SDV602 – Portfolio Project – I’ve Been There

Mark Christison

Nelson Marlborough Institute of Technology, New Zealand

Contents

[Contents 2](#_Toc47707769)

[Introduction 3](#_Toc47707770)

[Xamarin 3](#_Toc47707771)

[Problem description 3](#_Toc47707772)

[Storyboards 4](#_Toc47707773)

[Screen 1 4](#_Toc47707774)

[Screen 2 4](#_Toc47707775)

[Screen 3 4](#_Toc47707776)

[Requirements 4](#_Toc47707777)

[System Requirements 4](#_Toc47707778)

[User Requirements 4](#_Toc47707779)

[*User Stories* 4](#_Toc47707780)

[*Storyboards* 4](#_Toc47707781)

[UML 4](#_Toc47707782)

[Use case diagram 4](#_Toc47707783)

[Use case descriptions 4](#_Toc47707784)

[Initial Functional Test Cases 4](#_Toc47707785)

[CRC Cards 4](#_Toc47707786)

[Domain Class Diagram 4](#_Toc47707787)

[Design Class Diagram 4](#_Toc47707788)

[Screen Designs 5](#_Toc47707789)

[Screen 1 5](#_Toc47707790)

[Screen 2 5](#_Toc47707791)

[Screen 3 5](#_Toc47707792)

[Conclusion 5](#_Toc47707793)

[Bibliography 5](#_Toc47707794)

# Introduction

# Xamarin

Background

* Mono
* Xamarin
* Android
* IOS

# Problem description

The software to be designed will be like that of the popular website Geocaching (<https://www.geocaching.com>). A user would take a photo of a location, that location would be geo tagged with its location. Other users would be able to find that location later.

Complexity could be added later by allowing users to make a set of waypoints. For users to follow the path they would need to fine the location and scan it with their camera on their phone. The photo would confirm that users have been at a location.

Users could see “start points” on a map and start a “path” of “waypoints” that other users create. The user would be required to take a photo of each way point. The idea here is that this could be expanded into an app that would allow people to see points of interest along a walkway for example, such as a famous landmark. Some additional information could be provided to the user at this point such as a blub about the landmark/location. Additionally, users could leave comments at each way point or create their own branch of landmarks off of the main “path” that was originally developed.

Another feature could be a “capture the flag” idea, whereby a user would take a picture of a location like a piece of public art. From there, they would take a picture of another location but that would not have a geo location. The idea being that a second user would have to find the second location, take a photo of it to confirm that they have been there, and then move to another location and take a photo of it. The system would log the geo location of the new location and show it to all the other users to attempt to find.

# Storyboards

Map, Search, title screen, login, location

Top level diagram as an Overview

Detail of each screen

## Screen 1 – Map

## Screen 2 – Search

## Screen 3 –

# Requirements

## System Requirements

Funcitonal Requirements

Non-Functional Requirements

## User Requirements

### *User Stories*

# UML

## Use case diagram

## Use case descriptions

|  |  |  |
| --- | --- | --- |
| Use-Case | | Search for Item |
| Version / Date | | Version 2 / 3 May 2020 |
| Author | | Mark Christison |
| Summary | | User searches for item and receives a list of matching items |
| Priority | | High |
| Dependencies | Includes |  |
| Included By | Search for item by search term  Search for item by category |
| Actors | | Customer |
| Trigger | | User makes a search request |
| Pre-Conditions | | Items are known to the system user is on search page |
| Description | | 1. User inputs search term of item they are looking for 2. User submits search 3. System generates results 4. System displays results to user |
| Extensions / Exceptions | | 1a. User limits search to a specific category  5. User requests detailed results of a product  5a. System displays one product details page |
| Post-Conditions | | User is displayed a list of items or one items complete details |

## Initial Functional Test Cases

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case** | **Function Being Tested** | **Initial System State** | **Input** | **Expected Output** |
| System Start-up | System is started when the switch is turned “on” | System is turned off | Activate the “on” switch | System requests initial cash amount |
|  |  |  |  |  |

## CRC Cards

## Domain Class Diagram

## Design Class Diagram

# Screen Designs

## Screen 1

## Screen 2

## Screen 3

# Conclusion

# Bibliography