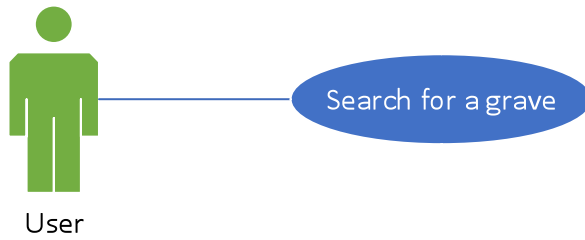


# Technical Architecture Document – Grave Finder

X00080345 Alan McGowan

In this document, I will be discussing the use cases, the technical architecture of the project and the use cases I will demonstrate and weeks 8 and 11.

## 1. Use Cases



### **Title (Goal)**

Search for a grave

### **Primary Actor**

The primary actor is the user (i.e. members of the public)

### **Scope**

The scope of the use case is to allow the user to search for a person's grave in a cemetery as the user needs to be able to find where in the cemetery the deceased person is via their smartphone.

### **Level**

The priority level of this use case would be top priority as it is the main function of the mobile application.

### **(Story)**

For the use case the user would enter the details required to search for the grave in the cemetery and be returned the row name/letter and identification number with a map to show the position of the grave in the cemetery.

**Use Case to be added on Monday in College as I don't have the software at home**

### **Title (Goal)**

Add a new deceased person

### **Primary Actor**

The primary actor is the administrator (i.e. members of the cemeteries)

### **Scope**

The scope of the use case is to allow the administrator to add a new deceased person to the different graves within certain cemeteries as the administrator would be getting new records everyday so the database needs to be kept up to date.

## Level

The priority level of this use case would be middle priority as it is a function of the web application for the user.

## (Story)

For the use case the user would select the name of the cemetery and then press the “add a new grave” button. This would then allow the user to enter the details of the deceased person and which grave they are in.

**Use Case to be added on Monday in College as I don't have the software at home**

## Title (Goal)

Edit a deceased person

## Primary Actor

The primary actor is the administrator (i.e. members of the cemeteries)

## Scope

The scope of the use case is to allow the administrator to edit a deceased person's information in a certain cemetery as when the administrator has saved the details, they may have made a spelling mistake or put in the wrong date that they wish to change.

## Level

The priority level of this use case would be middle priority as it is a function of the web application for the user.

## (Story)

For the use case the user would select the name of the cemetery and then press the “edit details” button beside the person's name. This would then allow the user to enter the new details of the deceased person.

## **2. Technical Architecture**

### **2.1 Software Components**

The software components I plan on using for my fourth year project are Windows Phone as the mobile platform, using Azure Cloud Services to store the backend of the application, a website for the administrator to add or edit records and the SQL database in the cloud to store the tables required the user to get the information they want. I will also use Visual Studio 2013 to implement the code for designing the applications.

### **2.2 Platform Libraries**

For the platform libraries, I plan on designing the application with C# and using the .NET API for Windows Phone to allow me to access some features with windows phone through the API. I also plan on using the Web API to help me in connecting the cloud services to the website.

### **2.3 Distribution and Deployment**

The applications will be deployed to the Azure Cloud Services through RESTful web services mainly to store the backend of the mobile application. With using RESTful, it has https security for the website and allows for the mobile application to communicate with the database in the cloud.

### **2.4 Risks**

The risks that may affect the delivery of the project are:

- 1) The mobile application may not be able to communicate with the cloud services through RESTful web services
- 2) When changes are made on the website, they may not show on the mobile application.

## **3. Prototype**

### **3.1 Prototype Deliverable for Week 8**

- Add a new deceased person
- Edit a deceased person

The testing strategy I plan on doing is testing to see can I add and edit the details into the database on the cloud. This would be tested by entering in falsified information as if it was a new deceased person being added through the website. If this works, then I would try editing the information saved to see will it save the new version of the information.

### **3.2 Prototype Deliverable for Week 11**

- Search for a grave

The testing strategy I plan on doing is testing to see can I search for details in the database on the cloud about a certain grave. This would be tested by entering in the information I require as if I was looking for a deceased person through the mobile application.