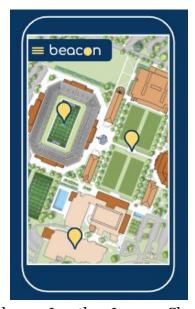# Technical Documentation for

No Bugs Allowed:

Beacon

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CIS 4592 Capstone Project

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Table of Contents

1   Outline of Team Process

As our team nears the halfway point of our first sprint, we shall gather for a scrum meeting on the 17th of February. Jerald will lead us as Scrum Master and ask a few questions to mitigate confusion and prevent any obstacles in our way to successfully completing the goals of sprint one. The goal of the scrum meeting is to keep the development team on track and to maintain high productivity. The goal of each sprint is to have a deliverable product that will give some amount of value to the customer.

The process of completing user stories should also be reviewed by the scrummaster. It is their responsibility to organize the Trello board and move user stories to completion. On an important note the scrummaster and anyone else should refrain from adding new items to the backlog and sprint backlog unless approved by the Product Owner. If a user story seems too difficult then a discussion to break apart the case into multiple parts should take place and noted for discussion at a future sprint.

6. 2Requirements Documentation

In order to provide the most availability to our customers will be using a minimum API level of 24 also codenamed Nougat. This level of compliance will assure that over 80 percent of android users will be able to use this app. In addition to this we will need the android device to have a way locating itself on Google Maps and to ask the user's permission to use this information. For user stories we plan to add on acceptance criteria to each user story to assure that if they interact with other stories we may better prepare for the integration aspect.

a. 2.1Relevant Requirements

- *Users must use Android API level 24 or higher*

- *Users must allow for GPS tracking*

- *Users must be able to see their location*

- *User must be able to drop beacons*

7. 3Deployment Platform

The first step of our deployment phase is get our software to work on an Android platform. To accomplish this we will be using Android Studio to develop the front end. This platform will allow us to create a mobile application that users may download. We chose to work with Android because our team is familiar with Java and the framework of Android development. We will also use the Google Maps API to allow use of geo-locations and other map services. This will support the portable nature of the project and the ability to drop beacon where they are.

a. 3.1Reasons for Platform Selection

Using Android Studio will allow our team to test the software in real time. The IDE provides tools for running the software on multiple types of android devices with emulations. This makes testing the front end easier. Along with the emultation, Android Studio makes working with a model view controller easier because of the file directory setup provided when creating a new project.

8. 4Expected Client Platforms

The client platform that we will target is an Android enabled mobile device. We have chosen this platform for our application because it plays into the decision to target a mobile platform and the ability to use the application anywhere, not just where the user has access to a

desktop computer. Additionally, the majority of our group members have some experience using Android Studio to build applications.

9. 5Development Platform

The development platform that we will use to create our application is Android Studio. This is the same platform that we plan on using for our deployment. We will use GitHub to perform version control in order to keep each other up-to-date with the latest working programs. Github also helps with synchronization by allowing us to creating separate branches for every specific function, Then allowing the user to merge their changes with the main program branch.