

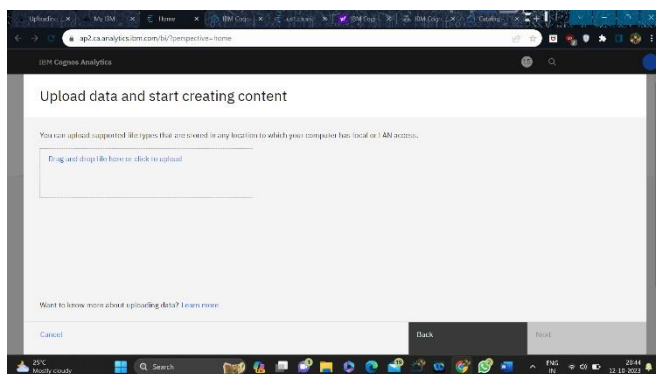
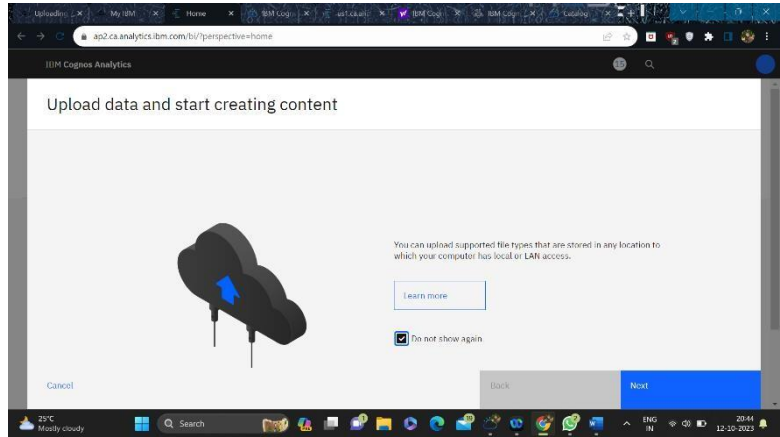
Air Quality Analysis

Phase 3

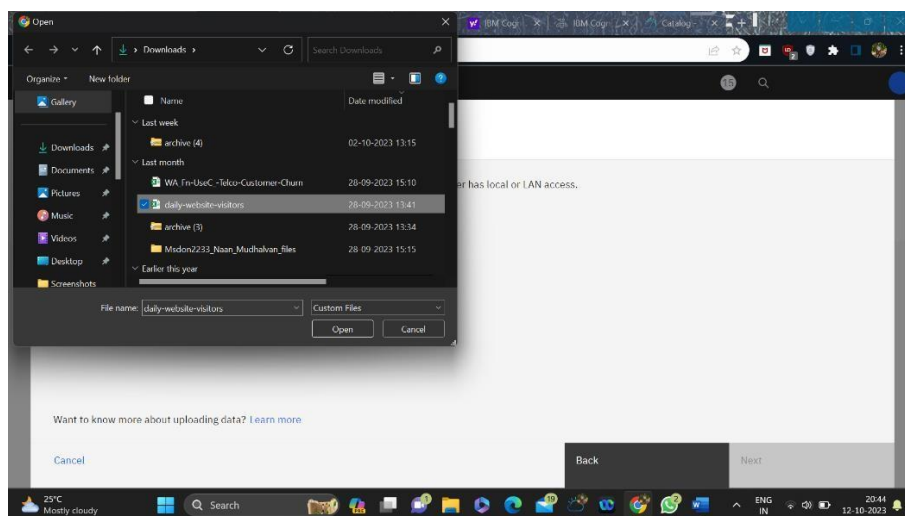
Dataset Loading and Preprocessing:

Loading or Uploading Dataset:

- In this phase of the project we are going to upload our dataset for analysis which is already provided through Kaggle link in the SkillUp platform.
- For this purpose, first of all we have to access the IBM Cloud services and IBM Cognos Analytics suit.
- All must create an IBM Account and register as a lite account for gaining access to some premium membership accessibilities.

