Cases.....	9
7. Detailed Use Cases .....	13
8. FURPS+ .....	27
9. Conclusion.....	28

## Table of Figures

Figure 1 - Context Diagram .....	7
Figure 2 - Use Case Diagram .....	8

# 1. Introduction

The purpose of this document is to outline the main functionalities of the “Migraine Tracking Application”.

This document will provide information about the planned application and the target audience.

Use case diagrams will also be provided to describe the functions and scope of the application. Brief and detailed use cases will show how tasks will be performed when using the application. A context diagram has also been created to show the flow of data within the application.

Information about functionality, usability, reliability, performance and supportability (FURPS+) will also be provided.

## **2. Application Definition**

The “migraineHub” application is based on the belief that individuals who suffer from migraine attacks should keep diaries or journals to keep track of their migraines, triggers and symptoms. Many doctors and neurologists suggest that this practice is beneficial in helping diagnose not only migraines themselves but also can help to narrow down the type of migraine an individual is suffering from.

Individuals who suffer from migraines can benefit from using the application to track their triggers, symptoms, pain levels and locations, time of attack and also what food they have consumed, each of these aspects can help individuals to better understand their migraines.

### 3. Target Audience

There will be two types of users for the Migraine Tracking Application. These are “Users” and “Members”.

#### **Users**

---

This is an individual who uses the application for the first time to register as a “Member”.

#### **Members**

---

This is an individual who has registered with the application and has created an account. “Members” can create a profile, add records about their migraines and view their migraine statistics.

