## **Traffic Monitoring Project**

## Group #13

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# Software Engineering 14:332:452 User Documentation

https://sites.google.com/site/452trafficmonitoring/home

http://www.jracoma.com/trafficmonitor/

#### **Website User Documentation**

The website-based application can be accessed through a variety of browsers. Open a browser of choice and enter the following URL: <a href="http://www.jracoma.com/trafficmonitor">http://www.jracoma.com/trafficmonitor</a>. Once the page is reached, it is required to log in first. After logged in, the home page is shown with a variety of menu options on the top bar for the user to choose from.

#### **Home Page**

The Available options are "Traffic Monitoring", "ManageAlerts", and "Log out". Clicking the "Traffic Monitoring" button brings the user back to the homepage of the website. These options are at the top bar of the interface page.

The available inputs are "Starting Location", "Destination Location", "Arrival Time", "Departure Date: +10 days Max", "Set Alert", "Alert Method", and "Submit" button. These inputs box are on the right side of the interface.

The map is available on the left side beside the available inputs box.

### **Application**

In the user interface web, after filling the inputs on the right side and submit, the application can allow the user get direction from the input starting location to the destination location and allow user to set the alert to remind them the departure date, arrival time, starting location and destination. The page will validate the inputs and let the user know if an input is required or input in a wrong format. One example of data the user can submit is: "07016" in the starting location text box, "08854" in the destination location text box. Check "Set Alert", and input "3:20PM" in the Arrival time, "3/30/2014" in the departure date. Then, type in alert method as testing@gmail.com. Once the user clicks the submit button, the application will search for possible routes. Based on the route the user chose, it will attempt to display traffic condition and traffic incidents frequency on an overlay of the map of the area. At the right upper corner of the map, there are two options: time and weather. User can choose any listed time period or any listed weather condition to check the average traffic intensity, which is shown by balloons with different colors. The image displayed is medium (800 x 600 pixels). The webpage has scrollbars that the user can utilize to more fully view the output map. The route found is optimized to avoid all areas with a high traffic concentration. The list of directions shown is in table form, with the list of maneuvers and distance the User must follow at each point. On the right side, the total distance and estimated travel time are listed. The map showing the route is displayed on the left side of the list of directions. A static map from the Google Map is used, and the route the User should follow is highlighted in blue.

The second functionality of the website is managing alerts. Every time users click "set alert" and submit the searching request, the application will automatically save the information user inputs. If user no longer wants to receive the reminder, he/she can delete their saved alerts by clicking "Manage Alerts" at the top bar of the website.

At this point, the User may choose to input another set of directions; they may click any of the menu options to bring them to another page, or they may close the window to be finished with viewing the website application.