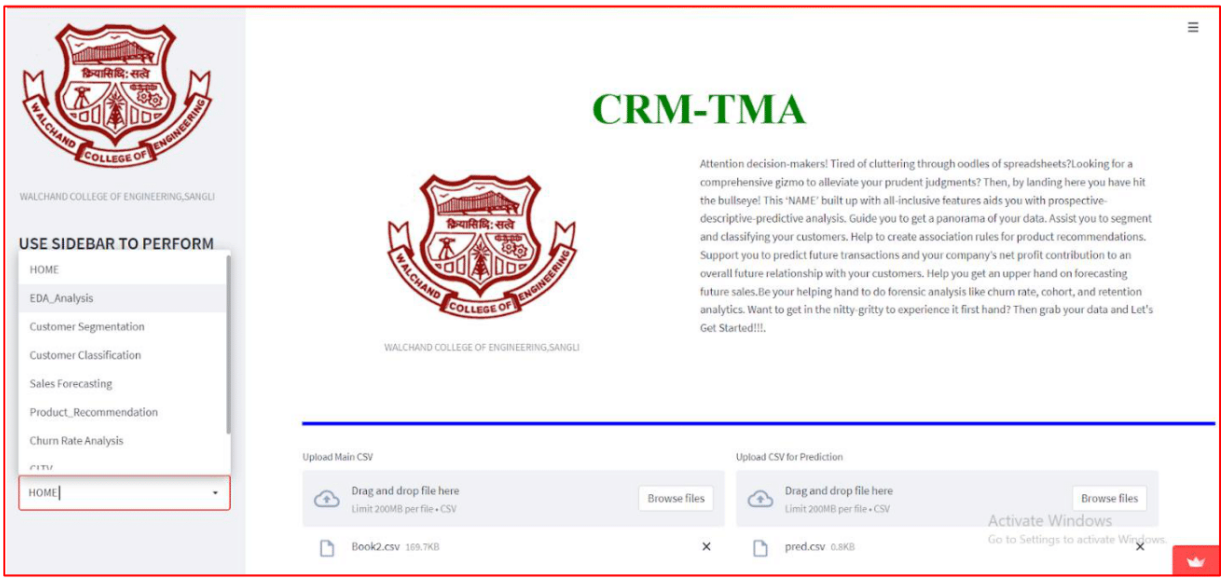
Grahak 360 CRM©

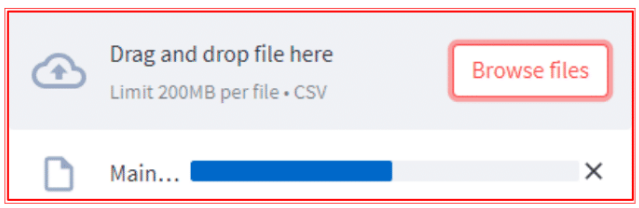
EDA ANALYSIS

A GUIDE TO USER

2.1 EDA Analysis



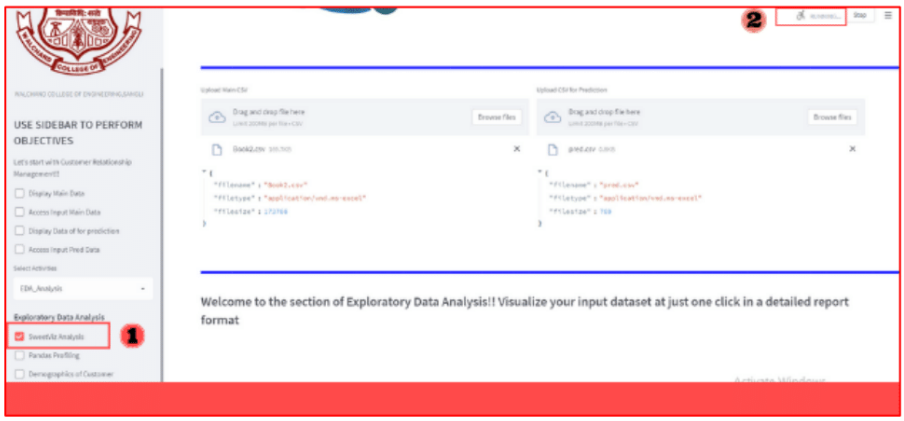
- Select the EDA Analysis option from the dropdown in the sidebar menu. Wait for some time until the screen gets static.