## 4. Context Diagram

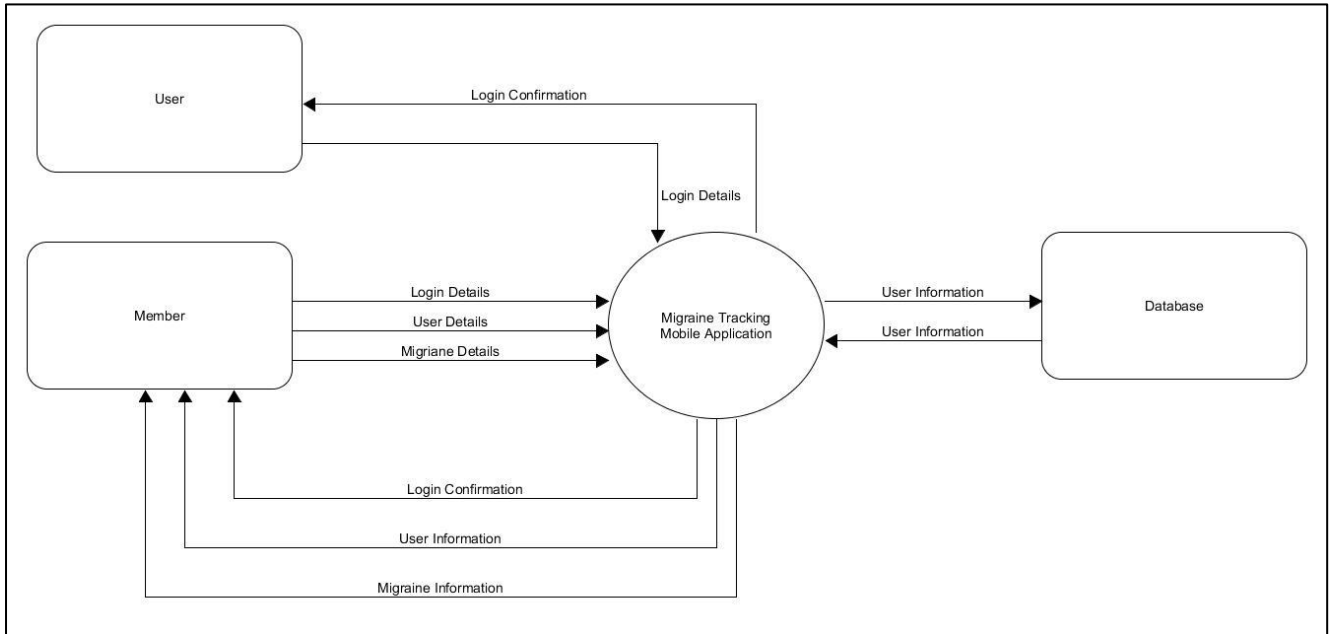


Figure 1 - Context Diagram



## 5. Use Case Diagram

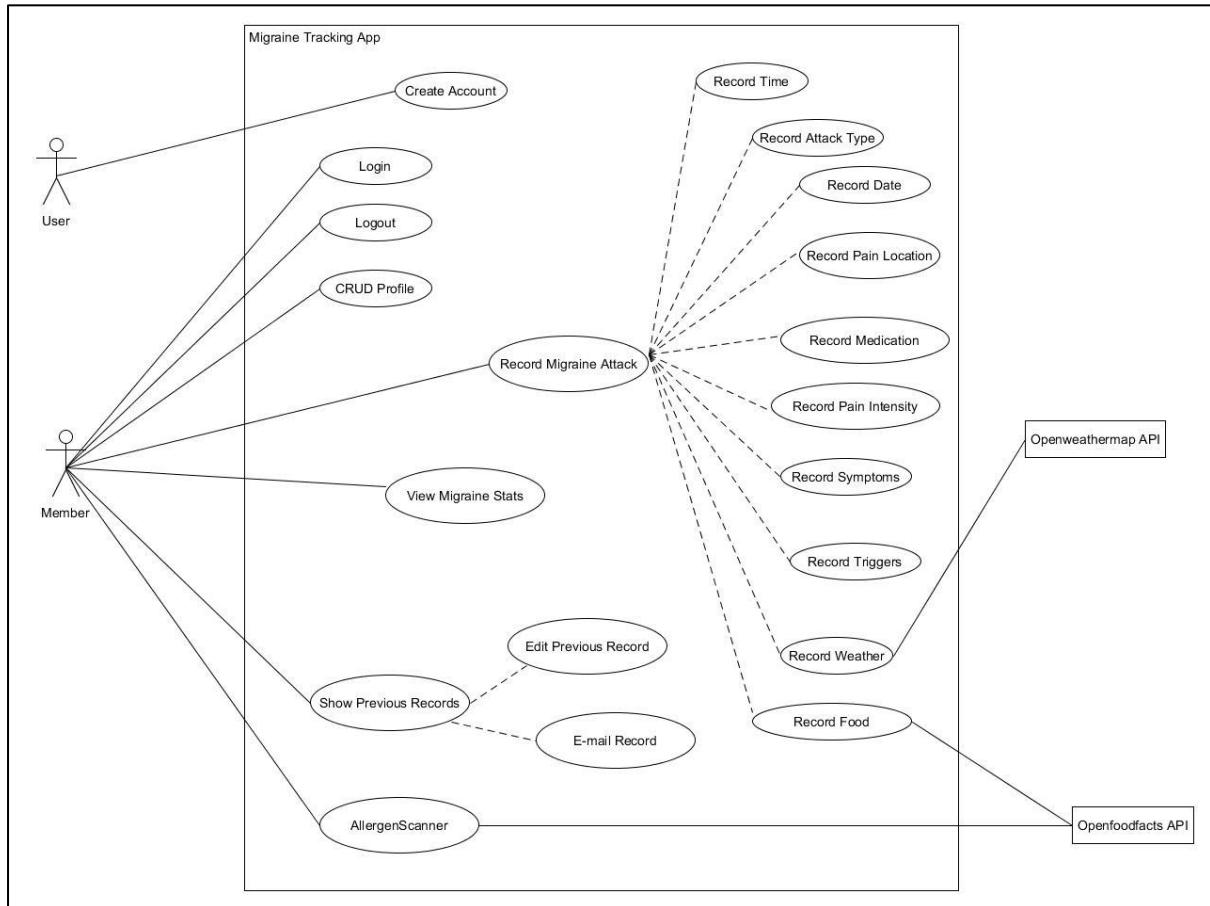


Figure 2 - Use Case Diagram

## 6. Brief Use Cases

### Create Account

**Actor:** User

**Description:** This use case begins when a user wants to create an account with the application. The user enters their information and selects the “create account” option. This use case ends when the user has successfully created an account.

