PRISON MANAGEMENT SYSTEM

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ABSTARCT

Most Prisons in the developing countries are still using the traditional system pen and papers, to keep track of their records. This system takes long to finish a single transaction; this has led to loss of information of some cases (crimes files), insecurity and data redundancy. Similarly, some cases have been reported where some prison staff connives with clients (victims) to change and hide some information or files hence leading to compromising the evidence of the matter. This has consequently resulted in time wastage to handle cases, increased corruption and insecurity of important files hence making the whole process costly. Also when reports are needed especially about prisoners, it takes a long time and therefore makes it hard for Prison Management to take urgent decisions. This has created a lot of loopholes in the system because there is no tracking and/or monitoring of the information available in the different Departments and there are no security measures in place to safe guard the available information. This necessitated automating the system to make it more efficient and effective. There was close study of the existing manual file based system that was in use, it was compared to the proposed system. A prototype of a proposed system was developed to ease data access, security and retrieval for instant report production by the prison management. The prototype was developed using MySql database, Flask, python CSS, and HTML

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Chapter 1

INTRODUCTION

1.1 General Overview

The automated prison management system is the collection of register cases for each prisoner entering the prison for automated release diary generator. A good system for prison service should be automated, because it enhances the administrative and experience to design, develop and implement a prison management system for prison defense and security.

In spite of the benefits of the use of computer to provide timely and accurate information, which is absent in most of prison, it is not all problem arises as to how computer can be utilize that is programmed to achieve desire result.

The introduction of computer has brought many changes to various fields, such as prison, health sector, hotel, bank and in business sector generally. Just because it helps to carry out complex and lengthy analytical operation very rapidly to effective communication system, it is also time saving, versatile, flexible storage of large information and reduce human labour.

The prison is a very large yard where prisoners, warders and other prisons staff reside. Researchers, prison staffs like any other human will always latest technology in the field so as to reduce stress encountered in their fields. In developed countries of the world, people are already fighting on how prisoners can gain access to the internet in their cell room or their common room. This electronic technology offers the competitive speed which is important for the prisoners.

Imprisonment as a form of punishing offenders was not too many pre- colonial communities in Pakistan. The day sentence is pass to a person, is the day he/

she becomes a prisoners even before getting to the fore walls of the prison yards. Immediately the sentence is passed, the prison officer becomes the middle men between the government and the prisoners. The prisoners on his/her own part will do any thing within his or her own limit to see that he does not spend a minutes beyond the sentenced given while government will not want to do away with prisoners until every bits of the jail terms or otherwise is completely secured.
The instrument used by the prison officer to see that both parties are satisfactorily treated this is the computation of sentence. Hence it is defined as the determination of the earliest day release (EDR) and latest day release (LDR) of the prisoners. To this end, a micro computer based prison management system will be developing to practically alert the prison staff of the capability of a computer for effective services. In this project attention will be based on automated prison management system.

1.2 Aim Objective of Project

The ultimate aim of the report is to automate the routine function of prison management system and overcome the problems associated with the present system. The aim and objectives are to handle the following;

1. To improve the existing manuals system by introducing a computerized system.
2. To reduce human dependability and lapses.
3. To design a system for easy information storage update and retrieval.
4. Court report can be prepared easily.
5. To bring into focus the important of computer in prison management.
6. To improve the operational speed for faster calculation of sentences.
7. To provide facility for good access to date store in the data base.

1.3 Problem Statement

The manual method has over the year proven faulty. This is due to several reasons:

1. Inability to locate record: due to the fact that the records are so many, some of them are not located easily this happens especially when the order of arrangement.
2. Bulky records: this is because the records are so many that they eventually take up a lot of unnecessary.
3. Missing records: this is because the records are so many that they eventually take up a lot of unnecessary.
4. Difficulties are encountered in granting requests to people who come for investigation or research and prison staff.

Chapter 2

METHODOLOGY

2.1 Methodology

The server gets the data by a POST request,which enables the server to get the data in the form.After receiving the data from the form the backend code stores the code into a ".python" file on the server machine and then compiles the file, which gives a ".exe" file.This ".exe" file is then executed with or without inputs as per the data received from the user.The ".exe" files returns the the output/error to the backend code.

