**Feasibility Analysis**

A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the [natural environment](https://en.wikipedia.org/wiki/Natural_environment), the [resources](https://en.wikipedia.org/wiki/Resources) required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are [cost](https://en.wikipedia.org/wiki/Cost) required and [value](https://en.wikipedia.org/wiki/Value_(economics)) to be attained.

A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending institutions. It must therefore be conducted with an objective, unbiased approach to provide information upon which decisions can be based.

* Several applications have been already developed for the purpose of crime analysis. Recent applications were developed by aiming at adopting data mining techniques and filing of cases are done manually which require a lot of time, effort and cost to the users.
* In existing system the case reporting and filing of cases should be done by reaching the specific station spending their time and taking effort. Some online systems do exist but only provides the features of identifying the crime prone regions. All these system is prone to cost human error. Aside from that, this process may lead to loss of data. Some data might be misplaced and lost and it causes misleads in generating data to a report. The proposed system is more user friendly and time saving process and user can file their cases just in a single click being anywhere, anytime as their convenience. The new proposed system is made with user friendly interfaces that the user can easily understand and use. The maintenance and working of the new system need less human effort.
* Recent applications were developed by aiming at adopting data mining techniques. The proposed system uses the K-means Clustering Algorithm This algorithm is mainly used to partition the clusters based on their mean. The prediction of crimes are done using this technology.

**Technical feasibility**

The system must be evaluated from the technical point of view first. The assessment of this feasibility must be based on an outline design of the system requirement in the terms of input, output, programs and procedures. Having identified an outline system, the investigation must go on to suggest the type of equipment, required method developing the system, of running the system once it has been designed.

Technical issues raised during the investigation are:  
• Does the organization have the technical capabilities and resources to undertake the project?

* Analyse the technical skill and capabilities of the software development team members.
* Determine whether the relevant technologies is stable and established.

• Can the system expand if developed?

The project should be developed such that the necessary functions and performance are achieved within the constraints. Through the technology may become obsolete after some period of time, due to the fact that newer version of same software supports older versions, the system may still be used. So there are minimal constraints involved with this project. The system has been developed using HTML in front end and MYSQLi server in back end and connectivity (middleware) using PHP, the project is technically feasible for development.

**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.

This analysis involves how it will work when the system runs in the environment in which it is implemented. The new proposed system is made with user friendly interfaces that the user can easily understand and use.

The new system is very user friendly and the operational cost is bearable. The maintenance and working of the new system need less human effort.

**Economic feasibility - Cost - Benefit Analysis**

Economic analysis is the most frequently used method for evaluating the effectiveness of a system, and is commonly known as Cost/Benefit Analysis. The procedure made to determine the benefits and savings that are expected from a system and compare them with costs. The result of comparison is found out and changed if needed. This is an ongoing effort that improves the accuracy at each phase of the system lifecycle. If benefits outweigh costs, then decision is made to decide and implement the system.

The following are some of the important financial questions asked during preliminary investigation:

•The costs conduct a full system investigation..  
•The cost of the hardware and software

•The benefits in the form of reduced costs or fewer costly errors.

Since the system is developed as part of project work, there is no manual cost to spend for the proposed system. Also all the resources are already available, it give an indication of the system is economically possible for development.