### Login

**Actor:** Member

**Description:** This use case begins when a member enters their email address and password into the fields and selects the “login” option. This use case ends when the member has successfully logged in.

### CRUD Profile

**Actor:** Member

**Description:** This use case begins when a member uses the app to create, read or update their profile. The member can add their information to their profile and can also update these. This use case ends when the member has finished creating or updating their information.

### Record Time

**Actor:** Member

**Description:** This use case begins when a member records a migraine attack. The member can add information about the start and end time of their migraine. This use case ends when the member has finished recording the time information.

### Record Date

**Actor:** Member

**Description:** This use case begins when a member records a migraine attack. The member can add information about the start and end date of their migraine. This use case ends when the member has finished recording the date information.

**Record Attack Type****Actor:** Member**Description:** This use case begins when a member records a migraine attack. The member can add information about the type of migraine they are suffering from. This use case ends when the member has finished recording the attack type information.**Record Pain Level****Actor:** Member**Description:** This use case begins when a member records a migraine attack. The member can add information about the pain level of the migraine they are having. This use case ends when the member has finished recording their pain level information.**Record Pain Location****Actor:** Member**Description:** This use case begins when a member records a migraine attack. The member can add information about the pain location of the migraine they are having. This use case ends when the member has finished recording their pain location information.**Record Medication Taken****Actor:** Member**Description:** This use case begins when a member records a migraine attack. The member can add information about the medication they have taken. This use case ends when the member has finished recording the medication they took.**Record Symptoms****Actor:** Member**Description:** This use case begins when a member records a migraine attack. The member can add information about the symptoms they are having. This use case ends when the member has finished recording their symptoms.**Record Triggers****Actor:** Member**Description:** This use case begins when a member records a migraine attack. The member can add information about what triggered their migraine. This use case ends when the member has finished recording their triggers.

**Record Food Eaten****Actor:** Member

**Description:** This use case begins when a member records a migraine attack. The member can add information about the food they have eaten and can also use a barcode scanner to add food items. This use case ends when the member has finished recording the food they have eaten.

**Record Weather****Actor:** Member

**Description:** This use case begins when a member records a migraine attack. The member can add information about the weather (humidity and temperature). A member enters their location and is given the information. This use case ends when the member has finished recording the weather.

**Show Previous Records****Actor:** Member

**Description:** This use case begins when a member uses the app to view their migraine attack. The member selects the “show previous records” option and can view any of the information they have about their migraine attack. This use case ends when the member has finished viewing their migraine attack information.

**Edit Previous Record****Actor:** Member

**Description:** This use case begins when a member uses the app to edit their migraine attack. The member selects the “edit” option and can update the information they have about their migraine attack. This use case ends when the member has finished editing their migraine attack.

**E-mail Record****Actor:** Member

**Description:** This use case begins when a member uses the app to email a previous record. The member selects the “email” option and can email the information they have about their migraine attack. This use case ends when the member has finished emailing their migraine attack.

**View Migraine Stats****Actor:** Member

**Description:** This use case begins when a member wants to view statistics about their migraines. The member selects the “view stats” option and can view the statistics about their migraine attacks. This use case ends when the member has successfully viewed their statistics.

