**Software Requirement Specification (SRS) for Criminal Record Management(CRM)**

**1.Introduction**

Criminal Record Management (CRM) is a web based application. This software provides facility for reporting crimes, complaints, missing persons, show most wanted person details online. Any number of clients can connect to the Server.

* 1. **Purpose:**

This Software Requirements Specification provides a complete description of all the functions and specifications of the Criminal Record Management System (CRMS). Criminal Record Management System (CRMS) allows user to store police department’s case details, Complaint Details, FIR Details, etc. This Software Package allows Police Departments to store all the details related to the department and use them whenever necessary. This project will also be able to provide reports of various cases, FIR report, charge sheet report, Most Wanted Criminals record, payroll, attendance reports and also be able to upload and view criminal photos and scanned documents.

* 1. **Scope:**

**In Scope:**

1. The system should have a login.

2. System should support for Data Entry module for Complaint registration for each prisoner entering in the Jail.

3. Police officers should have a read only access to the information of prisoners and view complaint status.

4. Criminal register management.

5. The user should be able to view all most wanted persons which can be given by the administrator.

6. Data managers must be able to add or update the data of Jailers.

7. User authentication.

8. Maintenance of database about criminals and their details of crime.

**Out of Scope:**

1. FIR Management

2. Manage list about existed crimes

**1.3 Definitions, Acronyms, and Abbreviations:**

**Acronyms and Abbreviations:**

SRS – Software Requirements Specification

CRMS – Crime Record Management System

Subjective satisfaction – The overall satisfaction of the system

End users – The people who will be actually using the system

HTML – Hyper Text Mark-up Language

GUI- Graphical User Interface

**Definitions:**

* **Criminal**-criminals are the persons whose guilt/offence are proven in court and given punishment by court.
* **Most-wanted**-These Criminals are still not arrested or they flee away from police custody and police are searching for them.
* **Released person**-They are released by court as the charge against them not proved.
* **Investigation Officer-**Investigation officer is the police officer who investigates the case. There may be more than one investigation officers in one police station.

**1.4 Overview:**

Criminal Record Management is a web based application. This application provides facility for reporting crimes, complaints, show most wanted person details online. Jail Superintendent is allotted highest authority of ministry. The duty of the Jail superintendent is to register the Criminal and update the records. Section 2 gives an overall description of the software. It gives what level of proficiency is expected of the user, some general constraints while making the software and some assumptions and dependencies that are assumed. Section 3 gives specific requirements which the software is expected to deliver. Functional requirements are given by various use cases. Some performance requirements and design constraints are also given.

**2. Overall Description:**

* 1. **Product Perspective:**

1. The web pages are present to provide the user interface on customer client side. Communication between customer and server is provided through URL.
2. It is a Window Based Platform. It works on any operating system.
3. The project is user-friendly.
4. This system will reduce the manual operation required to maintain all the records of Police department.
5. CRM is intended to be a stand-alone product and should not depend on the availability of other software.
   1. **Product Functions:**

|  |  |  |
| --- | --- | --- |
| Class of use cases | Use cases | Description of use cases |
| Use case related to  Installation | Installation | CRM installation |
| Use case related to  System Authorization | Login | 1. Login into the account 2. Change of password |
| Change password |
| Use case related to  Register | Registration | Registration of new criminals |
| Use case related to  Search | Search | Search the criminal is already present in the database or not |
| Use case related to  Report | Generating Reports | To record the already existing criminals |
| Use case related to  Delete | Delete | Delete the criminal record if the crime done by him doesn’t matter a lot. |
| Use case related to  Securities | Create security | Create a new security |
| Rename Security | Rename an existing security |
| Delete Security | Delete the existing security |
| Use case related to  Information display | View data | Show details of criminals |
| Use case related to release dairy | Viewing releasing dairy | Information of release date of prisoner |
| Use case related to confirm interview request | Confirm interview request | All interview requests by relatives of  Prisoners |

**2.3 User characteristics:**

a. The user should be familiar with the Criminal Record Management related terminology .

b. The user should know the basic details of criminals such as name/blood group.

c. Operator should be computer literate.

d. There will be a screen to display various information related to FIR.

e. A login screen for entering username, password will be provided.

f. There will be a screen for taking and modifying the information of the terms related to FIR.