The backend code then send this data to the output/error fields in the frontend for the user to see the result.

A brief flow chart for whole work is mentioned in the following figure:

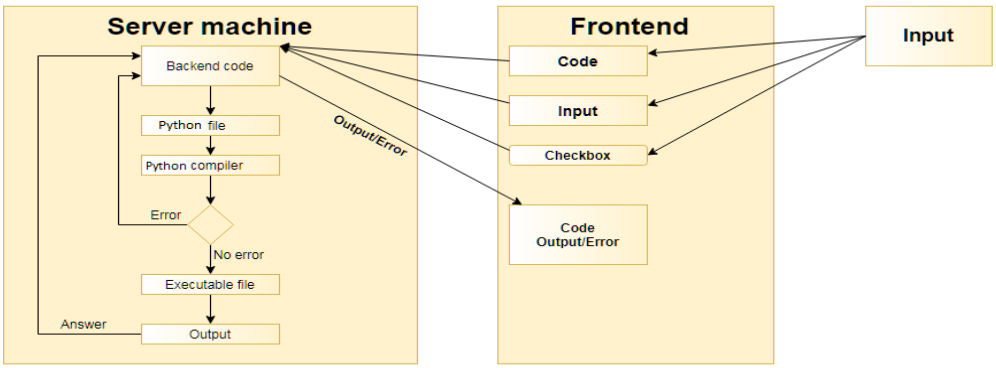

Figure 2.1: Methodology

2.2 System Execution Sequence

The system operates beginning with the Login page, login success, system interfaces for manipulations which includes add information, update data and view information(reports) in the database as shown below.

