

CS315

DATABASE MANAGEMENT SYSTEMS

PROJECT

Course Instructor: Dr. Arnab Bhattacharya

TOPIC : Police FIR Management **System**

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Introduction:

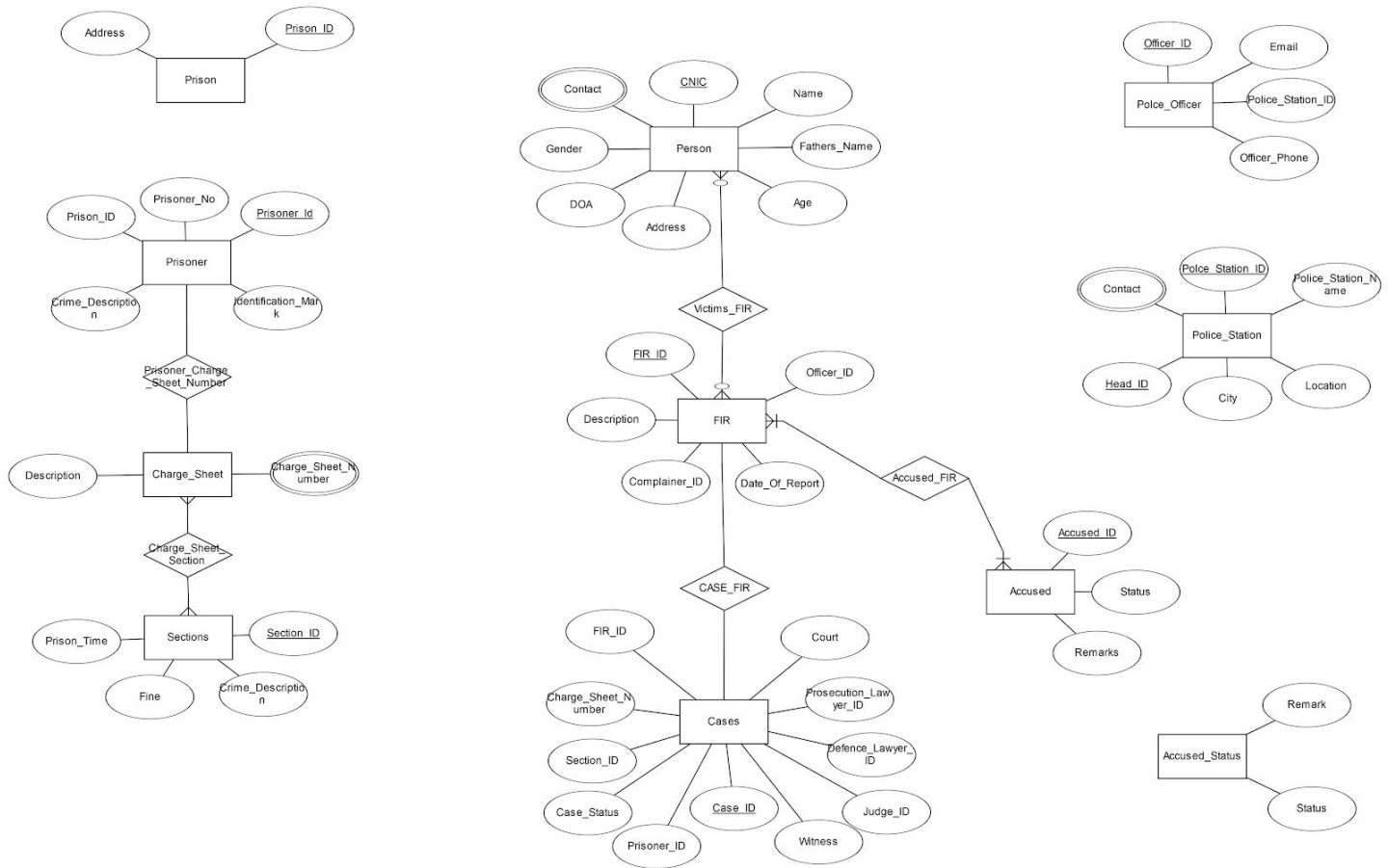
The police and the police stations have an eminence all around the world in this era when the crime rate is very high. The main responsibility of the police is to maintain the law and order situation in the country and restrict the criminal activities in the society by bringing the criminals into the court, for justice through proper investigations. For an effective investigation, it is important to solve the complex criminal cases and prove the truth in the court which is quite a complex process and requires a lot of effort. For this, access to correct FIR information becomes a priority.

Currently, some police stations are utilizing the old method (hard paper) of FIR registration which requires extra effort to maintain the record of criminals. To trace someone's record also requires unnecessary time which can be saved by digitizing the police stations' records.

Although some police stations do use digital record keeping in Excel sheets, the integrity problem is noticed in file-based records. Also, the access is slower for searching a single record as the officer/official may have to go through all the records in the sheet which consumes extra time. The excel sheets can only be used by a single person at a time and also they do not have any security mechanism, anyone who has access to the computer can easily access the sensitive record.

To overcome these issues we have developed an application for the police stations to digitize the method of FIR system and other important official records about the staff and necessary registers used by police stations.

Database Model and ERD :



We've made the database model using SQL.

Assumptions and Explanations:

- Charge sheets are filed multiple times as we get more info. We keep updating the charge sheet number in the CASE as well as PRISONER table
- The IDs of all the people are given by their CNIC number
- Prison time is fixed as a punishment under a particular section
- Prisoners were given a particular 'Prisoner Number' once they are under the bars of a prison which is different from the Prisoner ID(CNIC). This number can keep changing as the prisoner is shifted from one prison to another
- 'Section ID' is a multivalued attribute in the table ACCUSED as a single person could have done a crime under multiple sections
- DOA - 1 (alive), 2 (dead) , Gender - 1 (Male), 2 (Female), 3 (Transgender)

Server, Frontend:

The development stack of our system is LAMP. We made the frontend in HTML, CSS and some javascript, for the server side we used PHP5 and for the database management, we used MySQL.

In our system, you can log in with the database credentials, these details are then saved into session variables, and are eventually used to perform all the database queries. After login, you can see the database structure i.e. all the tables and the corresponding attributes. You can perform any custom query using this schema in the textbox given. You can also go to the page of any particular table by clicking on the table name. On this page, you can see the content of that table, insert/delete data. Note that while inserting, all the fields should be provided, and the strings should be given with quotes.

To run the system, do

- 1) `$ cd src`
- 2) `$ php -S localhost:8080`

Then open localhost:8080 in the browser, that's it: server is now ready and listening to requests.