Mini Challenge 1: Traffic Activity

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Bokeh Version - 0.12.7

Required Installations
• Edit Distance - https://pypi.python.org/pypi/editdistance
  command: pip install editdistance
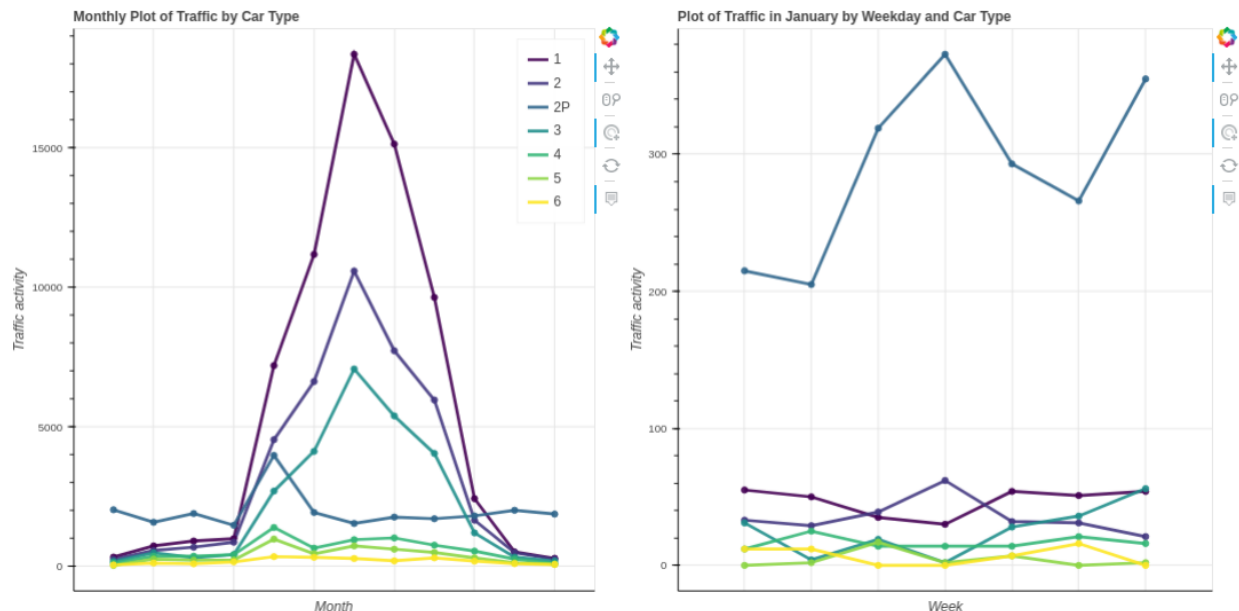
Command to run python file
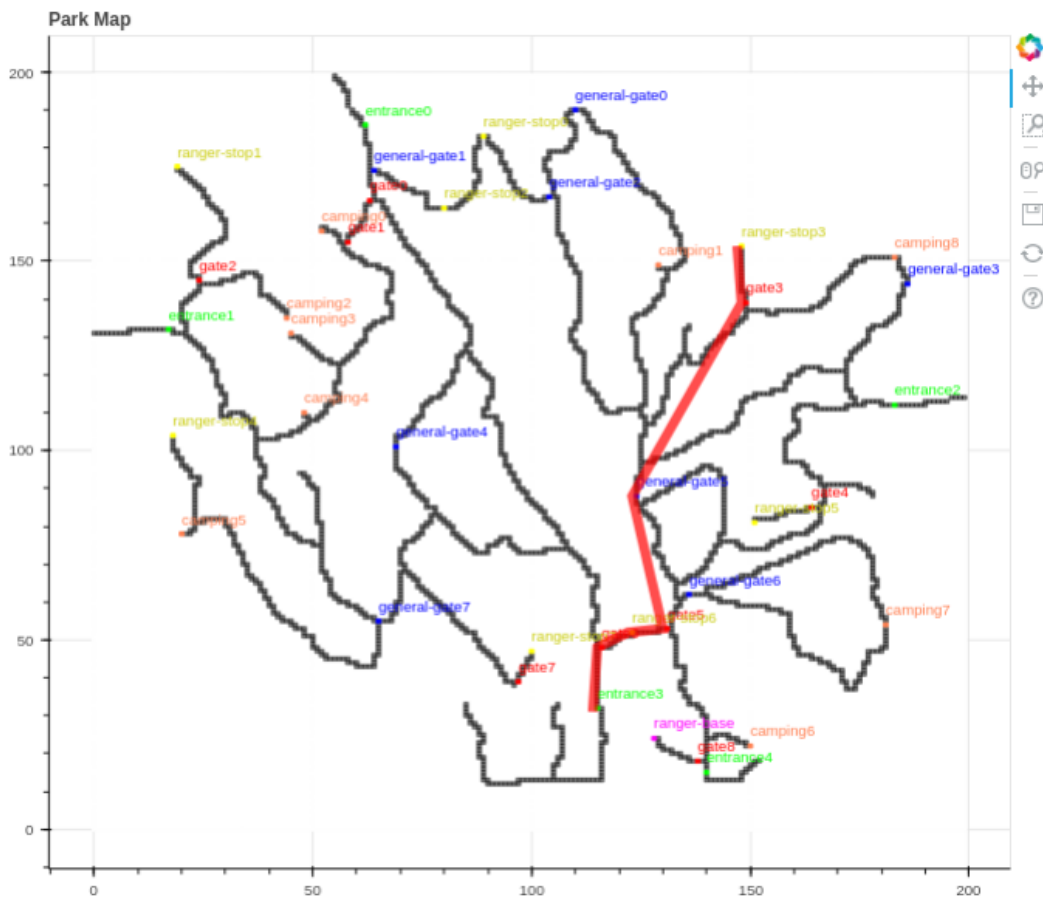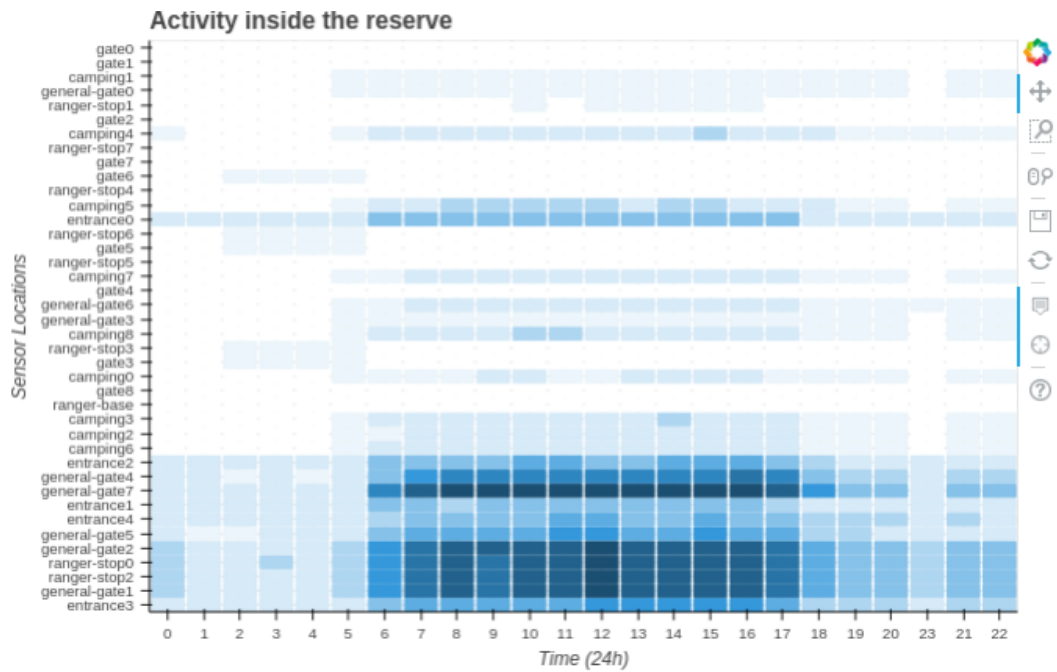bokeh serve --show MC1.py

Startup Time - 35 seconds

To Note: A majority of the pre-processing code is written as functions but is not used when running the python files. This is because the pre-processing takes a very long time. Hence these are done once and stored as pickle files that are loaded when the python file is run. Below is a description of the pickle files being used
• *TopPatterns.pickle* - We perform clustering month wise and store the patterns obtained in this pickle file. For more details one can refer to *top3ClusterPaths()* function
• *sensor_locations.pickle* - This stores the mapping between he sensors and their actual x,y locations on the map.

Screenshots

Activity inside the reserve

Sensor Locations (y-axis): gate0, gate1, camping1, general-gate0, ranger-stop1, gate2, camping4, ranger-stop7, gate7, gate6, ranger-stop4, camping5, entrance0, ranger-stop6, gate5, ranger-stop5, camping7, gate4, general-gate6, general-gate3, camping8, ranger-stop3, gate3, camping0, gate8, ranger-base, camping3, camping2, camping6, entrance2, general-gate4, general-gate7, entrance1, entrance4, general-gate5, general-gate2, ranger-stop0, ranger-stop2, general-gate1, entrance3

Time (24h): 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 23 21 22

Park Map

Year of the month: **1**

Park patterns for January