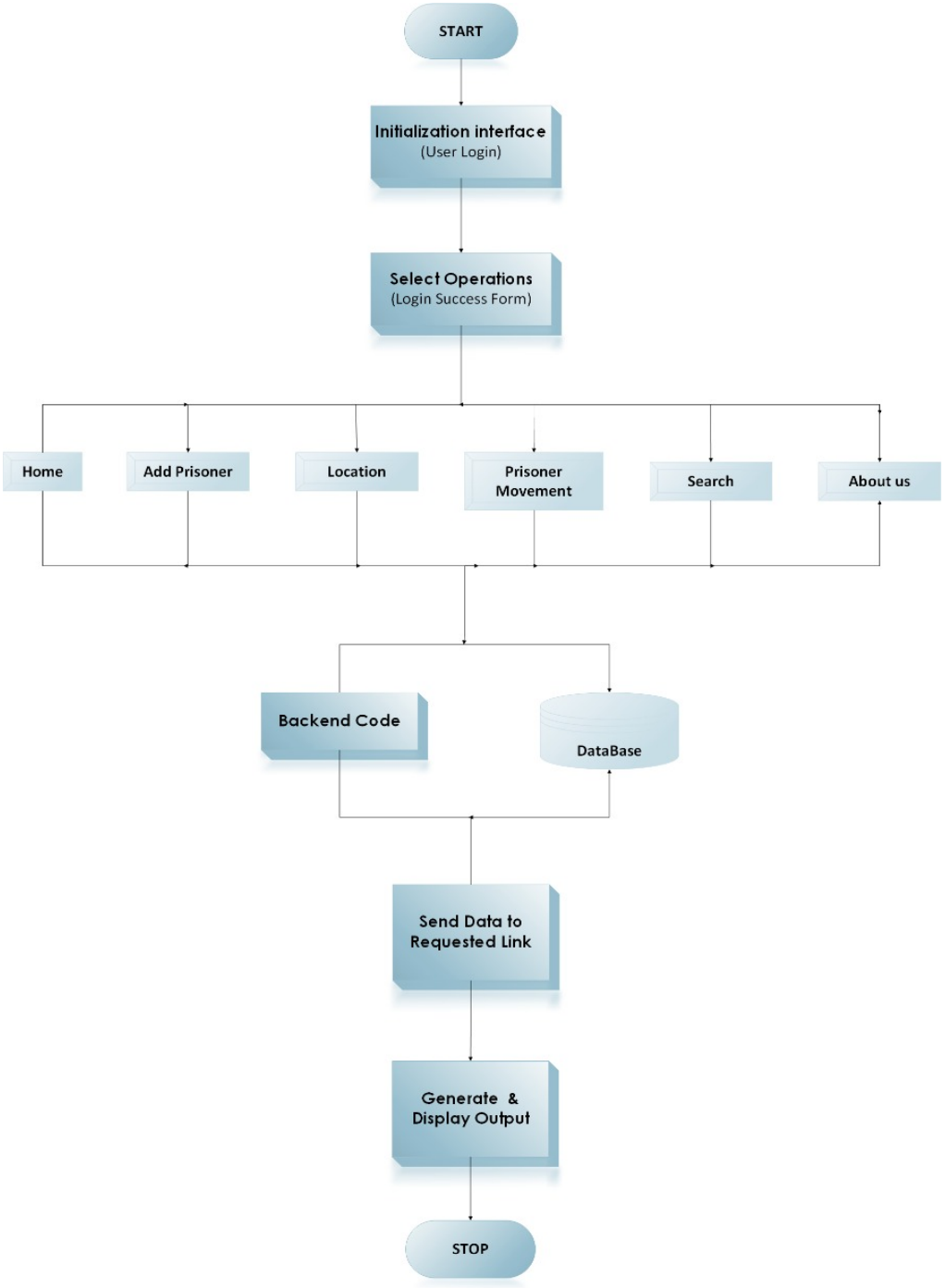

Figure 2.2: System Execution Sequence

2.3 Available System Operations

Various forms are available in the login success form after the user has successfully logged in, where users of the system can perform various manipulations that is to say, to add information, view or read information and delete the information that is no longer wanted from the database. Since all the forms for the available attributes that is the Home, Add Prisoner, Location, Prisoner Movement, Search and About Us manipulations are performed . The following are some of the operations that can be done while using the system
The system operates beginning with the Login page, login success, system interfaces for manipulations which includes add information, update data and view information in the database as shown below

2.3.1 Login System

This is the first page of the system that is displayed when the system is loaded for use. When the user in puts correct username and password, the page redirects to login success.html which contains all the necessary links required for the system manipulation. When the user in puts wrong username or password, the system will display error message. This authenticates only registered user to login. The fig below illustrates the login form

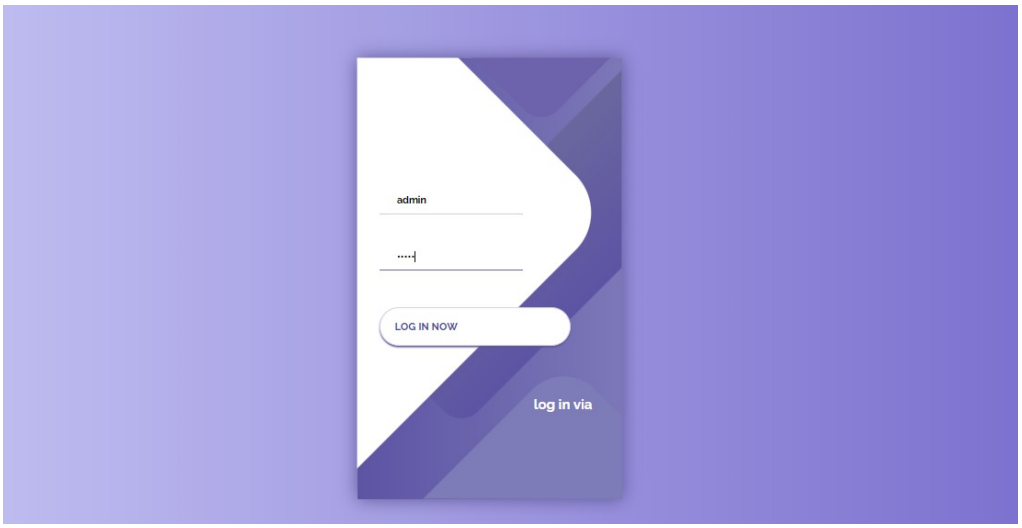

Figure 2.3: Welcome Form

2.3.2 Operations after successful login

When the user in puts correct username and password in the login form, login success form is displayed, this contains all the system manipulations that is to say CRUD which means Create or Add information, Read or View information, Update or Edit information and Delete information. Fig below is a log in success form.