- Upload the ***.csv file*** of the dataset whose EDA Analysis is to be done
- This can be done either by 'drag and drop' mode or by just browsing your directory.

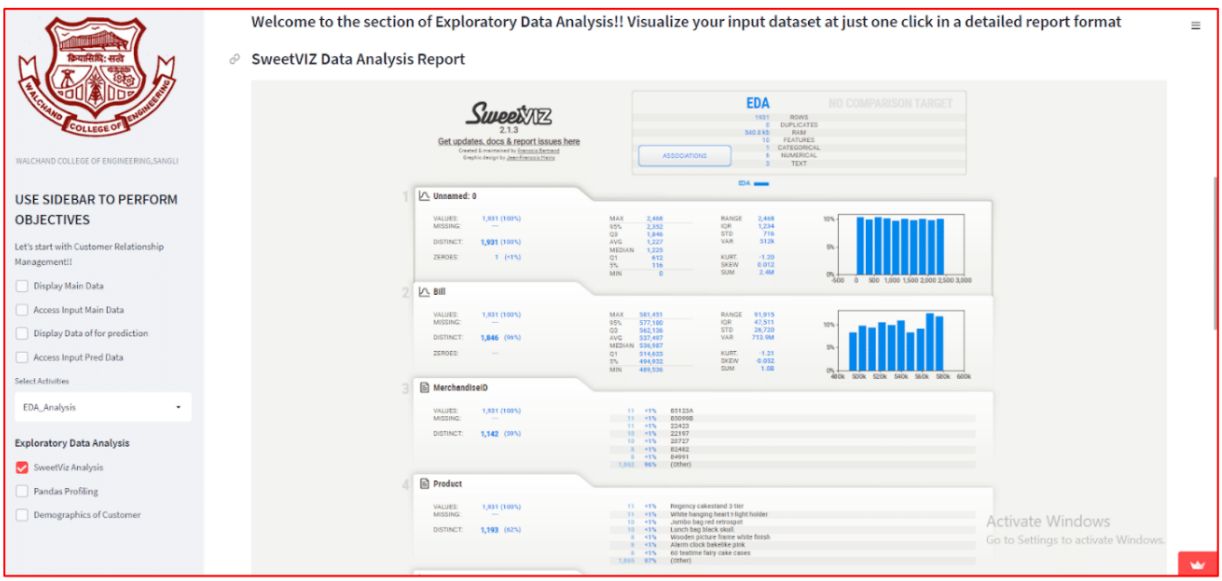
- Further you can choose between Sweetviz Analysis, Pandas Profiling and Demographics of Customer as per your requirements by clicking the checkbox in the sidebar menu.

2.2 SweetViz Analysis

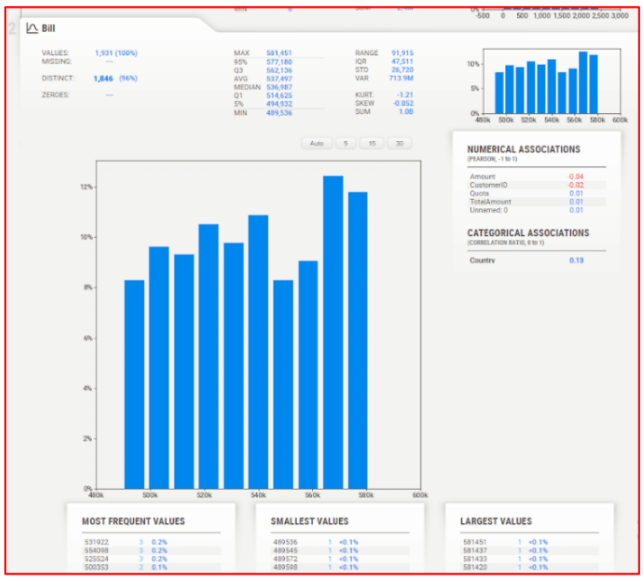


- Click on the ***Sweetviz Analysis*** option in the sidebar menu. Wait for some time until the results are displayed.