<b>Allergen Scanner</b>
-------------------------

<b>Actor:</b> Member
----------------------

<b>Description:</b> This use case begins when a member wants to view allergen information about a food item. The member uses a barcode scanner to scan food items. This use case ends when the member has been provided with allergen information about the scanned food item.
--

<b>Logout</b>
---------------

<b>Actor:</b> Member
----------------------

<b>Description:</b> This use case begins when a member wants to logout. The member selects the “logout” option. This use case ends when the member has successfully logged out.
---

## 7. Detailed Use Cases

<b>Use Case Name</b>	Create Account
<b>Actor(s)</b>	User
<b>Pre-conditions</b>	The application displays the “create account” option.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The user opens the application.</li> <li>2. The application requests the user email and a password.</li> <li>3. The user enters their email, password and confirms their password and then selects create account.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The user successfully creates an account.</li> <li>• The user is redirected to the home page.</li> </ul>
<b>Alternative(s)</b>	<p>3a. If the user’s password does not match an error message is displayed.</p> <ol style="list-style-type: none"> <li>1. The user re-enters their password.</li> </ol>

<b>Use Case Name</b>	Login
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	The application displays the “login” option.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member opens the application.</li> <li>2. The application displays the login form requesting the members email address and password.</li> <li>3. The member enters their email and password and selects “login”.</li> <li>4. Upon successful login the member is redirected to the home page.</li> </ol>
<b>Post-conditions</b>	The member logs in successfully.
<b>Alternative(s)</b>	4a. If the login has been unsuccessful the page will reload and the member will be shown an error message.

<b>Use Case Name</b>	CRUD Profile
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<p><b>Create Profile:</b></p> <ul style="list-style-type: none"> <li>• A member is logged in.</li> <li>• The application displays the profile creation screen.</li> </ul> <p><b>View/Edit Profile:</b></p> <ul style="list-style-type: none"> <li>• A member is logged in.</li> <li>• The view/edit options are displayed.</li> </ul>
<b>Main Success Scenario</b>	<p><b>Create Profile:</b></p> <ol style="list-style-type: none"> <li>1. The member selects the create profile option.</li> <li>2. The member adds their information.</li> <li>3. The member selects the create option.</li> <li>4. The application submits and saves the data.</li> </ol> <p><b>View Profile:</b></p> <ol style="list-style-type: none"> <li>1. The member selects the view profile option.</li> <li>2. The member selects their profile.</li> <li>3. The application displays the member's information.</li> </ol> <p><b>Edit Profile:</b></p> <ol style="list-style-type: none"> <li>1. The member selects the edit profile option.</li> <li>2. The member selects their profile.</li> <li>3. The member makes their changes</li> <li>4. The member submits the changes.</li> <li>5. The application submits and saves the data.</li> </ol>
<b>Post-conditions</b>	The member successfully creates/views/edits their profile.
<b>Alternative(s)</b>	<p>3a. The member selects cancel</p> <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol>



<b>Use Case Name</b>	Record Time
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “record time” option.</li> <li>The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “record time” option.</li> <li>The member selects the start time.</li> <li>The member selects the end time.</li> <li>The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The user successfully adds start and end time of their migraine attack.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>The member selects back. <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol> </li> </ol>

<b>Use Case Name</b>	Record Date
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “record date” option.</li> <li>The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “record date” option.</li> <li>The member selects the start date.</li> <li>The member selects the end date.</li> <li>The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The user successfully adds start and end date of their migraine attack.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>The member selects back. <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol> </li> </ol>

<b>Use Case Name</b>	Record Attack Type
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• The application displays the “record attack type” option.</li> <li>• The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects “record attack type” option.</li> <li>2. The member selects the attack type.</li> <li>3. The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The user successfully adds migraine attack type.</li> </ul>
<b>Alternative(s)</b>	<p>3a. The member selects back.</p> <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	Record Pain Level
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• The application displays the “record pain level” option.</li> <li>• The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects “record pain level” option.</li> <li>2. The member selects the number they associate with the level of pain they are experiencing.</li> <li>3. The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The user successfully adds pain level information.</li> </ul>
<b>Alternative(s)</b>	<p>3a. The member selects back.</p> <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	Record Pain Location
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “record pain location” option.</li> <li>The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “record pain location” option.</li> <li>The member selects the location where they feel pain.</li> <li>The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The user successfully adds pain location information.</li> </ul>
<b>Alternative(s)</b>	<p>3a. The member selects back.</p> <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	Record Medication Taken
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “record medication taken” option.</li> <li>The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “record medication taken” option.</li> <li>The member enters the medication they took.</li> <li>The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The user successfully adds medication information.</li> </ul>
<b>Alternative(s)</b>	<p>3a. The member selects back.</p> <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	Record Symptoms
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “record symptoms” option.</li> <li>The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “record symptoms” option.</li> <li>The member selects the symptoms they suffered from during their migraine attack.</li> <li>The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The user successfully adds symptom information.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>3a. The member selects back. <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol> </li> </ol>