**2.4 Principal Actors:**

The two principal actors of CRM are “user” and “system”.

**2.5 General Constraints:**

a. For full working CRMS may or may not require Internet connection.

b. CRMS is multi-user software.

c. It works on any Windows Operating system.

**2.6 Assumptions and Dependencies:**

1. Users are related to different branch of police Departments.

2. The information entered in Records should be correct.

3. User can fill the registration form.

**3 Specific Requirements:**

**3.1 Functional Requirements:**

We describe the functional requirements by giving various use cases.

**Use case related to installation:**

**Use Case 1:** Installation

Primary Actor: Administrator

Pre-Condition: Internet connection available.

Main Scenario:

1. User initiates CRM installation program.

2. System asks the user for the home directory in which all the working

Files will be created. User is also asked for the initial login and password.

3. User specifies the home directory and login/password.

4. System creates the working files in the specified home directory.

Working files contain:

a. Information of Criminal.

b. Current Location of Jail.

c. Backup & Restore of data.

Alternate Scenario:

a. Network failure.

b. Installation aborted.

**Use cases related to system authorization:**

**Use Case 2**: Login

Primary Actor: Jail Superintendent, Police Officer, CBI Officer, Administrator, Judge

Pre-Condition: Internet connection available

Main Scenario:

1. Start the application. User prompted for login and password.

2. User gives the login and password.

3. System does authentication.

4. Main screen is displayed.

Alternate Scenario:

1. Authorization fails.

2. Prompt the user that he typed the wrong password.

3. Allow him to re-enter the password. Give him 3 chances.

**Use Case 3: Change Password**

Primary Actor: Jail Superintendent, Police Officer, CBI Officer, Administrator, Judge

Pre-Condition: Certain User logged in

Main Scenario:

1. User initiates the password change command.

2. User is prompted for old password, new password and confirm new

Password.

3. User gives the old password, new password and confirm new

Password.

4. System does authentication.

5. New password is registered with the system.

6. User gets a message to his mail-id and mobile that password was changed.

Alternate Scenario:

1. Authorization fails.

2. Prompt the user that he typed the wrong password.

3. Allow him to re-enter the password. Give him 3 chances.

4. New password and confirm new password do not match. 4.1 Allow him to re-enter the attributes. Give 3 chances.

**Use case related to Registration:**

**Use case 4:** Registration

Primary actor: Jail superintendant

Pre-condition: Internet connection available.

Main Scenario:

1.The visitor accesses the registration page for new ID.  
2. He/she fills up the criminal details like name/blood group/type of crime etc. and submits.  
3. The completeness of data is checked on client side.  
4. The Database is updated.

Alternate Scenario:

* + - 1. The data completeness check fails and the user is prompted to

Provide all details.

* + - 1. The database update fails.

**Use case related to search:**

**Use Case 5:** Search

Primary Actor: Jail Superintendent, Police Officer, CBI Officer, Judge

Pre-Condition: Certain User logged in.

Main Scenario:

1. User clicks on search box

2. System asks the user for the name of Criminal.

3. User enters name/blood group/Jail no/DNA/Image.

4. Click on the search button

Alternate Scenario:

1. Criminal name does not exist.

2. Criminal name exists but finger print /blood group does not match.

**Use Case 6:** Record

Primary Actor: Administrator

Pre-Condition: Administrator logged in

Main Scenario:

1. Maintain the database

2. Grant role to other user

3. Revoke role from other users.

4. Back and restore the data

Alternate Scenario:

1. Data missing of Certain Criminal

2. Backup and restore is done every day

**Use case related to delete:**

**Use Case 7:** Delete data.

Primary Actor: Administrator

Pre-Condition: User logged in.

Main Scenario:

1. User initiates the ”delete data” functionality.

2. System asks for the name of the data.

3. The data is deleted.

Alternate Scenario:

1. Data does not exist.

2. Deletion fails, error message is displayed.

**Use cases related to securities:**

**Use Case 8:** Create a security.

Primary Actor: Administrator.

Pre-Condition: User logged in.

Main Scenario:

1. User selects the data in which the security is to be created.

2. User initiates the “create security” functionality.

3. System asks the user to enter the attributes of the security.

4. User specifies the following fields:

a. Name of Criminal or place

b. *Type*: where the Criminal is

5. An empty security of specified attributes is created.

Alternate Scenario:

1. A security with the given name already exists.

2. Security creation fails, error message is displayed.

**Use Case 9:** Rename security.

Primary Actor: Administrator

Pre-Condition: User logged in.