- Sweetviz data Analysis Report will be generated.

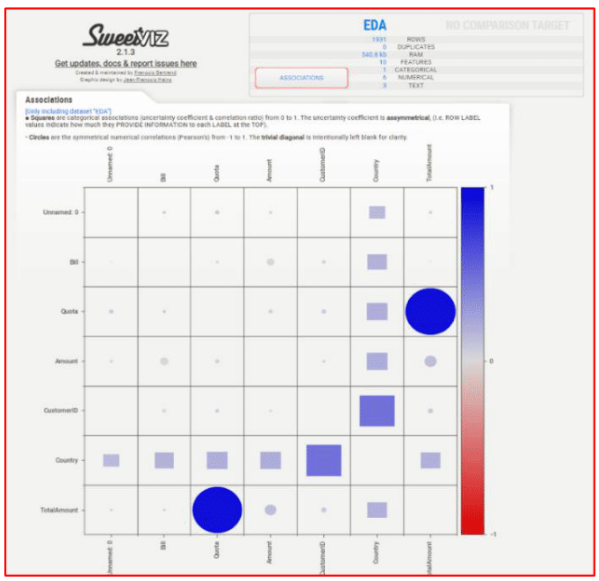


- Here you have various options to understand the crux of data. Right from visualizing the statistical information of each and every attribute to associations between attributes.
- Here by clicking on any one of the attribute you will get detail analysis.



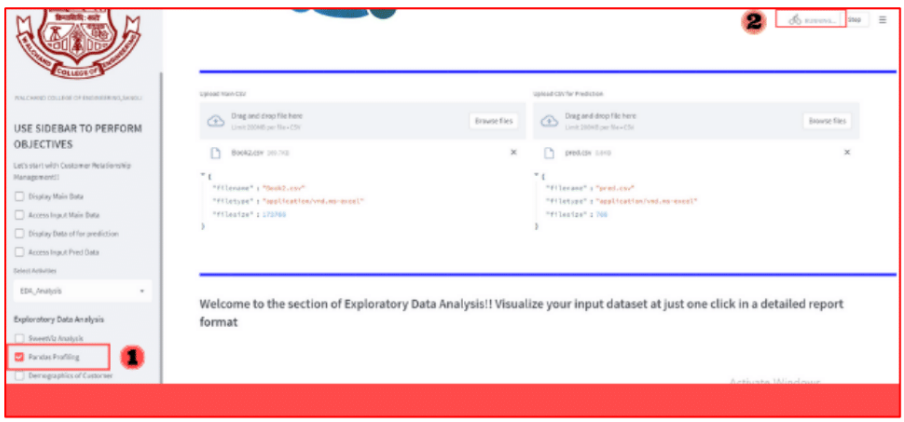
- Get insights on sparse and distinct values.
- Get numerical and categorical associations.
- Get the details of most frequent, smallest and largest values.
- Get visualization of the attribute.

- Here by clicking on Associations at the right most tab of Sweetviz Analysis you will get detail associations insights.



