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**DATABASE**

**PROJECT**

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PROJECT PROPOSAL

## Criminal Management System

### 1. Introduction

#### 1.1 Purpose

The purpose of this document is to specify the requirements for the development of a Criminal Management System. The system will facilitate the management of criminal records, including functionalities to add, delete, view, and update records. It will be built using PHP and SQL and will use XAMPP as the local server environment for development and testing.

#### 1.2 Scope

The Criminal Management System will be a web-based application designed for law enforcement agencies to efficiently manage criminal records. The system will provide a user-friendly interface for interacting with the database to perform CRUD (Create, Read, Update, Delete) operations. The primary users will be administrators and authorized personnel.

#### 1.3 Definitions, Acronyms, and Abbreviations

* **CRUD:** Create, Read, Update, Delete
* **PHP:** Hypertext Preprocessor
* **SQL:** Structured Query Language
* **XAMPP:** Cross-Platform Apache, MariaDB, PHP, and Perl
* **GUI:** Graphical User Interface

#### 1.4 Overview

This SRS document outlines the functional and non-functional requirements, system architecture, design constraints, and validation criteria for the Criminal Management System.

### 2. Functional Requirements

#### 2.1 Add Criminal Record

* The system shall allow authorized users to input new criminal records.
* Mandatory fields include Name, Age, Gender, Crime Details, Arrest Date, and Address.
* The data will be stored in the SQL database.

#### 2.2 View Criminal Records

* The system shall display a list of all stored criminal records.
* Users can search for specific records using filters such as Name, Crime Type, or Date.

#### 2.3 Update Criminal Record

* The system shall allow authorized users to edit existing criminal records.
* Users must be able to modify fields like Crime Details or Address.

#### 2.4 Delete Criminal Record

* The system shall enable authorized users to delete a criminal record.
* Deleting a record will permanently remove it from the database.

### 3. Non-Functional Requirements

#### 3.1 Performance Requirements

* The system should respond to database queries within 2 seconds.
* It should support up to 100 concurrent users.

#### 3.2 Security Requirements

* User authentication will be required to access the system.
* Passwords will be hashed and stored securely in the database.
* SQL injection prevention measures will be implemented.

#### 3.3 Usability Requirements

* The interface should be intuitive and easy to navigate.
* Error messages should be clear and helpful.

### 4. System Design

#### 4.1 Architecture

* The system will follow a client-server architecture.
* **Frontend:** PHP for server-side scripting, HTML, CSS, and JavaScript for the user interface.
* **Backend:** SQL database for storing records.
* **Local Server:** XAMPP for development and testing.

#### 4.2 Database Design

* **Table Name:** criminal\_records
* **Fields:**
  + id (Primary Key, Auto-increment)
  + name (VARCHAR, NOT NULL)
  + age (INT, NOT NULL)
  + gender (VARCHAR, NOT NULL)
  + crime\_details (TEXT, NOT NULL)
  + arrest\_date (DATE, NOT NULL)
  + address (TEXT, NOT NULL)

### 5. Assumptions and Constraints

* The system will run on XAMPP during the development phase.
* The users will have basic knowledge of operating web-based applications.
* The system will be deployed in a secure intranet environment.

### 6. Validation Criteria

* Successful addition of a new record to the database.
* Accurate retrieval of records based on search criteria.
* Correct updating of existing records.
* Deletion of records with confirmation prompts.

### 7. Conclusion

This SRS defines the requirements and design specifications for the Criminal Management System. By implementing the described functionalities and adhering to the constraints, the system will streamline the process of managing criminal records for law enforcement agencies.

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**THANK YOU**