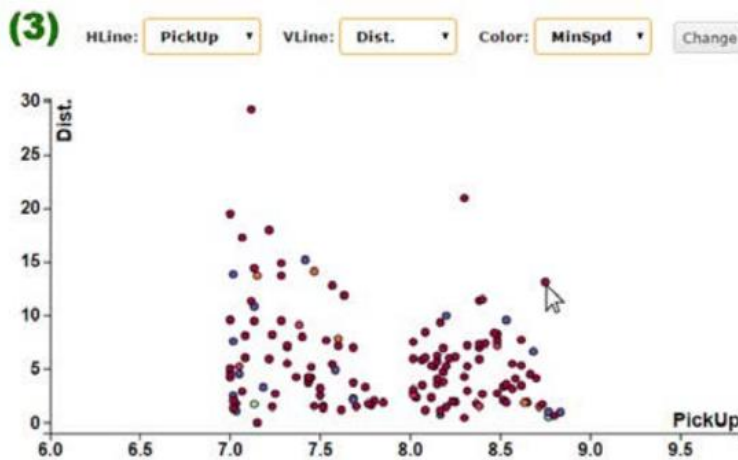


Project Task 1:

Trip Info:

Trip_ID, Av_Speed, Max_Speed, Min_Speed, Travel_Distance, Travel_Time_Duration, Start_time, End_time, StreetNames, Trips_points.

Interactive scatter plot to show the relationship between different attributes:



This scatterplot represents each taxi trip as one dot, the x-axis and y-axis show two different attributes. The color of the dots shows another attribute. Users can interactively choose the attributes that mapped to the axes and dot's color. The attributes are Av_Speed, Max_Speed, Min_Speed, Travel_Distance, Travel_Time_Duration, Start_time, End_time.

Tasks:

1. Implement the scatter plot by using D3.js or any other JavaScript visualization library.
2. Implement the interactions that allow the users to interactively assign the attributes to the axes and the dot's color as shown in the previous figure.
3. Provide a popup window to show more information about each trip such as trip_id once the user hovers the mouse over the trip's dot.
4. Highlight the trip on the map once the user click or hover the dot that represents that trip in scatter plot and vice versa.
5. Provide a selection method such as drawing a bounding box or using a lasso selection on the scatter plot to select a group of dots and help users to interact and filter the trips in both, the map view, and the scatter plot view.