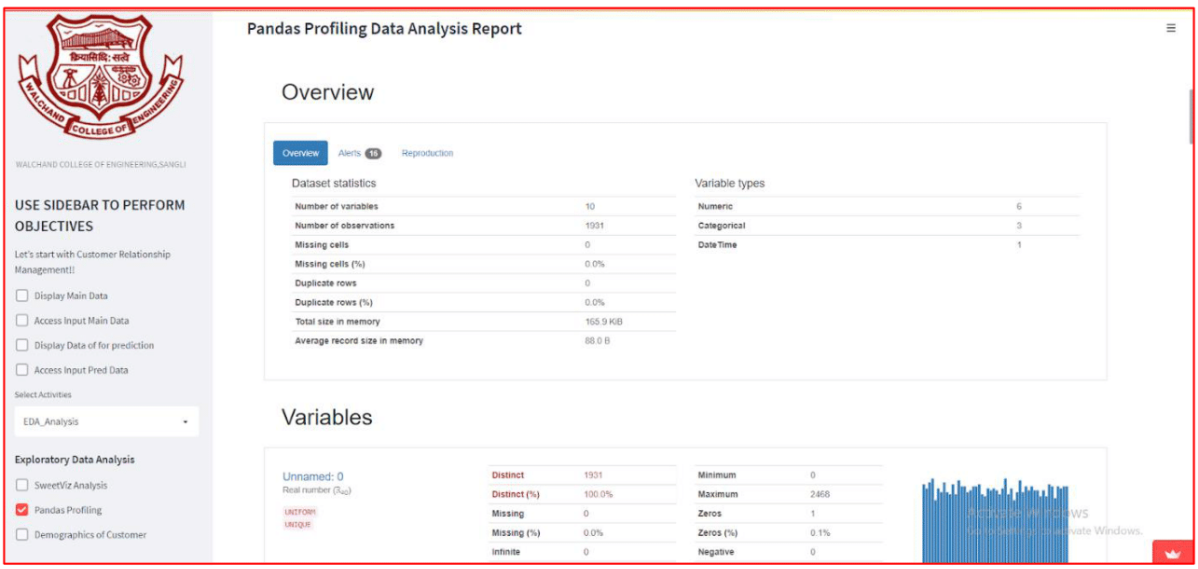
- Get insights on categorical associations represented in squares to understand correlations between attributes.
- Get insights on numerical associations represented in circles to understand correlations between attributes.

2.3 Pandas Profiling Analysis

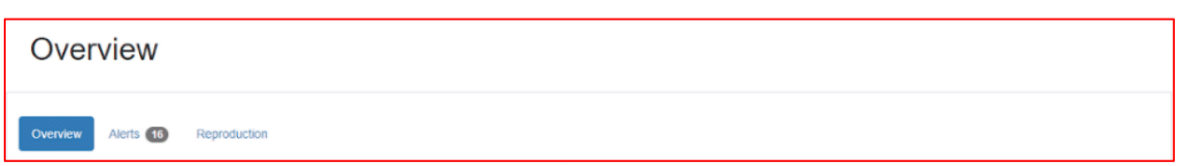


- Click on the ***Pandas Profiling*** option in the sidebar menu. Wait for some time until the results are displayed.

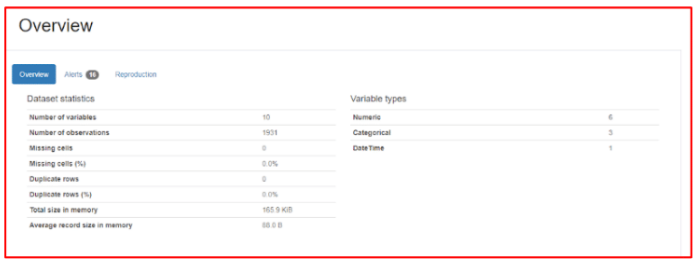
- Pandas Profiling Analysis Report will be generated.



- Here you have six different options to help visualize and analyze your dataset. Pandas profiling analysis will help you in getting an overview of dataset, analysis of variables, Interaction graphs between variables, correlation analysis, insights on missing values and display of a sample dataset.
- Here by clicking on overview option you will get three sub options which Includes Overview of dataset, Alerts and Reproduction of your analysis.

