## Public Transportation Efficiency   Analysis

Phase 3

Dataset Loading and Preprocessing:

Loading or Uploading Dataset:

- In this phase of the project we are going upload our dataset for analysis which is already provide through Kaggle link in the SkillUp platform.
- For this purpose, first of all we have to access to the IBM Cloud services and IBM Cognos Analytics suit.
- All must create a IBM Account and register as lite account for gaining access to the some premium membership accessibilities.
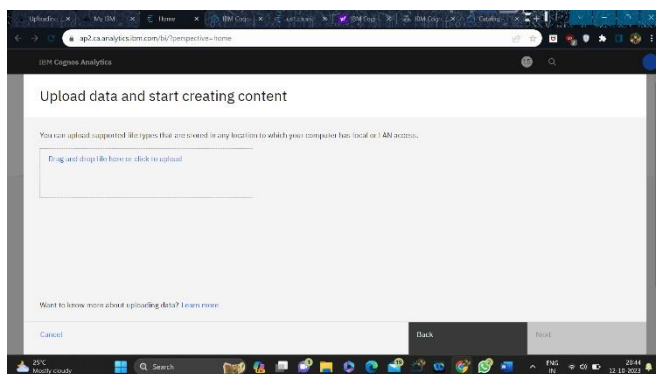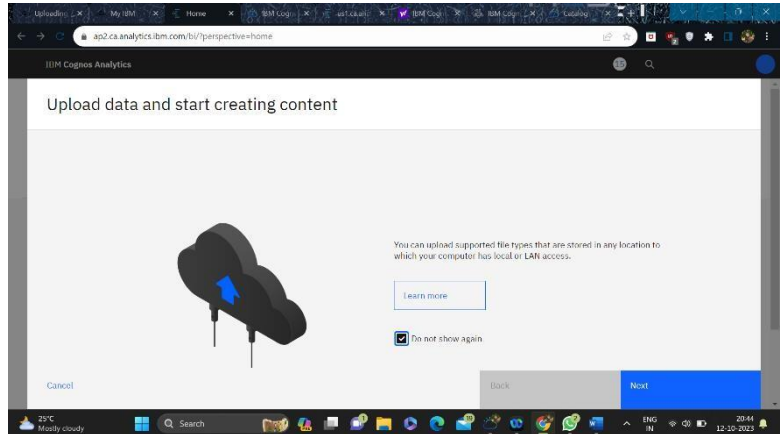
- A Lite account can use the features of IBM software of web applications upto a certain limits in time period , no.of sessions per month,storage limits etc.
- After the account is created and accessibility gained we have create a project and Upload our Dataset that need to be analysed into the My Conents section. Using selecting from storage option or drag and drop option.
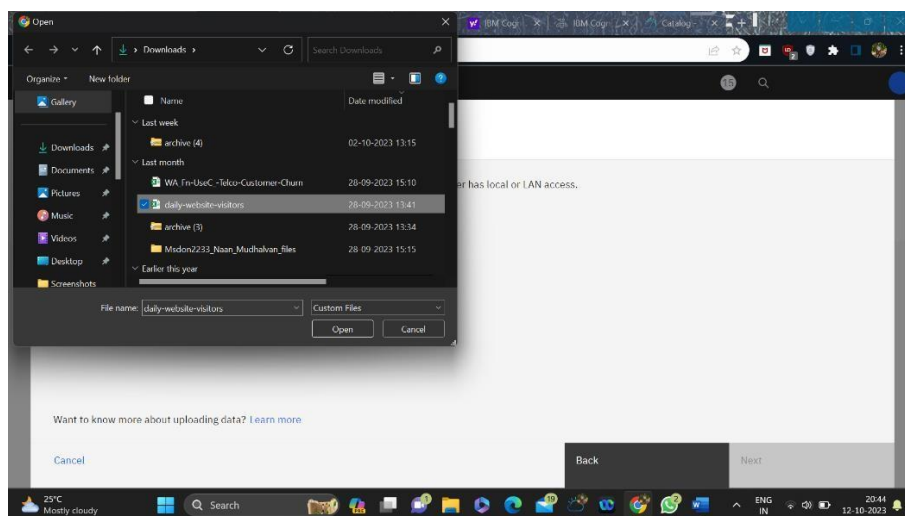
Preprocessing Dataset:

- Clean the data by handling missing values , outliers , and data quality issues.
- Transform and reshape the data as needed . This might include feature engineering , data aggregation ,or other data preparation.
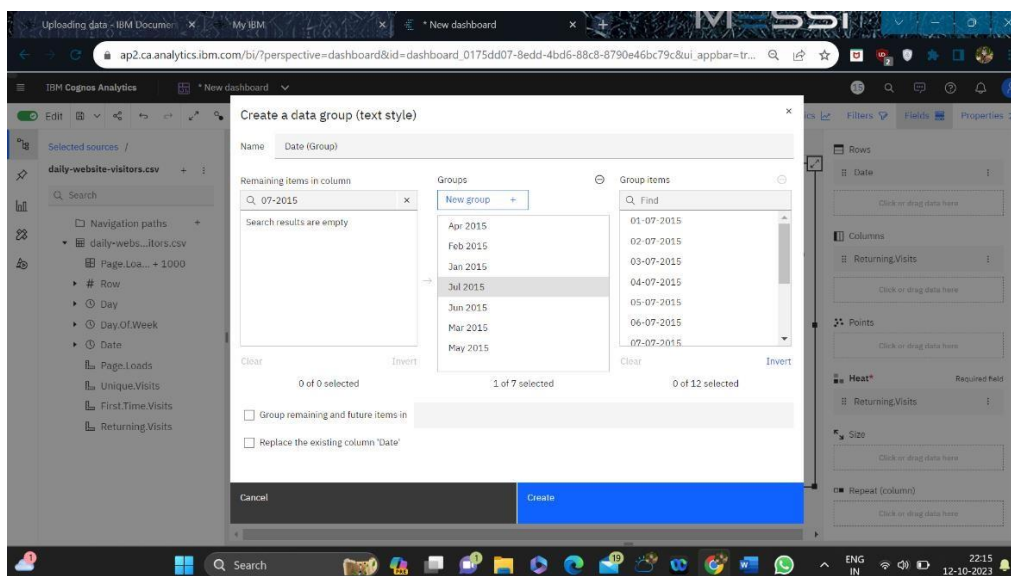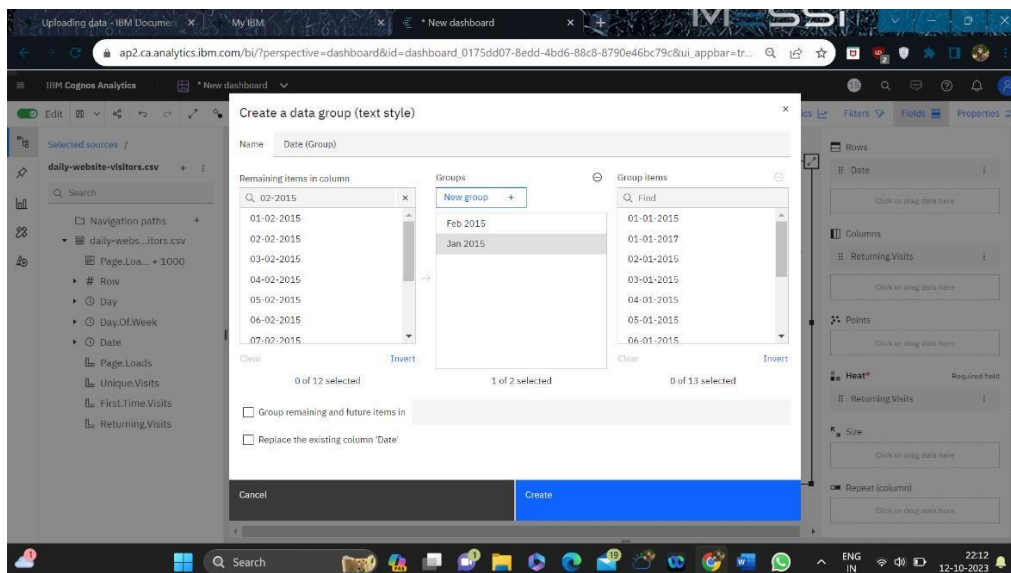
- Data Preprocess is one of the crucial step in the Data Analytics . Otherwise our analysis can be irrelevant due to unwanted noises in the data.
- This includes null value removal , formatting ,etc.

