

Data Visualization Framework

Team ID: 4

Project ID: 5

Abstract

Data Visualization aims to present textual data in visual or graphical format. Data in its raw sense, is little or not at all understandable. Patterns, trends and correlations that might go undetected in text-based data can be exposed and recognized easier with data visualization. For eg, looking at the rainfall statistics of the past few years, a person who is not familiar with the data would not understand anything, but if the data is presented in graphical format, he might be able to figure out the statistics. Hence, data visualization plays a very important role in making sense of the data, enables the user in extracting meaningful information and establish context.

Scope

The project aims at providing an interface to the user to analyze the data he has at hand. The user would be required to upload a file containing json data, which will then be parsed on the server and fed into the charting api to present the data in graphical format. The user also will have the option to select the chart type, which he thinks can represent the data in best possible format.

Technology Stack

Python + Flask: Flask provides lightweight bare minimum MVC framework that seems well suited for the purpose of this application.

Google Charting API / D3.js: To create charts using the JSON data

Twitter Bootstrap: For UI enhancements.