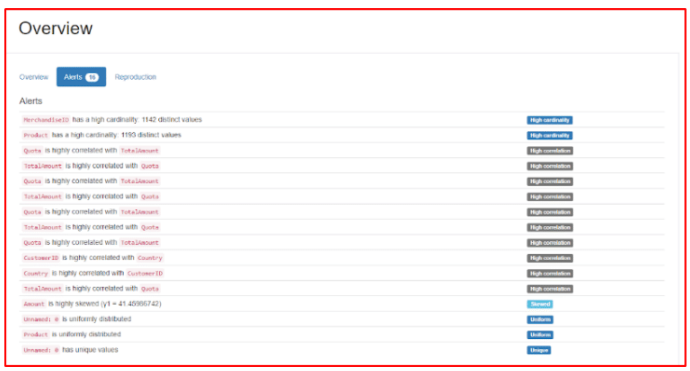


- Here by clicking on overview of dataset sub option you will get detail analysis.



- Get insights on dataset statistics to understand number of variables, duplicate rows, sparse data etc.
- Get insights on variable types of your attribute.

- Here by clicking on Alerts sub option you will get detail analysis.

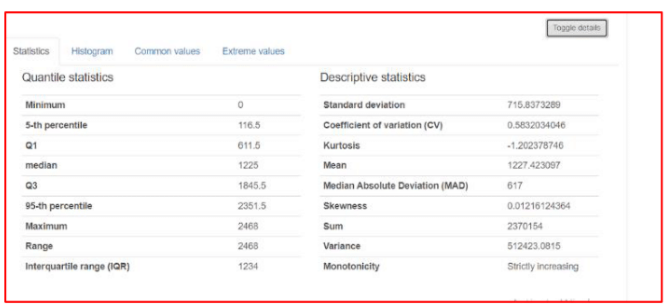


- Get top insights on the notifications provided to understand which attributes has high cardinality, high correlation, skewed data, uniform data and unique data in one glance.

- Here by clicking on Reproduction sub option you will get detail analysis.
- Get information on when the analysis was started, finished and other relevant metadata.

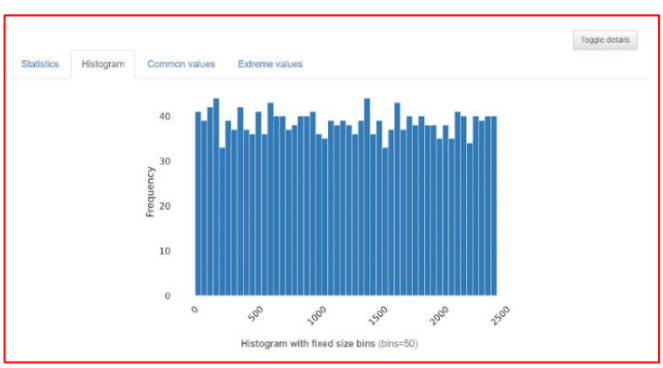
- Here by clicking on variables option you will get detail statistical analysis of every attribute and also by clicking on toggle details you will get more analysis and visualization associated with it. This toggle details further has 4 sub options: statistics, histogram, common values and extreme values visualization.

- Here by clicking on statistics sub-option you will get detail analysis.



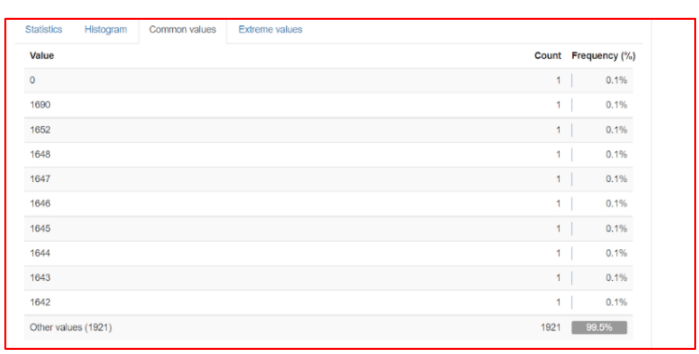
- Get insights on Quantile as well as Descriptive Statistics.