<b>Use Case Name</b>	Record Triggers
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “record triggers” option.</li> <li>The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “record triggers” option.</li> <li>The member selects the triggers they experienced.</li> <li>The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The user successfully adds triggers information.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>3a. The member selects back. <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol> </li> </ol>

<b>Use Case Name</b>	Record Weather
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• The application displays the “record weather” option.</li> <li>• The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects “record weather” option.</li> <li>2. The member enters their location and is given the corresponding weather information.</li> <li>3. The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The user successfully adds weather information.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>3a. The member selects back. <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol> </li> </ol>

<b>Use Case Name</b>	Record Food Eaten
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• The application displays the “record food eaten” option.</li> <li>• The member has chosen the record migraine attack option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects “record food eaten” option.</li> <li>2. The member enters the food they ate</li> <li>3. The member submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The member successfully adds food eaten information.</li> </ul>
<b>Alternative(s)</b>	<p>2a. The member chooses to scan a food items barcode.</p> <ol style="list-style-type: none"> <li>1. The application opens the camera to enable the barcode scanner.</li> <li>2. The member scans the barcode on the food item they ate.</li> </ol> <p>3a. The member selects back.</p> <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	Allergen Scanner
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>The application displays the “allergen scanner” option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>The member selects “allergen scanner” option.</li> <li>The member scans a food item.</li> <li>The member is informed of any allergens which may cause migraines.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>The member is successfully shown a list of potential allergens.</li> </ul>
<b>Alternative(s)</b>	<p>2a. The food items allergens are not in the database.</p> <ol style="list-style-type: none"> <li>The member is shown a message which informs them there is no allergen information available.</li> </ol> <p>3a. The member selects back.</p> <ol style="list-style-type: none"> <li>The member does not make any changes.</li> <li>The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	View Migraine Attack
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• A member is logged in.</li> <li>• The view option is displayed.</li> <li>• At least one migraine record has been created.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects the view migraine attack option.</li> <li>2. The member selects a migraine attack they wish to view.</li> <li>3. The application displays the member's migraine attack information.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The member successfully views their migraine attack record.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>1a. There are no migraine attack records saved. <ol style="list-style-type: none"> <li>1. The member is returned to the previous screen.</li> </ol> </li> <li>3a. The member selects back. <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol> </li> </ol>



<b>Use Case Name</b>	Edit Migraine Attack
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• A member is logged in.</li> <li>• The edit option is displayed.</li> <li>• At least one migraine record has been created.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects the edit migraine attack option.</li> <li>2. The member selects the migraine attack they wish to edit.</li> <li>3. The member makes their changes</li> <li>4. The member submits the changes.</li> <li>5. The application submits and saves the data.</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The member successfully edits their migraine attack record.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>1a. There are no migraine attack records saved. <ol style="list-style-type: none"> <li>1. The member is returned to the previous screen.</li> </ol> </li> <li>3a. The member selects back. <ol style="list-style-type: none"> <li>1. The member does not make any changes.</li> <li>2. The member is returned to the previous screen.</li> </ol> </li> </ol>

