**Chapter 1: Introduction**

Background:

Infographics is the representation of data, information or knowledge in the graphical format. Information is always best represented visually, which helps others to understand and analyse trends or characteristics of the field from which the information is collected. It can become a tool to further derive useful analytics and help a user to predict or forecast a behaviour of a system.

There already exists free information available for different fields on the internet. Using this information, we can derive a model that accurately describes and educates us with respect to understanding trends. Information analysis helps a person to make informed decisions which further helps to predict and hypothesize conditions that will benefit them as well as the society.

The project simply is designed to bring various fields where information has become an irreplaceable resource for analysis and accurately displays it using the graphical notations. The fields that have been taken into consideration are all in respect to information sharing and are trending with respect to economic impacts in the society. The name pulse suggests that the information fields are as important as the pulse of the human heart, indicating life. Hence, the project simply takes into consideration the representation of information that is of the utmost importance.

Objectives:

The project aims to bring a unified front in data analysis and visualization regarding data science. It gives users different live information to understand the implications of that field. Users also get to review the web application’s interface and other aspects by providing their feedback using a part of the application’s feedback form. The objective is simply to represent information from those fields which have the highest importance with respect to the economic and societal aspect.

To sum it up the project aims at infographic representation of data from economically sensitive fields of science and technology. Hence it is purely of the intention to provide information to those seeking graphical representation and for studying better ways to represent the information by taking feedback.

Purpose:

Analysing as well as interpreting data has become exceedingly difficult in terms with respect to time consumption. It almost is a frustrating endeavour as it becomes difficult to make sense out of raw and numeric data. Research data almost is always available since the dawn of internet and hence there exists several places from which we can fetch and gain information. Using this information, we can make a model that accurately describe and makes sense of the data in the visual format. Updating data using requests from a server will ensure it is always real time and new.

There already exists many already available such information displaying websites and apps, but none of them cover all the fields at the same time. Hence the true purpose is to do exactly a convergence of this representation and analytics of data.

Scope:

The entire project is a fragmented framework, meaning it is a project with multi-server execution interface. Each server will independently cover the workflow that it is assigned to do, using the framework in which it is built. Once the execution starts the server will cover one-page workflow and keep refreshing and inputting information for the graphical display. The multi web-app is compatible with all browsers supporting the Mozilla web framework.

The project has many checkpoints and has the scope to change and expand infinitely if the servers are supported and working. The message entry from feedback will be secured using smtp requests and managed in a database. With respect to entity relationships there is no interconnection of data for the different databases and hence the entire project is disconnected making it an advantage as well as a disadvantage.

Applicability:

The application of real time data scraping and visualisation is as much important as the internet’s primary goal that is to connect people virtually and share information globally. The entire project applies the concept of net scraping and information utilisation to make a service better and more available to the network of people using it. The more people use a service the better the service gets by constantly being subjected to feedback. Infographic application has almost become the primary focus of today’s data science platform and is necessary for future benefaction.