- Here by clicking on Histogram sub-option you will get detail analysis.



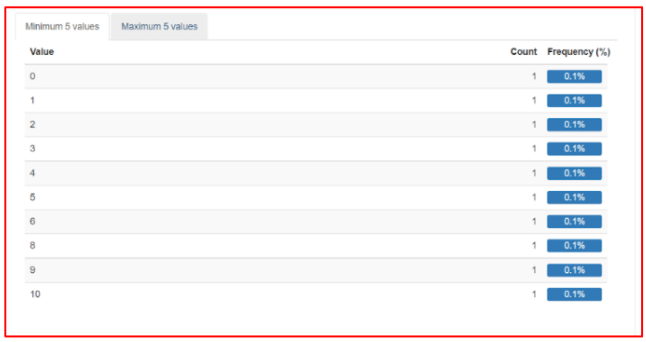
- Get insights on Histogram plots.

- Here by clicking on common values sub-option you will get detail analysis.



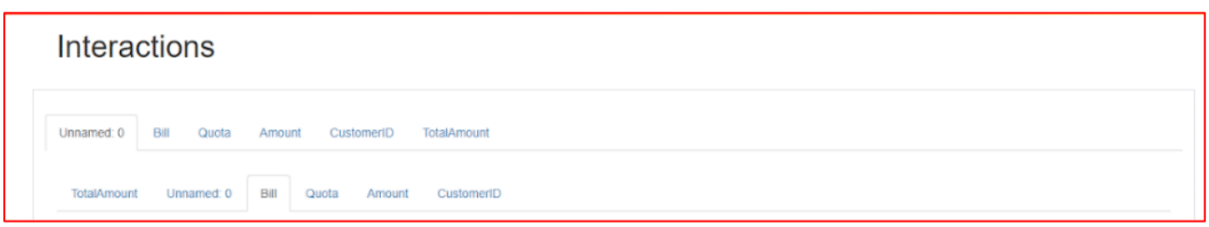
- Get insights on count and frequency of the distinct values present in the attributes.

- Here by clicking on extreme values sub-option you will get detail analysis.

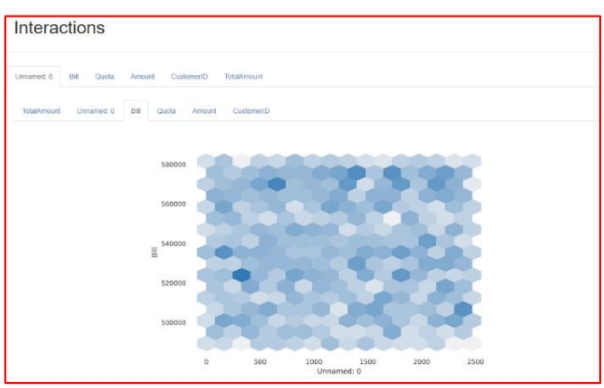


- Get insights on count and frequency of extreme minimum and maximum values.

- Here by clicking on Interaction option you will get set of variables to be plotted on x and y axis to understand there correlations.

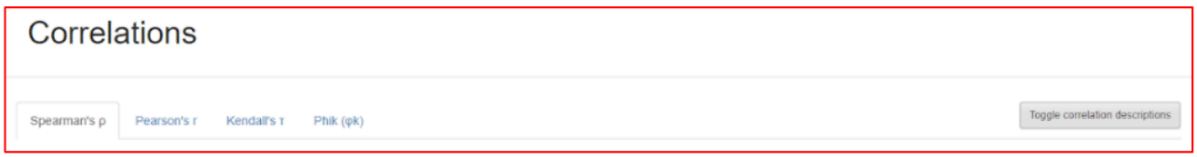


- Here by choosing between variables to be plotted on x and y axis you can get a correlation plots.



