

The project that we propose is an application we would like to call ParkZone. ParkZone will be an easy to use application that we will build to perform one function. To take a user's location and from that, determine the best place to park, drawing from a database containing information regarding parking lots in the area as well as information regarding where parking may or may not be available on the street. We aim to show a proof of concept of a fairly practical app. In addition to this, as a further stretch goal, we would like to attempt to implement a method for our program to be able to utilize publicly available cameras in order to scan the street in question or close to the location the user enters, and from that process the live feed and determine if the camera can find an actual parking spot on the road for the user.

The data for this program will be gathered from a few locations. The first will be the information regarding the garages we will be using. We will compile a database of parking garages, their locations, rates, times, etc. The garages we will gather data from are Icon and Edison FastPark and potentially others. Also, for the sake of scope we will be limiting the list of garages to those only within Midtown West with zip code 10019. This is because trying to compile a database for all of New York would be too time consuming. In addition to this data, we will also be drawing from the Department of Transportation's list of all parking signs and where they restrict parking to and when. All of this data is publicly available online, however, we will need to compile the database ourselves.

We will be using several tools for this project. For the programming languages, we will be using Python for the backend, HTML, CSS, and Javascript for the frontend, and MySQL for the database. In addition to this, we will potentially be using some third party tools. One we are considering is MapBox, a service which will provide us with a base map to build off of as

opposed to just drawing upon Google's map. The GitHub link for our project is <https://github.com/ramitix/ParkZone>.

The work of this project will be distributed between the three of us. At the current time, there is nothing foreseeable any of us wants to focus on independently but that may change later.

We look forward to attempting to implement our idea and hope that it turns out to be a resounding success.