Main Scenario:

1. User selects the portfolio.

2. User initiates the “rename security” functionality.

3. System asks the user for the security and the new name.

4. User enters the security name and the new name.

5. Name is changed.

Alternate Scenario:

1. The security whose name is supposed to change does not exist.
2. Renaming fails, the error message is displayed.
3. Security with the same new name exists.
4. Renaming fails, the error message is displayed.

**Use Case 10:** Delete security.

Primary Actor: Administrator

Pre-Condition: User logged in.

Main Scenario:

1. User selects the portfolio.

2. User initiates the “delete security” functionality.

3. System asks for the security name.

4. Security is deleted.

Alternate Scenario:

1. Security does not exist.

2. Deletion fails, error message is displayed.

Use cases related to information display:

**Use case related to display criminal Information:**

**Use Case 11:** Display Information

Primary Actor: User.

Pre-Condition: User logged in.

Main Scenario:

1. User clicks on search box.

2. System asks the user for the name of Criminal.

3. User enters name/blood group/Jail no/DNA/Image.

4.Click on the display button.

5. Then the details of the criminal are displayed.

Alternate Scenario:

1. Criminal name does not exists.

2. Criminal name exists but finger print /blood group does not match.

**Use Case 12:** Display Security

Primary Actor: User

Pre-Condition: User logged in.

Main Scenario:

1. User selects the option of viewing a particular security.

2. System displays all the transactions.

**Use case related to view release dairy:**

**Use case 13:** View release dairy

Primary actor: Administrator, Police Officer

Pre-Condition:

1. User must be logged in

2. He/she has to be at his home page

Main scenario:

1. Retrieved the release diary information from the data base.

2. Viewing of data.

Alternate Scenario:

1. Retrieval of data failed.

**Use case related to confirm Interview confirmations:**

**Use case 14:** Confirm Interview request

Primary Actor: Administrator

Pre-condition: Administrator should be logged in to his account to access this option

Main Scenario:

* + 1. Verification status is checked
    2. If OK then it is approved.

3.The database is updated

Alternate Scenario: The interview request is not approved.

**3.2 External Interface Requirements:**

The external interface is a dynamically generated web page with professional graphics

**3.3 Performance Requirements:**

1. Should run on 500 MHz, 256 MB machine.

2. 90% of the responses should be within 2 sec.

3. Responses to view information shall take no longer than 5 seconds to appear on the screen.

4. The system should be easy to handle.

**3.4 Design Constraints:**

1. Security: The files in which the information regarding securities and portfolios should be secured against malicious deformations.

2. Fault Tolerance: Data should not become corrupted in case of system crash or power failure.

3. The system shall be installed in a WINDOWS NT Network.

* 1. **Security Requirements:**

1. System will use secured database to maintain records.
2. System will have different types of users and every user has access constraints.
3. Data should be secured and it should not be leaked outside.

**3.6 Maintainability Requirements:**

1. Maintenance of Records up-to-date.

2. Database backup and DDL Script.

3. Our application should be designed to be easily be maintained and repaired.

4. Changes must be verified once per day atleast.

**3.7 Reliability Requirements:**

1. System shall be recovered within 10 minutes if it is down.

2. System shall be recovered without intervention at user terminal if it is down.

3. System shall have 99% reliability during users operating hours.

**3.8 Availability Requirements:**

1. Online or Offline help to above said users, Application deployment executive and developer.

2. 24\*7 availability.

3. Secure access of confidential data. SSL can be used.

**3.9 Database Requirements:**

1. Use of GUI like JASPER to show strategic data to admin.

2. Updations must be done Properly.

3. Crashing of data must be avoided.

**3.10Documentation Requirements:**

1. Simplicity of interface.

2. Printouts for employment disbursal and history etc.

**3.11 Safety Requirements:**

1. System use shall not cause any harm to human users.

2. The database may get crashed at any certain time due to virus or operating system failure.

**3.12 Operational Requirements:**

Once the implementation plan is decided, it is essential that the user of the system is made familiar and comfortable with the environment.

**3.13 Site adaption:**