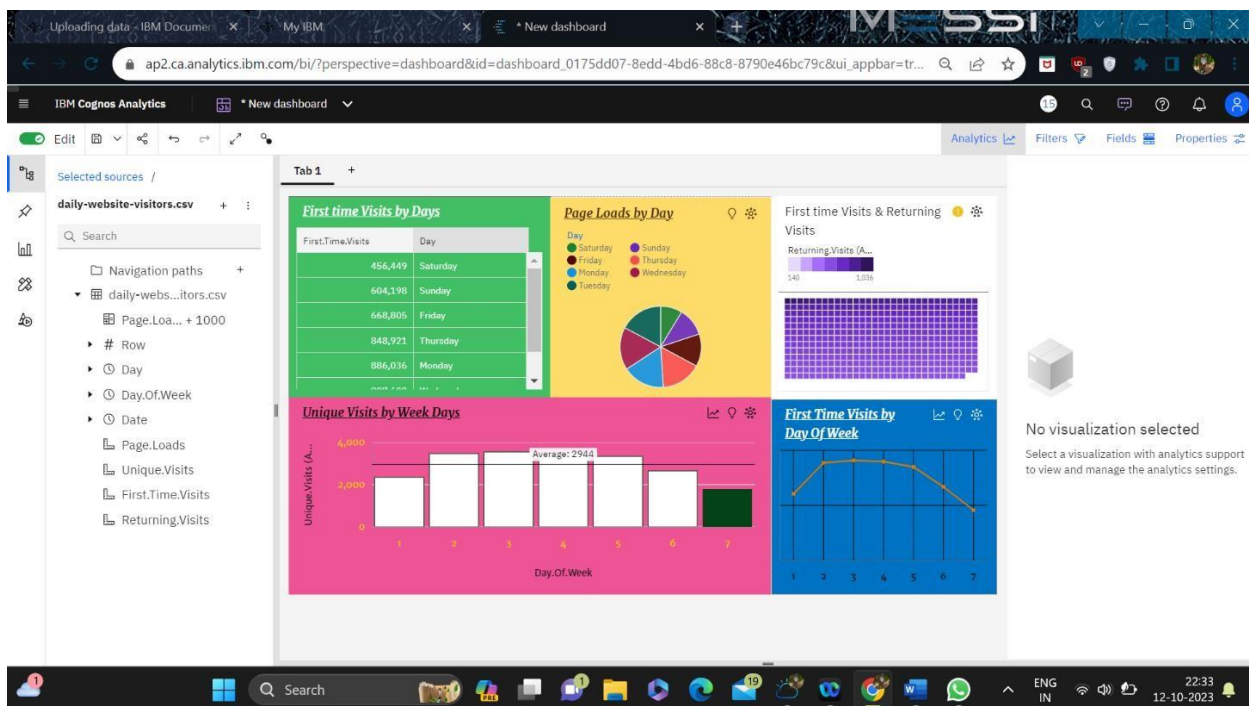## Basic Analysis and Visualization (Dashboard Creation):
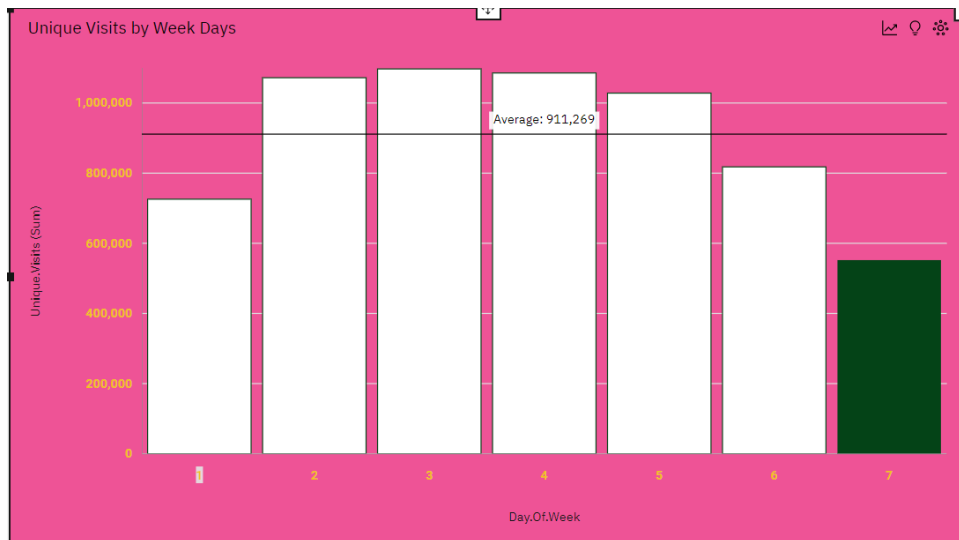
Analysis:

- Use IBM Cognos for descriptive and exploratory data analysis. Conduct statistical analysis to understand the dataset's characteristics.
- Identify patterns, trends, and correlations within the data. Look for potential factors that may contribute to website traffic analysis.

Visualization:

- Create visualizations using IBM Cognos to present your findings. This might include:
- Histograms, scatter plots, and box plots to visualize data distributions and relationships.
- Line charts or time series visualizations to explore trends over time.
- Dashboards that summarize key insights in a user-friendly manner.

Basic Dashboard:

First time Visits by Days

First.Time.Visits	Day
456,449	Saturday
604,198	Sunday
668,805	Friday
848,921	Thursday
886,036	Monday
897,602	Wednesday
907,752	Tuesday

Page Loads by Day

Day
- Saturday
- Sunday
- Friday
- Thursday
- Monday
- Wednesday
- Tuesday

First time Visits & Returning Visits

Returning.Visits (A...
140   1,036

Unique Visits by Week Days

Average: 2944

Unique.Visits (Average)

Day.Of.Week

First Time Visits by Day Of Week

First.Time.Visits (Sum)

Day.Of.Week