Project Specifications-

The project is about building a simple dataApplication - where a user is able to upload a dataset, view the list of uploaded datasets. Select a dataset and create visualizations to analyze the data. This is a small but representative sample of the kind of work you will be doing @ xVectorlabs albeit at scale and complexity.

We encourage you to work on the project to get a better understanding of your interests and alignment with the kind of work you will be doing at xVector.

If you are proficient in python and javascript this project should take 3 hours of your time. We understand finding a free slot for a block of time is hard. Hence we don't have a time limit setup.

If you are stuck or have questions write to jobs@xvectorlabs.com. Please use the coderbyte platform to submit your project.

Sample screens are provided - these are only schematics if you are so inclined use your creativity to extend the design.

Task-

To upload, get and view data.

Screens-

1) Simple Home/Landing page
2) Screen with options to -
    a) Upload data (a csv file) with a user provided name for data.
    b) View all data names already uploaded.
3) Screen with options to-
    a) View result of computed operation on data.
    (**Input by user** - data name, column name, operation {min, max, sum}
    Output on screen- {min, max or sum} value of the selected column in the data)
    b) Show plot of data.
    (**Input by user** - data name, two columns of the selected data
    Output on screen - Plot of selected column values against X and Y axes.

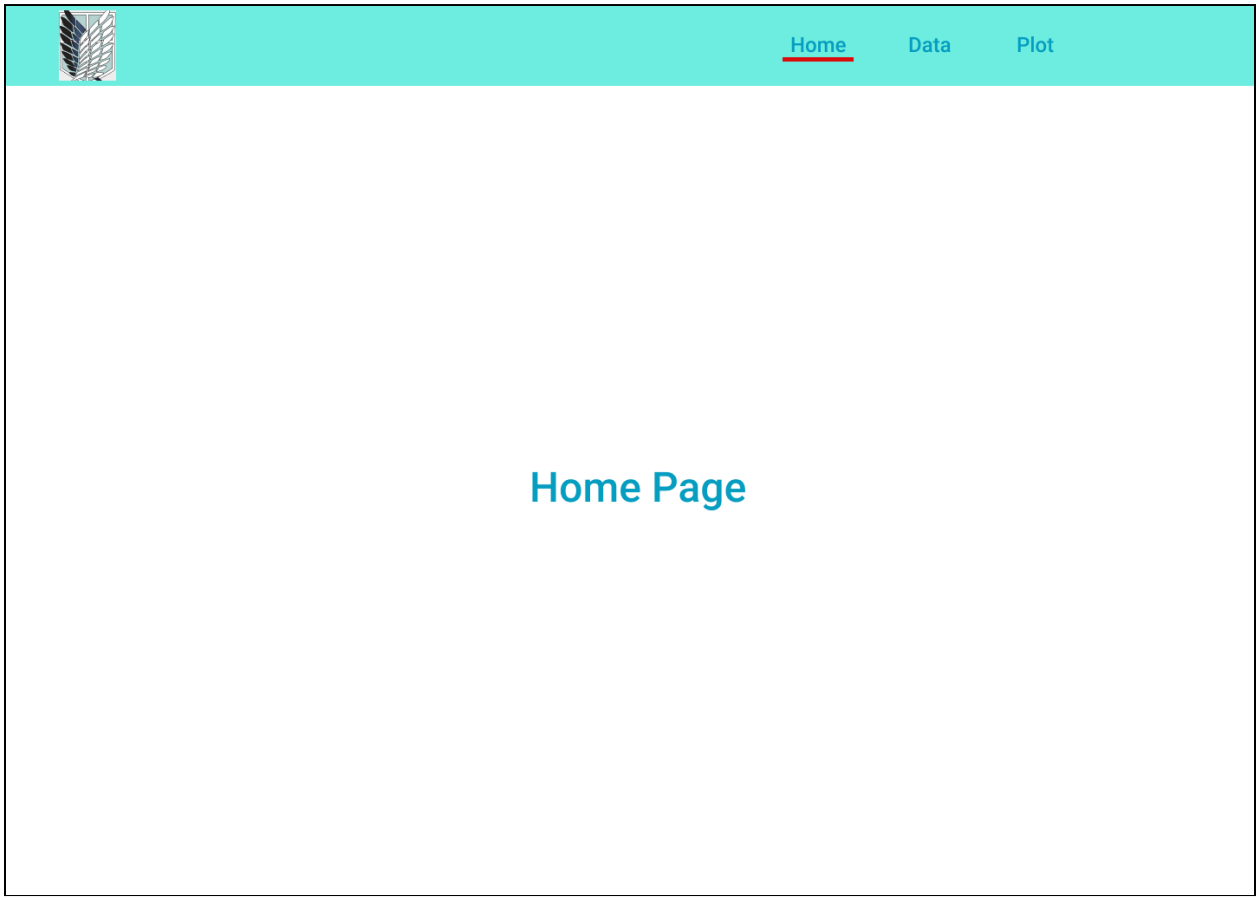
Use **Plotly.js** for the plots.)