- Get insights on dependency of the variables.
- Will help you find hidden patterns between the correlations.

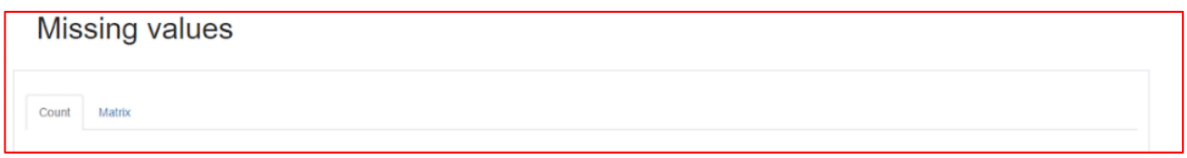
- Here by clicking on Interactions option you will get detail analysis.
- Here by clicking on Correlations option you can select between Spearman's, Pearson's, Kendall's and Phik rank correlation coefficient as per your requirements to understand the correlations in detail. Also with help of Toggle correlation descriptions you can actually get more information about it in descriptive form.



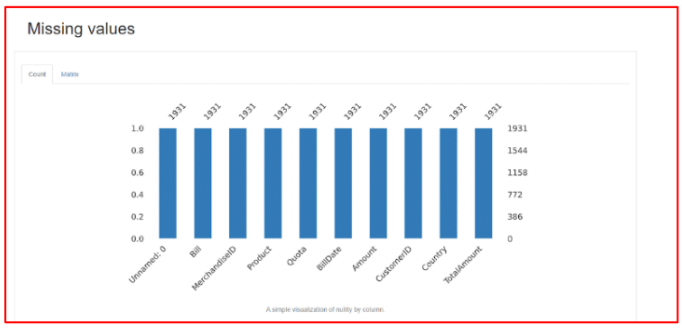
- Here by clicking on one of correlation method option you will get detail analysis of the chosen method.

- By clicking on say Kenall's T option you will get a heat map analysis describing the correlation.
- In case want the descriptive analysis of the same then click on Toggle correlation descriptions.

- Here by clicking on the missing value you will get two options to visualize the sparse data in form of count and matrix form.

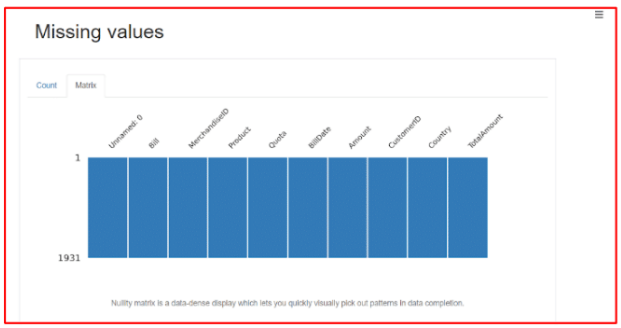


- Here by clicking on the Count Option you will get visualization of the sparse data.