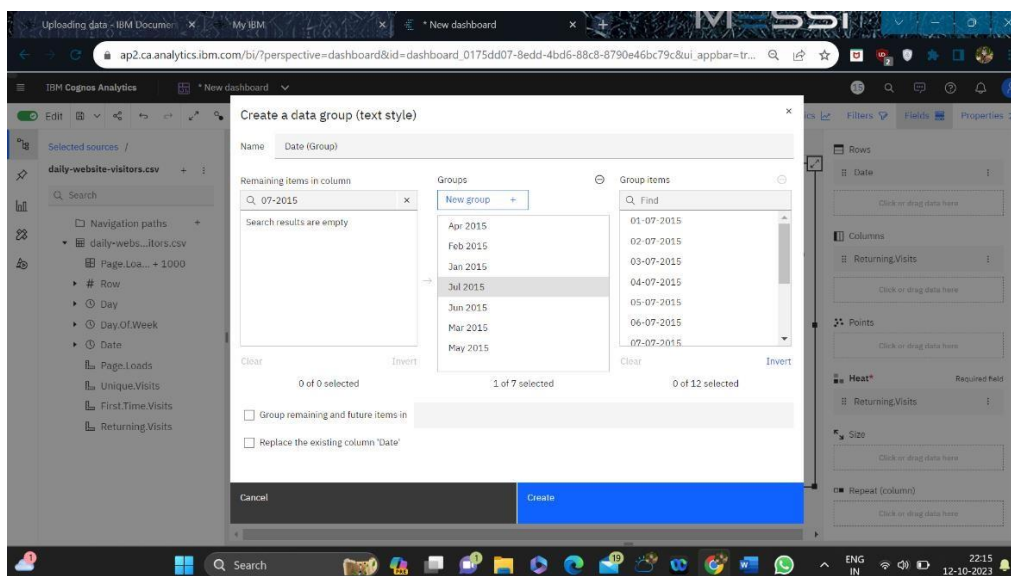
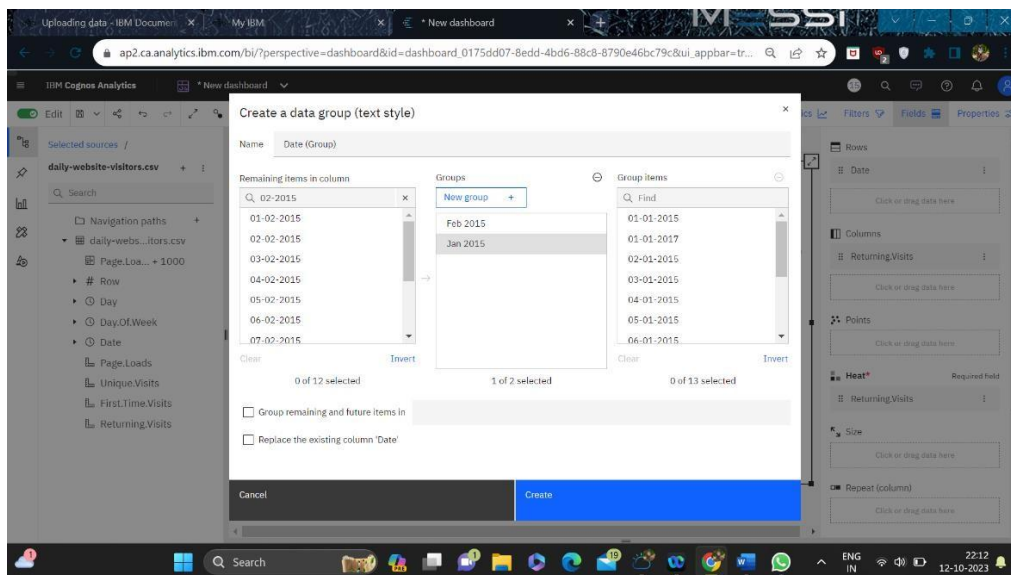


- A Lite account can use the features of IBM software of web applications up to a certain limit in time period, no. of sessions per month, storage limits, etc.
- After the account is created and accessibility gained, we have to create a project and upload our dataset that needs to be analyzed into the 'My Contents' section. Using the 'select from storage' option or the 'drag and drop' option.