<b>Use Case Name</b>	E-mail Migraine Record
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• A member is logged in.</li> <li>• The e-mail record option is displayed.</li> <li>• At least one migraine record has been created.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects the migraine attack they wish to e-mail.</li> <li>2. The member selects the e-mail migraine record option.</li> <li>3. The member sends the email</li> </ol>
<b>Post-conditions</b>	<ul style="list-style-type: none"> <li>• The member successfully e-mails their migraine attack record.</li> </ul>
<b>Alternative(s)</b>	<ol style="list-style-type: none"> <li>1a. There are no migraine attack records saved.</li> <li>2. The member is returned to the previous screen.</li> </ol> <ol style="list-style-type: none"> <li>3a. The member selects back.</li> <li>3. The member does not make any changes.</li> <li>4. The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	View Migraine Stats
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• A member is logged in.</li> <li>• At least one migraine attack has been added by a user.</li> <li>• The application displays the migraine stats option.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The member selects the migraine statistics option.</li> <li>2. The application displays statistics about their migraines.</li> </ol>
<b>Post-conditions</b>	The member successfully views their migraine attack statistics.
<b>Alternative(s)</b>	<p>1a. There are no migraine attacks added so no information is able to be displayed.</p> <ol style="list-style-type: none"> <li>1. The application displays a message informing the member there is no migraine statistic information available.</li> <li>2. The member is returned to the previous screen.</li> </ol>

<b>Use Case Name</b>	Logout
<b>Actor(s)</b>	Member
<b>Pre-conditions</b>	<ul style="list-style-type: none"> <li>• A member is logged in.</li> </ul>
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. The selects the log out option.</li> </ol>
<b>Post-conditions</b>	The member successfully logs out

## 8. FURPS+

The following are the non-functional requirements for the application.

Non-functional requirements are functionality, usability, reliability, performance, supportability and + (extra requirements such as security and regulations).

**Functionality:** This represents the main features and core functionalities of the application. The main functionalities and features of the Migraine Tracking Application have been described in the previous sections of this document.

**Usability:** This includes the aspects of the user interface, accessibility and responsiveness of the application.

- The user interface (UI) design should be easy to navigate and suitable for individuals who are suffering from migraines (e.g. background colours should not be too bright).
- Members should be able to create a profile within 2 minutes, 90% of the time.
- Members should be able to login within 5 seconds, 90% of the time.

**Reliability:** This refers to the expectations of the application in relation to up-time and how fast the application recovers from failures.

- Members should be able to add information about a migraine attack without internet access.

**Performance:** This includes aspects of the application that relate to the applications efficiency, response time and data retrieval.

- The login process should take 5 seconds 90% of the time.
- The signup process should take 5 seconds 95% of the time.
- Data should be submitted and retrieved within 3 seconds, 90% of the time.
- Multiple users should be able to use the application at the same time.

**Supportability:** This refers to the testability, maintainability and compatibility of the application.

The application will be developed to be cross platform using Xamarin forms. The application will support the following:

- Android: Minimum Version (Android 5.0)
- iOS: Minimum Version (iOS 8.0)

**+**: This refers to extra requirements such as security.

- Firebase Authentication will be used to provide a way to authenticate users of the application. Firebase Authentication also handles sending emails for password resetting providing more security.
- Only registered members should be given access to the application.

## 9. Conclusion

The migraineHub application is a cross platform mobile application that is designed to meet the requirements of individuals who suffer from migraines and who wish to tack them. This document shows the functionalities the application will provide members when they use the application.

The main functionalities of the migraineHub application which have been described and discussed in detail are: Create Account, Login, Logout, CRUD Profile, Record Migraine Attack, Record Time, Record Attack Type, Record Pain Level, Record Pain Location, Record Medication Taken, Record Symptoms, Record Triggers, Record Food Eaten, Record Weather, Allergen Scanner, E-mail Record, View Migraine Attack, Edit Migraine Attack and View Migraine Stats.

Non-functional requirements such as functionality, usability, reliability, performance, supportability and extra requirements such as security were also discussed.