Figure 2.4: Operations after Successful Login

2.3.3 Add Prisoner operation

The forms available for adding information in the database include add Prisoner ID, Prisoner Name, Charge and number of charges.These forms have the fields that are necessary to capture the required information that is necessary to be stored in the database. These forms have the fields that are necessary to updating the required information from system database. These include update or edit, delete and add. This form enables the storage of well organized data or information in the database. The fig below shows registers and update data form that is available in prison with all necessary manipulations.

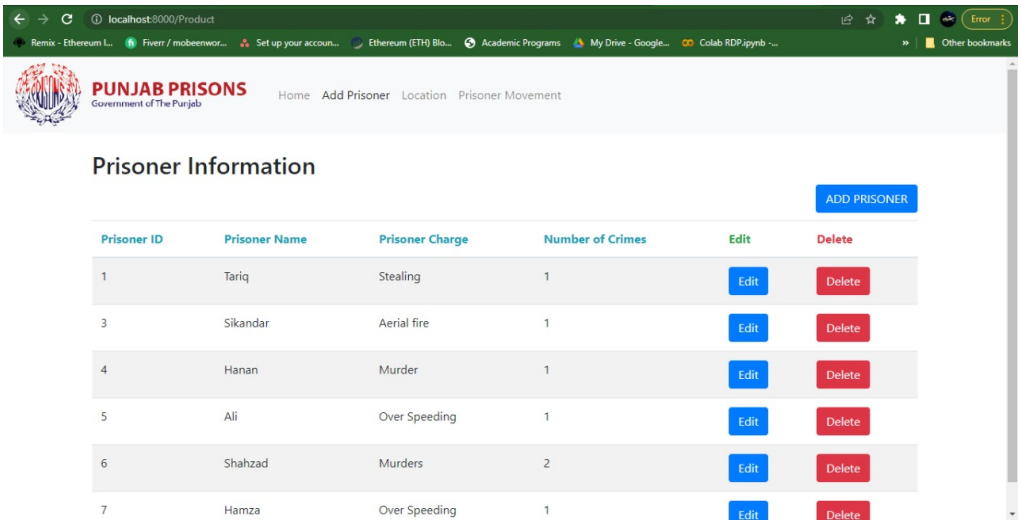

Figure 2.5: Prisoners Data

2.3.4 Search Button

The forms available for viewing information in the database include view all prisoners details. These forms have the fields that are necessary to view the required information from system database. This form acts as a report and it is essential to view all the information about the prisoners that is available in the system database. The fig below shows the report of the prisoners that are available in prison.

Figure 2.6: View Prisoners Data

2.3.5 Prisoner Location operation

The forms available for adding information in the database include add Location ID, Location Name.These forms have the fields that are necessary to capture

the required information that is necessary to be stored in the database. These forms have the fields that are necessary to updating the required information from system database. These include update or edit, delete and add. This form enables the storage of well organized data or information in the database. The fig below shows registers and update data form that is available in prison with all necessary manipulations.