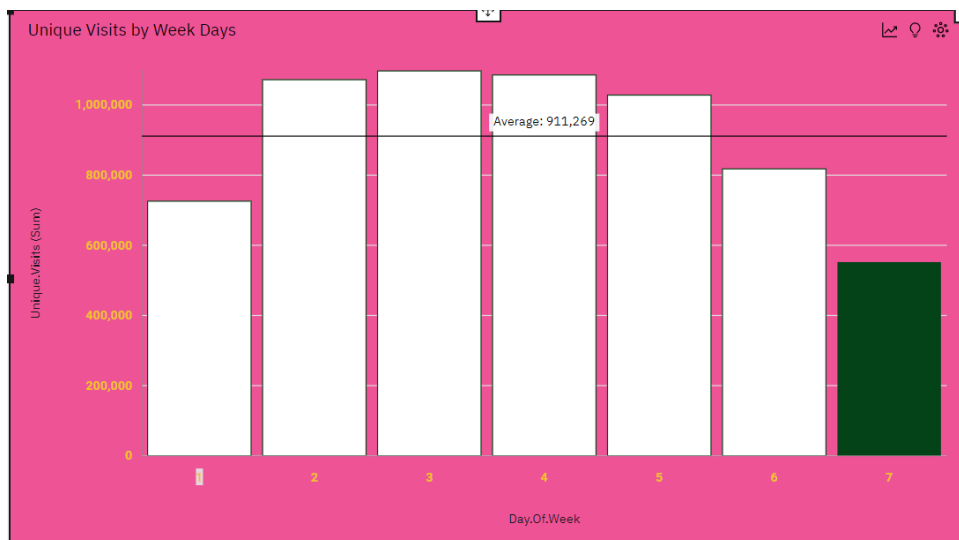
Preprocessing Dataset:

- 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):

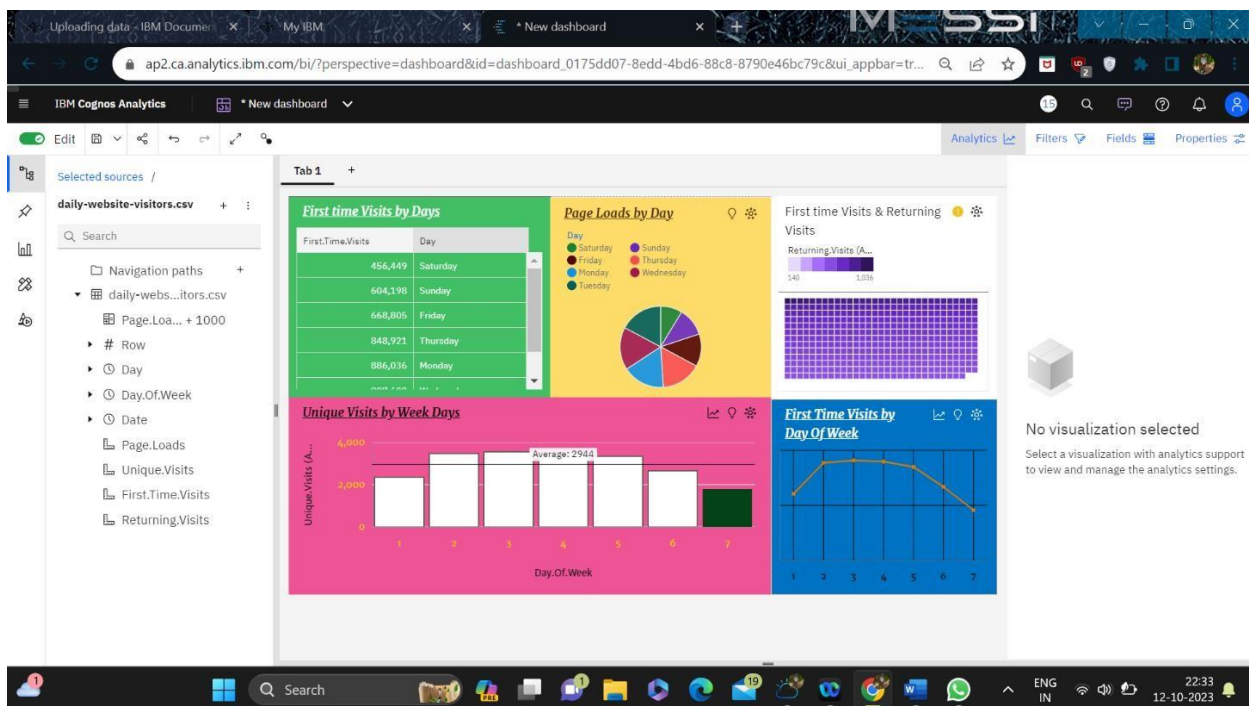


Analysis:

- 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:

