

# Review on Entity Relationship Model of Crime Management System

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## ABSTRACT

In this review paper examines crime management systems and how they affect crime rates. It gives a general review of the components and benefits of crime management systems as well as the challenges in putting them into implementation. In addition, the paper examines how technology affects crime control and how it helps to lower crime rates. This review study recognizes the value of modern crime management systems and their potential for further development through technological advancements.

**Keywords**— Technology, surveillance, public safety, resource allocation, data management, privacy, justice, recidivism.

## I. INTRODUCTION

Due to the global rise in crime events, crime management systems have grown in important in modern times. With the use of these systems, criminal activity may be tracked, monitored, and managed effectively, improving public safety and lowering crime rates. This review paper's goal is to give an overview of crime management systems and how they contribute to crime rate reduction. The paper will look at the components and benefits of crime management systems, the challenges in putting them into practise, and how impacting crime management. This review paper aims to consider the importance of crime management systems and its potential for further advancement through technological advancements by reviewing these topics.

## II. PURPOSED ALGORITHM

### 2.1. MODULES

#### 2.1.1. Administrators Module: -

The module's focus will be on maintenance, including master data maintenance and the removal of dated and old data from the software, among other things.

#### 2.1.2. Operator Module: -

- Each of the station must first register with the website.
- Once the prospective station registers with the website they can avail the existing records

### 2.2. Actors of the project

- **Administrator:**
  - a) Adding New Operators.

- b) Updating Operators.
- c) Viewing Operators.
- d) Delete Operators.
- e) Administrator Operator
  - i. Insert New Data.
  - ii. Delete Data.
  - iii. Update Existing Data.
  - iv. Retrieve Data from Given ID.
  - v. Insert & Update Others Details.
  - vi. Delete Details.
  - vii. Retrieve Details.
  - viii. Retrieve All Details.
  - ix. Insert Split Image
  - x. Match Criminal Photo With Database
  - xi. Find Criminal Details By Eyewitness
- **Operator:**
  - a) Retrieve Data from Given ID.
  - b) Retrieve All Data.
  - c) Retrieve All Details.
  - d) Match Criminal Photo with Database.
  - e) Find Criminal Details By Eyewitness.

### III. SYSTEM DESIGN

#### 3.1. Waterfall Model

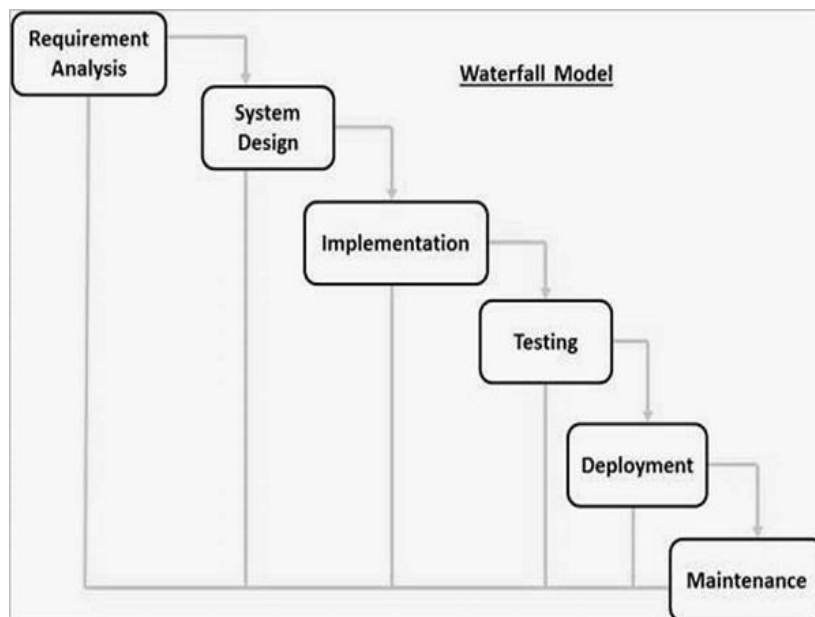
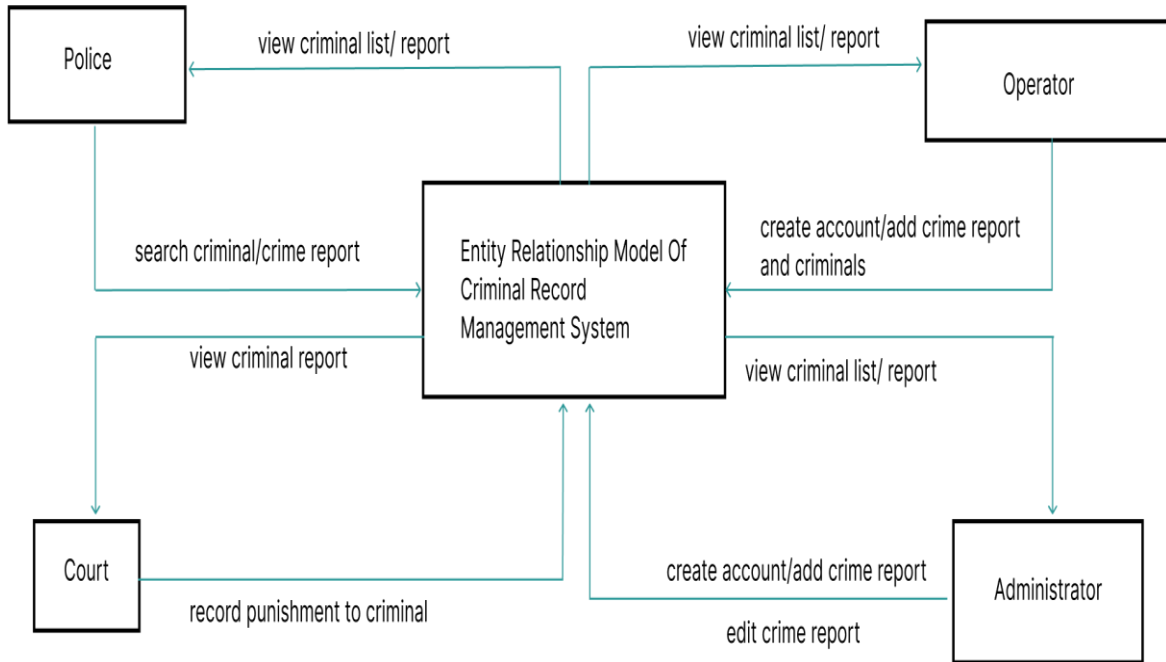


Fig: - 3.1 Waterfall Model

The waterfall models have phases such as Requirement Analysis, System Design, Implementation, Testing, Deployment, and Maintenance. And it is important to finish one phase first then move to the next phase this way you will face less tribal.

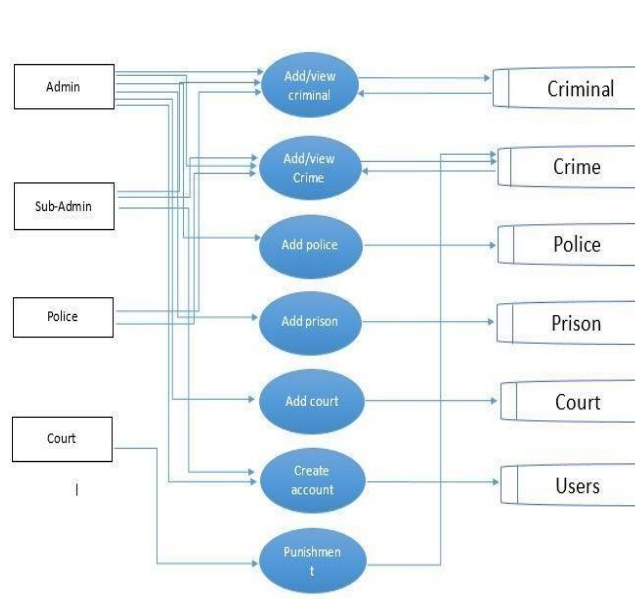
### 3.2. System Architecture



**Fig:- 3.2 System Architecture**

In this fig 3.2 shown the functionality with the help of system architecture diagram. This figure shows which type of user have what types of rights while using this system. We develop this system on the basis of waterfall model, which is a part of the SDLC (Software Development Life Cycle

### 3.1 System Flow Diagram



**Fig:- 3.3 System Flow Diagram**

Data flow gives the information about how the data is flowing from different parts of the system as the system is being used by the different authorised person.

#### IV. ADVANTAGES

**1) Enhanced crime prevention:**

Crime management systems provide real-time monitoring and analysis of criminal activities, enabling law enforcement agencies to respond quickly and prevent crimes from occurring.

**2) Improved investigations:**

Crime management systems enable law enforcement agencies to gather and analyze vast amounts of data on criminal activities, making it easier to identify suspects and solve crimes.

**3) Efficient resource allocation:**

Crime management systems enable law enforcement agencies to allocate resources more efficiently by providing real-time information on crime trends and hotspots, enabling agencies to deploy resources where they are needed most.

**4) Increased public safety:**

Crime management systems enable law enforcement agencies to work more effectively and efficiently, resulting in increased public safety and a reduction in crime rates.

**5) Data-driven decision-making:**

Crime management systems provide data and insights that enable law enforcement agencies to make informed decisions and develop effective strategies for preventing and reducing crime.

#### V. FUTURE SCOPE

**1) Integration with emerging technologies:**

New technologies like artificial intelligence, machine learning, and predictive analytics could help crime management systems by improving their capabilities.

**2) Improved privacy and data protection:**

There is a need for better privacy and data security measures to prevent unwanted access and secure personal information as crime management systems gather and handle massive amounts of sensitive data.

**3) Collaboration between agencies:**

Promoting collaboration and information sharing between different law enforcement departments at the local, national, and international levels could improve crime management systems.

**4) Improved community engagement:**

By involving communities in the crime prevention and reporting process, enhancing public trust, and promoting community safety, crime management systems could become more effective.

**5) Evaluation of system effectiveness:**

The effectiveness of crime management systems in preventing and reducing crime must be regularly evaluated in order to identify areas for improvement.

## VI. CONCLUSION

Crime management systems are important instruments for reducing crime rates and improving public safety, to conclude. The use of technology has further enhanced the capabilities of these systems, which offer efficient platforms for tracking, monitoring, and managing criminal activity. Although though crime management systems provide lots of advantages, implementing them can be difficult because of challenges with resource allocation and privacy. But, crime management can become even more successful in preventing and reducing criminal activity by continuously improving these systems and resolving these issues. In conclusion, this review paper emphasizes the important role of crime management systems and the potential for further technology advancements to enhance them, emphasising the need for continued research and development in this field.

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