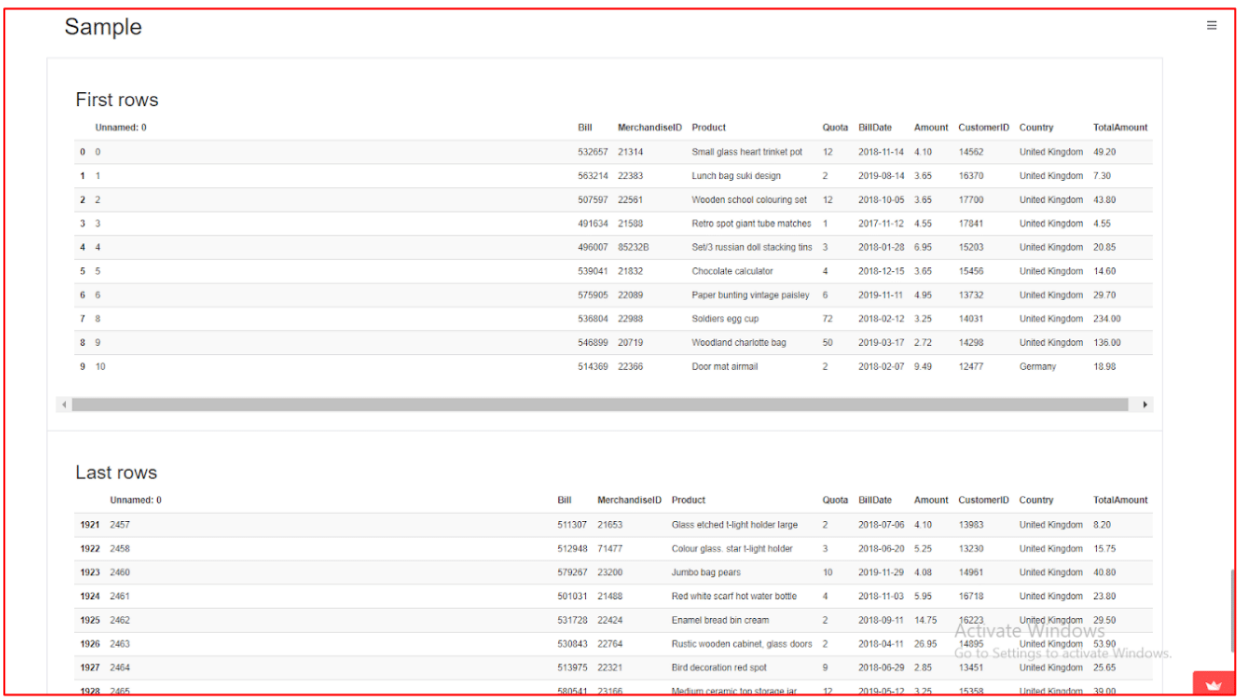
- Get insights on a simple visualization of nullity by columns.

- Here by clicking on the Matrix Option you will get visualization of the sparse data.

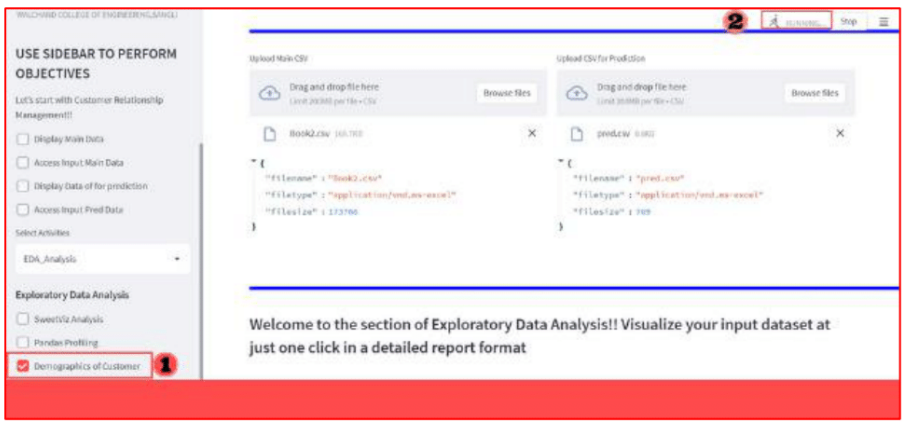


- From this data-dense null matrix get quicker insights on visualizing patterns in data completion.

- Here by clicking on Sample option get quicker insights on visualizing the first and last rows of your dataset.



2.4 Demographics of Customer



- Click on the ***Demographics of Customer*** option in the sidebar menu. Wait for some time until the results are displayed.

- Sweetviz data Analysis Report will be generated.

- Here you can visualize demographic spread of your customers globally.
- To fully view the demographics of customers, use the expander at the top right corner
- The regions highlighted in red in the map helps you to visualize the concentration of the customers in particular regions.