APIs-

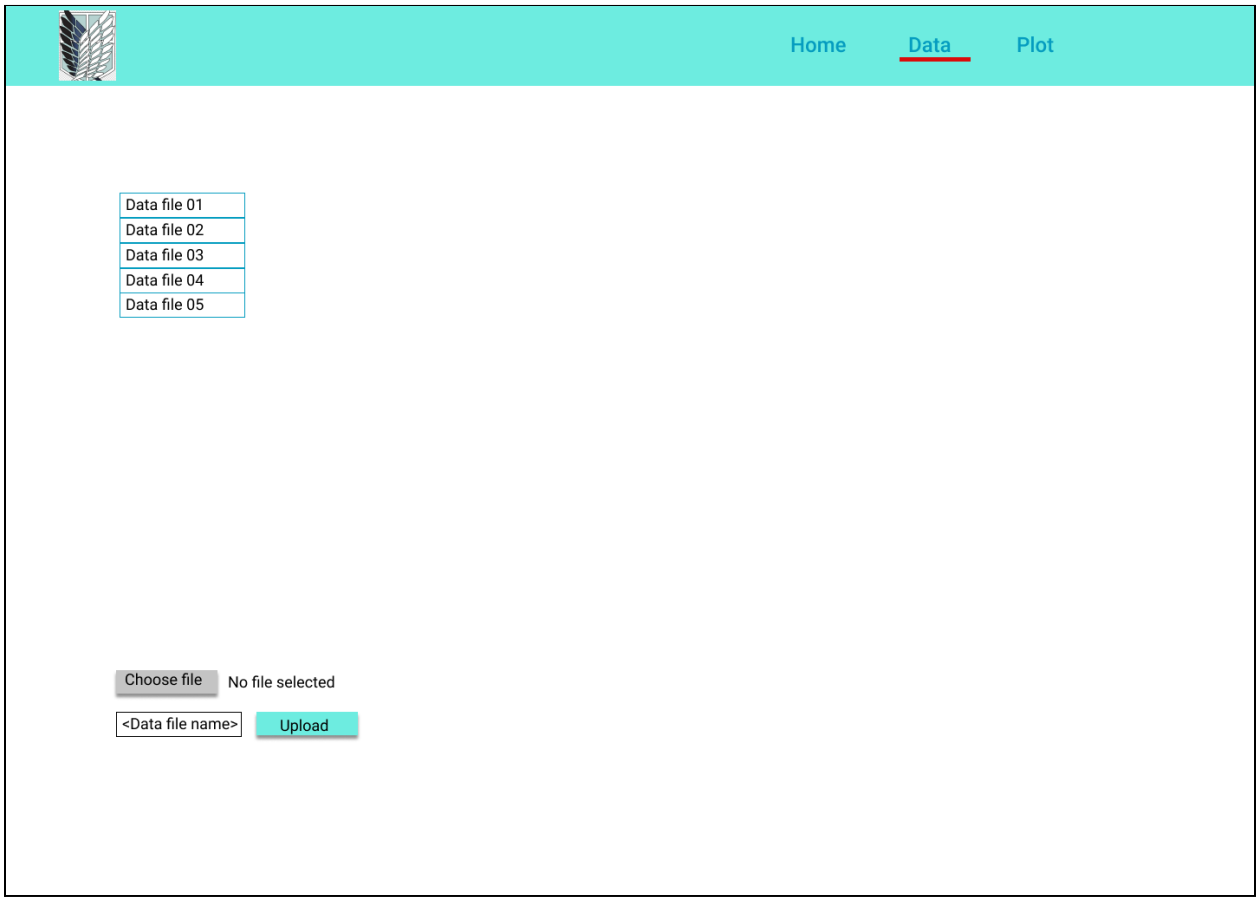
1) /dataset , method=POST : stores a csv file with user provided data name as a table in a database (postgres)
2) /dataset , method=GET : gives the list of stored data.
3) /dataset/:id/compute , method=POST , fields:[column name, operation(min, max, sum)
   Example:
   Column1, max -> gives the maximum value in Column1 of the selected data.
4) /dataset/:id/plot , method=GET, fields:[column1, column2]
   Example: Column1, column2 -> gives the first 25-30 values of column1 and column2 (needed to plot against X and Y axes in the UI)

