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**Final Project Report**

Various transportation apps have, like Uber and Lyft have been sweeping the nation recently. They provide a sleek and simple interface to get where you are going easily, and have made navigating the late-night transit scene much safer for a lot of people. However there is a catch. These apps require a lot money to get around, and when money is tight, they are not an option. This leaves out people who are in need of a safe ride the most: those in impoverished neighborhoods, often ridden with violent crime. The safe walking app intends to provide a free option for users to be able to avoid hot crime areas on walks home, and report suspicious activity they have seen to help others.

The Safe walking App is a web app that utilizes server client interactions to allow users to add to a database and filter results based on time of day and type of crime. This version is a prototype that works in Chicago with base data collected by the Chicago Police Department from January – April 2017. I opted for a Web Application due to processing power constraints with the technology that I had available. Chicago made a good case study because data was readily available and it has been known for high violent crime rates.

There were a few challenges implementing the HTTPServlet, again due to processing power. To combat this, we worked off a local GeoJson file. This allowed for full functionality for the mobile UI and spatial trends. Because of this issue, two demo videos were created. The server client interactions can be seen in video 1. [see ‘Server-Side-Demo.swf’] In this video we show the data being called from the server, however because of processing power we were forced to limit it to one crime being shown. Then we show a crime report being created that we can find in the database. This video shows proof of client-server interactions. The second video shows the full functionality of the interface. [see ‘Full-Functionality.swf’] This video shows us how the interface operates. We show retrieval functions with a popup, then Filtering functions, and lastly we can see the report creation, including map reload.