DATABASE SYSTEMS PROJECT

PRISION RECORDS DATABASE

GROUP 3 MEMBERS

# 1.0 Project Idea Definition

This project is about creating a database system to help in the storing and managing records in prisons. There has been a significant increase in the storing of records in prisons as most is done manually. In Kenya, the funding that is given to prison or correctional centres, they are not able to afford the technological way of keeping records. Computers and hardware devices are very expensive to buy and maintain that is why they opt to use physical files and store them in cabinets.

Also, in most cases not many people are literate when it comes to using computers. It is difficult to use and understand hence they use the manual method of storing data.

## 1.1 Scope and Objectives

The scope of this project is to help in improving the management of the prison records in a simple and organized manner.

The functions of the database:

For inmate record management- for tacking inmate personal information and sentencing crimes.

For managing staff records- keeping records of guard assignments and training

For managing health records- maintaining medical and mental health records to help in the rehabilitation of inmates.

For resource allocation- managing resources like food, clothing and other supplies.

## 1.2 Stakeholders

The stakeholders that will benefit from this system are:

1. State Department of Correctional Services- they will use the database to effectively organize the training and counselling for the purpose of rehabilitating inmates.
2. Administration of the Kenya Prisons Organization- they will be able to produce offenders to court by having a comprehensive record of the offender in question speeding up the court process.
3. Kenya Prisons Service- to improve the conditions of the prisons and provide a humane safe place for inmates further improving the rehabilitation of offenders.

# 2.0 Entity Relationship Diagram (ERD)

## 2.1 Design

## 2.2 Entities and Attributes

### 2.2.1 Inmates table

This table is used to store the records of the inmates in the prison.

It includes the following attributes: -

Serial No (PK)

Full Name

Gender

Date of birth

Blood type

Weight

Length of sentence

Cell No (FK)

### 2.2.2 Health table

This table stores the records of the inmates or staff who visit the prison's medical centre.

It includes the following attributes: -

Patient ID (PK)

Patient Name

Ailment

Date of visit

Doctor Name

Staff ID (FK)

### 2.2.3 Cells

This table is used to store the records of the cells in the prison and the inmates living there.

It includes the following attributes: -

Cell No (PK)

Inmates Name

Guard ID (FK)

### 2.2.4 Guards table

This table stores the records of the guards stationed in the prison.

It includes the following attributes: -

Guard ID (PK)

Cellblock

Cell Number

Staff ID (FK)

### 2.2.5 Staff table

This table is used to store the records of the different staff members employed in the prison.

It includes the following attributes: -

Staff ID (PK)

Full name

Date of birth

Occupation

### 2.2.6 Medicine table

This table is used to store the records of the medicine prescribed to patients/ inmates.

It includes the following attributes: -

Medicine name

Patient name

Dosage

Period of time

Prescribed by

Patient ID (FK)

### 2.2.7 Inventory table

This table stores the inventory records or storage of items in the prison.

It includes the following attributes: -

Item

Quantity

Staff ID (FK)

## 2.3 Relationships

One cell can have many inmates, the two entities have total participation.

One guard can be assigned to many cells, the two entities have total participation.

One inmate is prescribed one medication, the two entities have a partial participation. The inmate might not be prescribed medication.

One doctor can have many patients, the two entities have partial participation. The doctor may not have any patients.

Many staff can work as guards.

# Database Schema

## Normalization

# Repository

https://github.com/0Francis/Group-3-Database