

## Introduction

As part of the CS307 (Software Engineering) course, group #6; consisting of Brandan Miller, Michael Clayton, Billy King, and Bakytzhan Kudebayev; will proceed in developing a mobile-based network locator which meets the requirements and uses the techniques which have been set forth in class.

## Problem Statement

There needs to be a way to locate Wi-Fi networks within my current proximity as well as outside of my local proximity. A solution to this is a crowdsourced Wi-Fi Locator.

## Project Objective

We will be designing a crowdsourced Wi-Fi network locator called WiFiL. WiFiL will be an application, which allows the user to locate local Wi-Fi networks through which the user can obtain Internet access. Currently, WiFiL is being designed for devices with Google's Android OS. WiFiL will also be using the Google Maps API to help display the locations of found Wi-Fi networks and to track the location of the user. A server backend will be developed to store, serve, and manage registered network locations. The end goal for the project is to guide the user to a destination that they may gain access to a Wi-Fi network.

## Stakeholder

- 1) The Developers
- 2) Project Coordinator
- 3) Professor of CS307
- 4) End Users: people near a populated area where Wi-Fi access is accessible, yet hard to locate.  
(ex. Students on a college campus, people within a capital city)

## Risks

- 1) The scope of the project may be too large for a working prototype to be delivered.
- 2) The tools used will require permissions, which we might not be able to gain access to within the allotted time.
- 3) The success of the project requires that enough users use it in order to collect sufficient data. It may be difficult to gather enough initial network data to make the application useful.
- 4) Wiffle might send a Cease and Desist letter for using a parody of their trademark name.

## **Project Resources**

- 1) GitHub
- 2) Eclipse
- 3) Android SDK
- 4) Google Maps API

## **Project Organization**

Our project will be maintained using techniques taught in our CS 307 class, will be discussed outside of the CS 307 class amongst all of the members at least three times every week, and will be reported on remotely at least once every day by one or more member.

## **Project Deliverables**

The deliverable project will be able to locate the user, point the user out on a displayed map, locate accessible Wi-Fi networks in adjacency of the user, point out the accessible Wi-Fi networks on the map, and indicate statistics for located accessible Wi-Fi networks.

## **Project Budget/Costs**

Our project is predicted to cost the university nothing.