**LITERATURE SURVEY**

This document furnishes the Use Case diagrams, Class diagrams, Sequence diagrams, Collaboration diagrams, Activity diagrams, Component diagrams, Deployment diagrams for the “Crime Data Analysis and Visualization” using UML. The literary survey provides the overview of the project in terms of the user experience and functionality of the project.

**Feasibility Study:**

A Feasibility study aims to objectively and rationally uncover the strengths and weaknesses of a proposed venture, opportunities and threats present in the environment, the resources required to carry through, technical support required for implementing it and ultimately the prospects for success. It is an important phase in the software development process. Feasibility study should be performed based on various criteria and parameters.

The various types of feasibility studies are:

* Operational feasibility
* Technical feasibility
* Economic feasibility
* Schedule feasibility

1. **Operational Feasibility:**

Operational feasibility is the measure of how well a proposed system solves the problems and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The aspect of study is to check the level of acceptance of the system by the user which solely depends on the methods that are employed to educate the user about the system and to make him familiar with it.

Our project employs a simple yet intuitive interface for the user to navigate through the website. This makes it easy for the user to find the visualization around the crime areas based upon the user’s requirements, without much hassle.

1. **Technical Feasibility:**

Technical Feasibility assesses the current resources (such as Hardware and Software) and technology, which are required to accomplish the requirements in the software within the allocated time and budget.

Our project needs Internet connection to retrieve the analysis and visualization of crimes. A modest internet connection is sufficient, and it runs on any web browser on any operating system.

1. **Economic Feasibility:**

The purpose of an Economic Feasibility is to demonstrate the net benefit of a proposed project for accepting funds or benefits, taking into consideration of the benefits and costs to the agency, other state agencies, and the public as a whole. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified.

The technologies are mostly freeware and did not cost anything. The software tools that we have used is also an open source.

1. **Schedule Feasibility:**

**Schedule Feasibility** is defined as the probability of a project to be completed within its scheduled time limits, by a planned due date. It is a measure of how reasonable the project timetable is. If a project has a high probability to be completed on-time, then its schedule feasibility is appraised as high. If a work to be accomplished at a project does not fit the timeframes demanded by its customers, then a schedule is unfeasible.

We completed our project and its requirements within the time period given by our project guide.