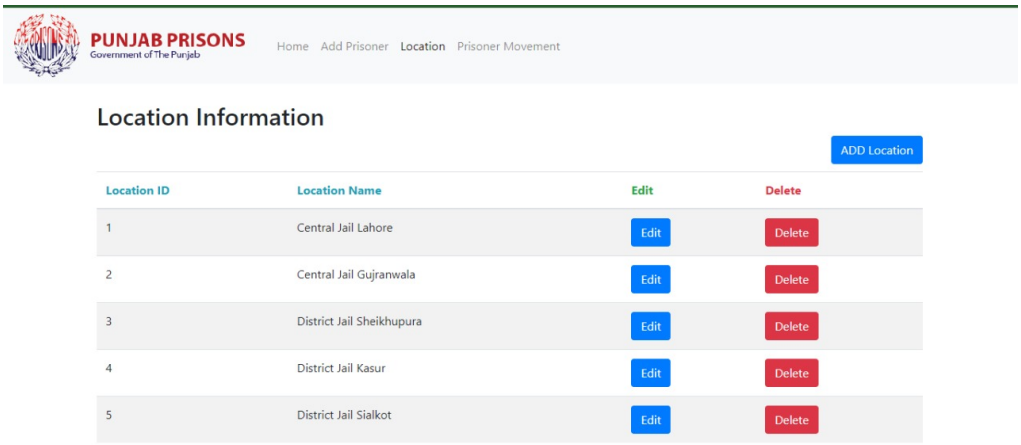

Figure 2.7: Prisoners Data

2.3.6 Prisoner Movement operation

The forms available for adding information in the database include add Prisoner ID, Prisoner Name,Date Time, number of charges Prisoner Location Name.These forms have the fields that are necessary to capture the required information that is necessary to be stored in the database. These forms have the fields that are necessary to updating the required information from system database. These include update or edit, delete and add. This form enables the storage of well organized data or information in the database. The fig below shows registers and update data form that is available in prison with all necessary manipulations.

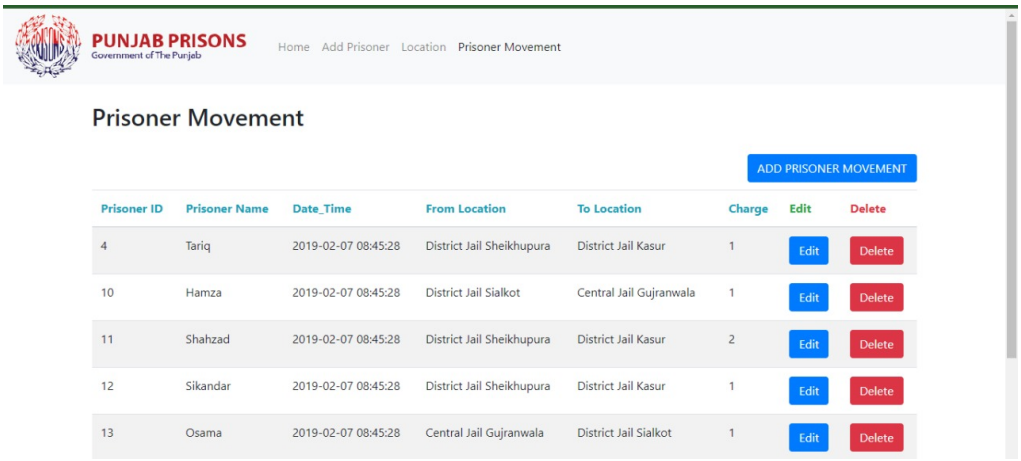

Figure 2.8: Prisoners Data

2.4 Benefits of using the developed system

- The system is easy to use with very good user interfaces.
- The system does not allow duplicate information and therefore no redundancy.
- The system can be used everywhere on the globe as long as there is internet connection.
- Enhances faster decision making by the management because reports and other actionable information can be obtained by a single click.

Chapter 3

CONCLUSION

This report was set out to develop a secure web-based records management system for prisons using a user centered approach to software development. The scope set at inception was restricted to developing a system for tracking records. The report led to design and implementation of a prototype for a web based system for tracking records. The system was tested and validated for functionality. The system was implemented using a multi-tier approach, with a backend database (specifically MYSQL database), a middle tier of Flask Container and Python, and a front end web browser (client). This report has also discussed each of the underlying techniques used to design and implement the application and the steps undertaken to achieve this. The report provided solution of providing easy and faster way for managing prisons centrally and tracking the records with ease by the authenticated users and even the top government officials who need information about a particular prison. The system will also update the records and improve performance of the man power, as well as reducing maintenance and repair costs. The desired aim of providing centralized access to information and records tracking on prisons are more applicable to developing countries, Pakistan in particular is among.