Computing Project 14

Technical Architecture Document – Grave Finder

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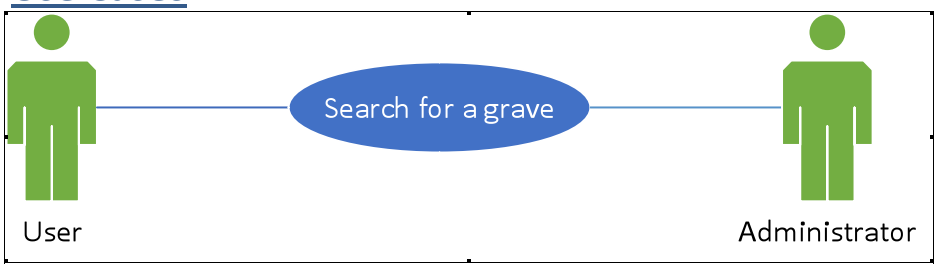
In this document, I will be discussing the use cases, the technical architecture of the project and the use cases I will demonstrate and weeks 8 and 11.

1. Use Cases



Title (Goal)

Search for a grave

Primary Actor

The primary actors are users (i.e. members of the public) from the mobile application point of view, and also the administrator (i.e. staff members of the cemeteries) on the web application.

Scope

The scope of the use case is to allow the user to search for a person's grave in a cemetery.

Level

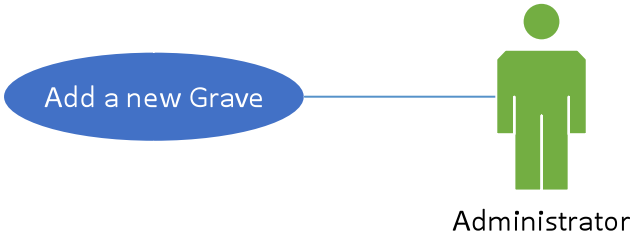
The priority level of this use case would be top priority as it is main function of the mobile application for the user to use.

The priority level of this use case on the web application would be middle application as it wouldn't be as important as allowing the administrator to add or edit a grave.

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.

From an administrators view on the website, they would either enter the name of the deceased person or select the cemtery where they are buried from a drop-down list as they may need to change the details if they need to be updated or made a mistake when adding it to the database.



Title (Goal)

Add a new Grave

Primary Actor

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

Scope

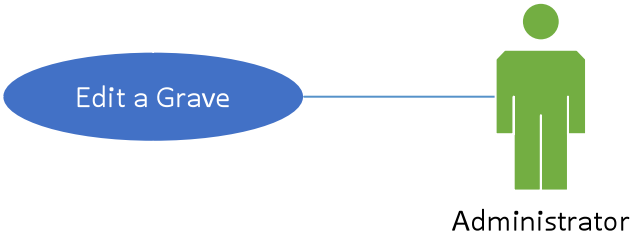
The scope of the use case is to allow the administrator to add a new deceased person to the different graves within certain cemeteries.

Level

The priority level of this use case would be high priority as it is an important function of the web application for the administrator to use.

Story

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



Title (Goal)

Edit a Grave

Primary Actor

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

Scope

The scope of the use case is to allow the administrator to edit a grave in the cemtery they are positioned.

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 search for the deceased person; select the name of the cemtery and then press the “edit details” button beside the persons name. This would then allow the user to enter the new details of the desceased person.

USE CASE TO ADDED HERE

Title (Goal)

Log In/Off

Primary Actor

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

Scope

The scope of the use case is to allow the administrator to log in to make the changes and log out when they are done.

Level

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

Story

For the use case the administrator would click the ‘login’ button and enter their login details in order to use the functions of the website. If the administrator does not have login details, they can register a new account on the website and be returned to the login screen.

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 moblie 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
- Log In/Out

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. I also plan on testing to see can I log in with login data not in the database and data that is in the database.