**Module 2 – Initial Analysis**

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**By**

**Group 1**

**Sunil Raj Thota**

**Nalini Macharla**

**Lakshmi Priya Neelamsetty**

**Sumadhura Thananki**

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**Prof. Mykhaylo Trubskyy**

**Initial Analysis**

The data set is Street tree data from the 2015 Street Tree Census, conducted by volunteers and staff organized by New York City Parks & Recreation and partner organizations. The dataset collected includes species, health, latitude, longitude, and other parameters. We will be using required variables concerning the Questions that we have thought of. We will explore and analyze the dataset to build an interactive dashboard using Tableau and R Shiny.

**Variables:**

* borough
* health
* latitude
* longitude
* spc\_common
* status
* user\_type
* problems
* address
* postcode
* zip\_city
* state
* root\_stone
* steward
* root\_grate
* guards
* root\_other
* sidewalk

Understanding the relationship and other key point indicators between the trees and the City’s health and the economy will help the stakeholders support more resources to build a happier and greener city.

This is an interesting dataset to explore and the audience who might be willing to discover are

* Green Council Departments, Horticulture Department, and Forest Authorities
* Government Entities – City, State, and the Country based Organizations
* Local public, Volunteers, NGO’s, Researchers, Environmental Activists and Students

The questions that we propose to answer to the audience through the data visualization are:

* To find if there is any connection between problems and trees?
* To determine the status, density of plantation, and health of the trees?
* To discover the correlations between various attributes like health, problems, borough, sidewalk, and spc\_common?
* To showcase an overview of the Tree Density over the specified Geospatial Data?
* To inspect the root-based columns like root\_stone, root\_grate, and root\_other?

We will be making sure to delve deep into the dataset and compellingly provide relevant stats and stories by using Tableau and R Shiny Dashboarding Tools. We aim to make sleek and hassle-free storytelling and provide an immersive experience for the user.

There are many graphs to interpret our ideologies to share but mostly we wanted to stick with the fundamental graphs which drive the data story. Graphs/ Visualizations like bar plots, scatter plots, bubble charts, tree charts, line charts, heat maps, geospatial maps, and other relevant charts will be employed.