Sample Template

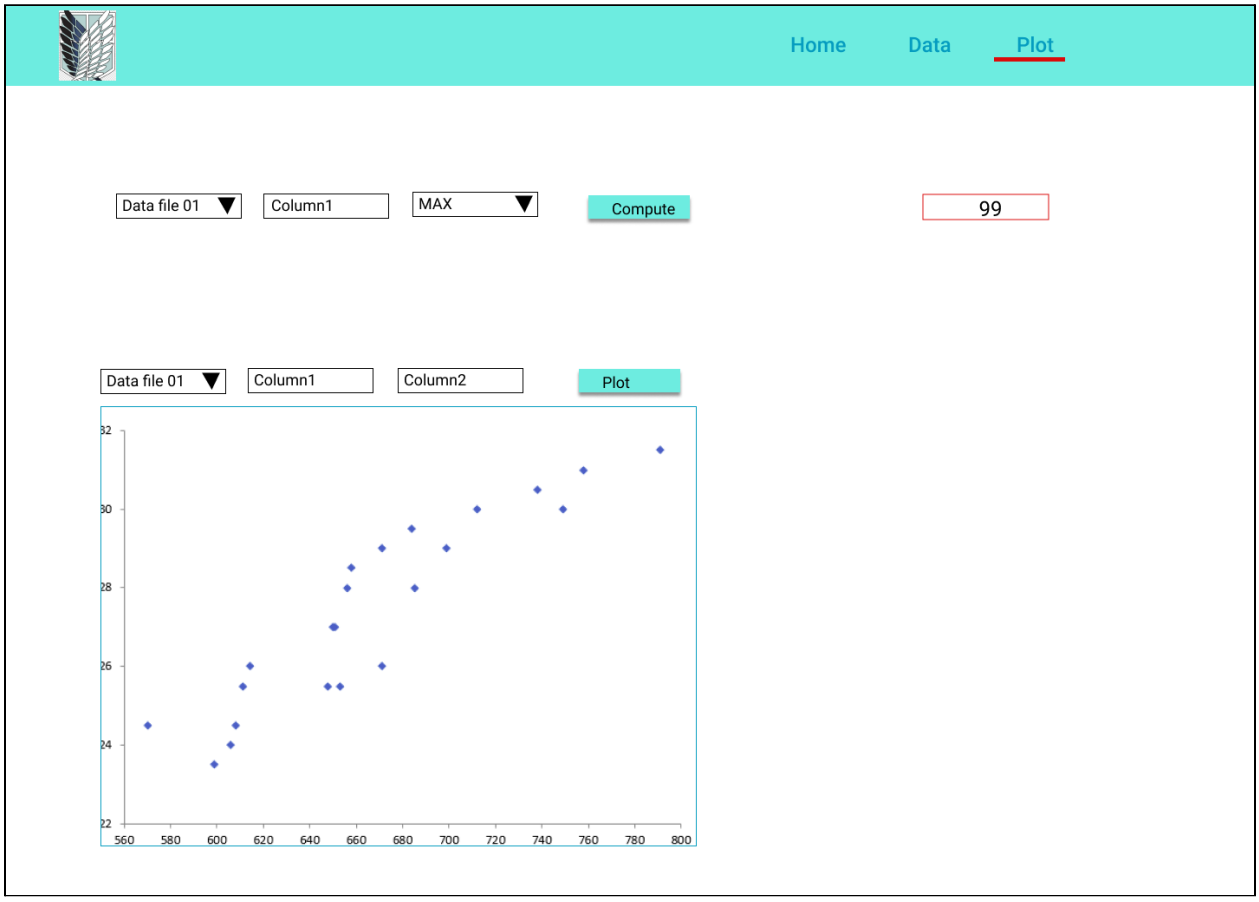
Screen1-



Screen2-


Home
Data
Plot
Data file 01
Data file 02
Data file 03
Data file 04
Data file 05
Choose file
No file selected
<Data file name>
Upload

Screen3-


Home
Data
Plot
Data file 01
Column1
MAX
Compute
99
Data file 01
Column1
Column2
Plot
32
30
28
26
24
22
560
580
600
620
640
660
680
700
720
740
760
780
800