North South University

Department of Electrical and Computer Engineering

Project Proposal – Group 03

Project Name: Crime Record Management System

Database System Lab

CSE 311L

Section 05

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Introduction:

Crime is increasing day by day and managing crime data efficiently is crucial for law enforcement agencies. The Crime Record Management System (CRMS) is a web based solution which is designed to provide a digital, centralized and secure way to record and manage criminal data, reports, investigation and similar types of activities. This system will enable law enforcement agencies to streamline their operations, enhance decision making capabilities and improve overall case management.

Objective:

1. Digitalization of crime reporting and record keeping process.
2. Providing a centralized database for managing criminal records and investigations.
3. Allowing authorized personnel to securely access, update and track criminal data.
4. Integrating with existing law enforcement databases for a seamless flow of information.

Target Users:

Police officers who will use the system to log incidents, view criminal records and manage case details.

Investigators who will track the investigation process and update case related information.

Administrators who will manage access control system settings and data security protocols.

Prosecutors who will retrieve case details and track legal proceedings.

Value Proposition:

The CRMS will drastically reduce the reliance on paper records, minimizing human errors and saving time in crime reporting and management processes. The centralized database will improve data accessibility and coordination across law enforcement agencies.

Feature and Description -
1. **User Authentication and Role Management:**
   a. Secure login for authorized users
   b. Role based access control for different levels of access (Officers, Investigators, Administrators, Public Prosecutors)

2. **Crime Reporting:**
   a. Officers can insert incidents, providing all relevant details such as crime type, location and persons involved.
   b. Attach evidence, images and documents

3. **Criminal Record Management:**
   a. Maintain a detailed profile for individuals with criminal records, including their personal information, prior convictions and investigation status.

4. **Case management:**
   a. Track case progress from reporting to closure.
   b. Assign tasks to officers and investigators.

5. **Evidence Tracking:**
   a. Manage the collection, storage and chain of custody of evidence.
   b. Ensure evidence integrity for court proceedings.

6. **Crime statistics [Not sure will be able add this feature or not]:**
   a. Providing a statistical graph about the crimes that are occurring mostly in the country.

Tools and resources:
Frontend: HTML, CSS, JavaScript
Backend: Python/PHP
Database: MySQL

Challenges:

1. **Integration:** Integrating with existing law enforcement databases (like biometric databases or national id systems) may require overcoming bureaucratic hurdles.

2. **Data Accuracy:** Ensuring that the data entered is reliable and up-to-date, especially when relying on manual input from multiple officers.

3. **Scalability:** As crime data and users increase, the system needs to scale efficiently without performance degradation.

4. **Data security:** This website will be for different types of users, some of the users will be from the police, some will be from lawyers or judiciary. Presenting necessary data for different users and hiding the sensible data from particular users is the main challenge.

5. **User Experience:** The system must have an intuitive, user-friendly interface to ensure adoption by law enforcement personnel of all skill levels.