**Train Dispatch Project**

**Group Members:**

**Yash Sheth , Ran Bi, Frank Savino**

**Motivation**

The motivation for theTrain Dispatch project is to design a quick, efficient system, which can route trains from a location to another one.

The main motivation behind the Train Dispatch System is to replace some of the inappropriate dispatch system, which may waste our time. Also, a more efficient and appropriate dispatch system will make our life easier.

We aimed to work hard to create the most efficient and best- appropriate train dispatch system for save our passenger’s time.

**Description**

Since we implement the directional algorithm, which is about looking for the angle between the start station and the end station and find the edges. The algorithm implement 500 times to clear the heat map, which provides a focus on finding the most efficient way to dispatch the trains.

For our heat map, which basically is to use different colors to provide the different situations for different routes. Such as we used the black color for the route has no traffic, and blue for low traffic route, green for the low-med traffic route, yellow for medium traffic, orange for med-high and the red for the high.

**Weekly Log for CSE 2010 : Algorithms & Data Structures Train Dispatch Project**

**Group Members: Yash Sheth, Frank Savino, Ran Bi**

1. On 25th of January, we met after the lecture and we planned the division of tasks per person to be followed.
2. On 9th of February, we met in the lab again and decided the method of User Interface to be used.
3. On 23rd of February, we met in the library and we set up **Github project**.
4. On 13th of March, we work together after the lab and we finished the base case part and started working on the station and train.
5. On 18th of March, we finished the station map.
6. On 22nd of March, we started working on the algorithm part and map testing.
7. On 5th of April, it was less than one month left, so we decided to meet more often, to get the graphic and algorithm done.
8. On 16th of April, we almost finished the algorithm part started work on the PDF and the PPT file, and prepared for the presentation.
9. On 19th of April, since the deadline extended to 24th we changed our plan to focus on the GUI.

**Statistics and Charts**

**For the statistics we have number of train as 1.**

1) Case 1: Total number of stations.

2) Case 2: Total number of Edges.







