## **Project Technical Requirements:**

For this project, we have model, design, and implemented an objectoriented Charting Dashboard for data analytics and visualization fordatasets in a health industry.

This Object-Oriented Dashboard is modelled and designed using UML, and implemented using JavaScript and Java, use of Freeware Charting Libraries, tested on Firefox and Chrome platforms.

## **Dashboard GUI capabilities:**

- 1. The ability to select a Dataset from a list of datasets in certaincategory; at least 5 datasets must be present for selection and testing in your final submission
- 2. Datasets to be read from a data file in CSV or JSON format
- 3. The selected dataset must be displayed as a table in the browser(Firefox or Chrome)
- 4. The User must be able to graph/plot the data on the Dashboard inone/many of the following chart types: Line, Bar, Pie, Stacked, Pivot
- 5. The user must be able select/deselect Columns forinclusion/exclusion of data from the dataset for Charting theselected data
- 6. The user must be able select/deselect Columns forinclusion/exclusion of selected data from the dataset for charting
- 7. The user must be able to filter Rows for inclusion/exclusion of thedata from the dataset for charting
- 8. The user must be able to plot/chart basic stat data, for example,min, max, average, count, standard deviation, etc.
- 9. The user must be able to create and plot/chart complex analytical queries based on the column names and values for a given dataset.

## **Project Deliverables:**

- 1. Requirements and Design document has the following
  - Brief project overview statement.
  - Requirements/Features List (All Requirements and Featuresmust be numbered)
  - Use Cases and Use Case Diagram
  - Activity Diagrams
  - Sequence Diagrams
  - Domain Model Class Diagram
  - Design Model Class Diagram
  - Documentation and class diagrams for Design Patterns used.
- 2. Source Code
- 3. Output report that has ALL captured screen-shots of your project run saved in OUTPUT.pdf
- 4. Video recording of 10 minutes as a demo for the run of your project using https://screencast-o-matic.com/Sdfs