2.3.4 Other Non-functional Requirements

The system is expected to meet the following Non-Functional requirements for a smooth

and seamless experience with the system.

● Safety: Administrator should conduct a maintenance survey of the system after

every six months.

● Security: The Admin should keep the server password secret and do not share it

with anyone. Websites` should be secure according to the industry best practices.

● Simple Interface: Requirements for a UI ask that it be modern, easy to use and

distinctive.

● Scalable: The website should be capable enough to handle 2000 users without

affecting its performance.

● Portable: The software should be portable, moving from one OS to other OS does

not create any problem. The website should be able to run across various platforms

and screen sizes like mobile phones, tablets and full-size computers.

● Performance: Modified data in the database should be updated for all users

accessing it within two Seconds.

Data Security: The system must ensure the security and confidentiality of the uploaded data and any other sensitive information throughout the data processing and segregation process.

Scalability: The system must be scalable to accommodate a large volume of complaint data and users over time.

Compatibility: The system must be compatible with different file formats and data sources commonly used by stakeholders.

Error Handling: The system must have proper error handling mechanisms to ensure that stakeholders are notified in case of any errors or issues during the upload, processing, or segregation of the complaint data.

2.3.4.1 Performance Requirements

The performance of our system is measured through how accurately the complaints have been

classified into the various buckets. It can also be justified by looking at how well the complaints

have been matched. If the complaint is published with important keywords in it then only the

performance requirements will be met.

● Simplicity: For the UI, the main thing to keep in mind is to keep it simple and easy

to use. It should not be uselessly sophisticated and complicated and usable for a

layman. The user should only give input and get the result.

● Availability: The interface will be in use and accessible to the user till the internet

is in working and that particular web page is open.

● Maintainability: Our system is specified for the task of classifying and matching

of the data given by the user. Therefore, maintainability does not have

more importance than it has in a normal software.

2.3.4.2 Safety Requirements

There is no such safety requirement but for a better experience administrator should

conduct a maintenance survey of the system after every six months.

2.3.4.3 Security Requirements

The interface must be safe in terms of user data and confidentiality. Website would be

secure according to the industry best practices and server password should remain a secret

for the administrator.

2.4 Cost Analysis

No cost as of now.

Functional requirements:

The system must allow users to log into their account by entering their username and password.

The system must allow users to reset their password by clicking on "I forgot my password" and receiving a link to their verified email address.

User Accounts: The system must have a user account management feature that allows administrators to create and manage user accounts with different levels of access and permissions.

Login Credentials: The system must require stakeholders to provide valid login credentials, including a username and password, to access the system.

File Upload: The system must allow stakeholders to upload a file containing the complaint data in a supported format.

Data Preprocessing: The system must preprocess the uploaded file by cleaning, normalizing, and standardizing the data to ensure accurate and consistent results.

Model Integration: The system must integrate with a trained machine learning model capable of classifying the complaint data into different buckets or categories.

Category Segregation: The system must classify the uploaded complaint data into different buckets or categories based on the trained model's output.

Display Results: The system must display the segregated data to stakeholders in an easy-to-understand and user-friendly manner.

Export Functionality: The system must provide export functionality that allows stakeholders to export the segregated data in a supported format, such as CSV or Excel.