SRS DOCUMENT

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1. Introduction

1.1. Purpose

The main objective of this document is to illustrate the requirements of the project Online Crime Reports. The document gives the detailed description of both the functional and non functional requirements proposed by the client. The document is developed after a number of consultations with the client and considering the complete requirement specifications of the given project.

1.2. Scope

This system is designed to bridge the gap between the police and the common people. We intend to create a system where the user could register a complaint under various sections and inform the police constables whenever in an emergency situation from their current location. I believe that this system will be the widely used in the future and will also help to bridge the gap between the police department and the people and also highly reduces the scopes of false promises.

1.3. Product perspective

1.3.1 System interfaces

This is a web application that runs in the latest version of Chrome, Firefox or any web browser on Windows, Linux and Mac.

1.3.2 User interface

The application user interface has menus, toolbars, buttons, text boxes, hyperlinks allowing the user to control the application with the help of a mouse and keyboard.

1. Login Page.

2. Registration page

3. Complaint Registration.

That allows the people to file a crime from their location only so that helps the people as well as the police department to take actions immediately. And it is time consuming.

4. Missing Persons.

It shows the list of Missing persons.

5. Most wanted People.

It will show the list and photos, details of the most wanted peoples.

6. Accident Cases

It allows people to register accident cases so that the police can take immediate actions.

7. Missing Vehicles

1.3.3 Hardware interface

The system needs a proper internet connection for the web application to work properly.

1.3.4 Software interface

The system works on a client-server manner. Communication with the server is done with the help of scripting language PHP. It also requires Data Base for the storage of details of the customer's and the details of the shops and also the products for that we use MYSQL. DNS is used for the purpose of naming the application on the internet.

1.3.5 Communications interface

The communication architecture follows the client server model. Communication between the client and server should be served over HTTPS. The communication must follow stateless protocol.

1.3.6 Memory constraints

Initially, databases of all the police stations and their authorizing review panel members must be maintained. When a user logs in with his E-mail ID and password, the user can report the compliant. The reported compliant will be forwarded to the appropriate review panel. Review panel is responsible for approving or rejecting the complaints. Once it is approved by the review panel, the report is forwarded to the station for immediate investigation. So all the reports and details are stored in the database for that it will take a large amount of memory.

1.4. User Characteristics

They login at the client level and get access to their account. They can view their profile. They can also have permission to change their password. But they cannot delete another user account or make modification. When a user is reporting a complaint through his account his details will be stored in the database. Registered users are given permission to view, update and withdraw the details.

1.5 Performance Requirements

Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely with the users of the existing system to give the requirement specification because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be design according to those requirements. It is very difficult to change the system once it has been designed and on the other hand design a system, which does not cater to the requirements of the user, is of no use.

The requirements specification for any system can be broadly stated as given below:

- **The system should be able to interface with the existing system.**
- **The system should be accurate.**
- **The system should be better than the existing system. The existing system is completely dependent on the user to perform all the duties.**

1.6. Acronyms and Abbreviations

We use bold letters to represent the main functions of the system. The underline will represent a hyperlink. Italics represent notes. We will be using some of the acronyms throughout this document. Below shown are the abbreviations and definitions of some terms used in this document.

1.6.1 Admin

Admin is the person who has full control over the web application and he/she is responsible for managing the functions in the system.

1.6.2 Database

Database is the storage space for storing all the information related to the web application in tabular format.

1.6.3 Field

A field is a cell inside a form.

2 Requirements

2.1 External Interfaces

There are many interfaces related to software in software engineering. Some of the important interfaces are User Interface, Software Interface and Hardware Interface.

2.1.1 User Interfaces

User interface is the page with which the customer interacts which is build using HTML and PHP. The forms that user interact is designed using HTML.

2.1.2 Hardware Interfaces

The local address of the system will be in IPV6 format.

2.1.3 Software Interface

The system must interact with the configure to identify all available components. The system should communicate with the content manager to obtain product specifications.

2.1.4 Communication Interface

In communication interface we use the HTTPS which is the secured file transfer protocol used for communication between the client and the server. This project uses client server architecture.

2.2 Modules

2.2.1 User Modules

Users can easily register and add their complaints. And they can view the progress of their complaint online.

This module helps the user in following ways:

- **Add Online Complaints.**
- **Check Complaint Status.**
- **Edit Complaints.**
- **Add Missing Person Report.**
- **Ask Questions.**
- **Send Messages.**
- **Give Feedbacks**
- **Change Password.**

2.2.2 Admin Module

This module helps the admin in following things:

- **View and Reply User Complaint.**
- **View and Reply User Crimes.**
- **View and Delete User's Feedback**
- **Add, Delete and View Most wanted Persons.**
- **Add Delete and View Missing Persons.**
- **Add and View Criminal Registration.**

2.2.3 Visitors Module

This module helps the visitor in following ways

- **View Hot News.**
- **View Missing Persons.**
- **View Crime Types.**
- **View Most Wanted.**
- **View Help lines.**
- **View Safety Tips.**
- **View Stolen Vehicles.**

2.2.4 Review Panel:

They are a team of experienced members. They can review and process all the incoming complaints. They can also have permission to approve a newly entered station by the administrator.

2.3 Usability requirements

The software provides a framework within which a user can easily work with. That was out next objective. We know users are of many categories, like users from who know working with computers very well to users who didn't know about computers. So all the category can use the software. So it should be user friendly.

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2.5 Database requirements

Designing data about discovering and completely defining application's data characteristics and processes. Data design is a process of gradual refinement, from the course to the precise data structures and processes that provide it. The process of data design includes identifying the data, defining specific data type and storage mechanisms, and ensuring data integrity by using business rules and other run-time enforcement mechanisms.

2.6 Design constraints

Design includes the budget for designing and also the time that is allocated for designing. The designing part of the software should be simple that is it should not affect the performance of the software like the time taken for loading a page should not increase. It should be attractive and also should be easy to maintain.

2.7 Software system attributes

The application should run in latest chrome, fire fox or safari. It should not send any data to internet all the data should be kept confidential. It can analyze all the inputs made by the users.

2.8 Functional Requirements

Functional requirements specify which outputs should be produced from the given inputs. They describe the relationship between the input and output of the system. For each functional requirement, a detailed description of all the data input and their source, the units of measure and range of valid input are given. This subsection describes the various processes provided by the system.

3. Verification

This document outlines the procedure used for testing and verification of the code. Software testing is the process used to help identify the correctness, completeness, security and quality of developed computer software. This includes the process of executing the program or application with the intent of finding errors. In verification we check all the above given requirements are completely present in the final product. The stake holders check if all the requirements listed by them are satisfied in the product.

4. Conclusion

The Software developed is found to be working efficiently and effectively. It results in regular and timely action against crime reported. It can be observed that the information can be obtained easily and accurately. The Software is made user friendly to the maximum so that any lay man can run the software provided he could access to the system via the login password. It believes that partnership work is highly beneficial to the organization and that partnership work is the way forward to reduce crime and disorder. Hence, we wish to remind that its culture should fully endorse partnership work; we urge to ensure the attention they require.