

## Location Based Crime Analysis

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### **Abstract**

*Crime is an anti-social and illegal activity to which penalties are imposed. This anti-social conduct is condemned by society and is punished by law. Some activities that are unethical but there are no punishments applied to them are not criminal acts such as antisocial conduct. Most people don't know the crime rate in new regions and spend a lot of money in such regions. This often leads to a loss of their money and sometimes life also. This all happened due to believing the third person before investing. This paper aims to discuss about this problem here we are developing a website site for people to know the crime rate in particular region in which user interested to invest some money.*

**Keywords:** *PHP, SQL, Bootstrap.*

### **I. Introduction**

Crimes pose the greatest danger to humanity. There are several crimes that happen regular time intervals. Maybe it grows and spreads at a rapid and vast pace. Crimes occur in small villages, towns and major cities. There are various forms of crimes like theft, murder, rape, assault, false arrest, abduction, assassination. Because crimes are growing, there is a need for a much quicker resolution of the cases. Crime detection and criminal identification are the main issues facing the police force, as there is a vast amount of data collected on crime. Technology is required through which case-solving could be faster.

Crimes are a common social issue which affects a society's quality of life and economic growth. When people move into a new city, it's considered an essential factor. That crime, law enforcement agencies continue to demand innovative geographic information systems and new solutions to better crime detection and better security of their communities.

So here we are bringing a new system we can find the crime rate in a specific area and the user can also book a case on another person who causes him problems in a much simpler way. The police man verifies these details and accepts that cases give acceptance status to the person who places the cases.

## II. Literature survey

Crime is one of our society's biggest and most prevalent issues and its prevention is an important part of it. There are huge numbers of frequent crimes perpetrated daily. It includes all crimes to be documented and a database to be maintained that can be used for future reference. The major problem faced is to maintain a sufficient collection of crime data and interpret this data to assist in future crime prediction and resolution. This project's objective is to examine data set consisting of various crimes and forecast the type of crime that will occur depending on different circumstances in the future.

In the existing system, they performed statistical analysis on the attribute values of our datasets as an initial step to evaluate and get a big view of the results. For each city and started to create a certain script to measure frequencies of separate values for each variable, but crime analysis in the current framework is not done accurately.

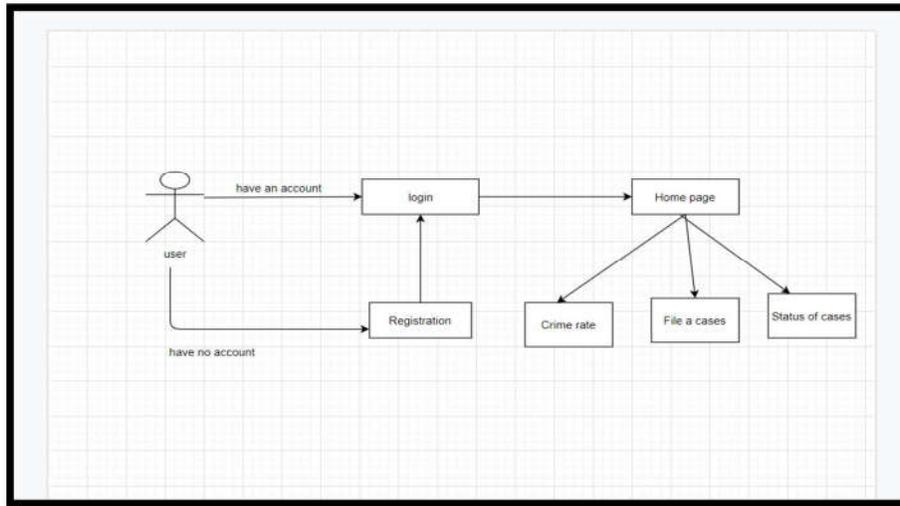
### Proposed System:

In the proposed system, the user selects a specific location where he or she wants to buy a house, then our interface shows the crime rate of that particular area and the user can determine whether or not to buy a house at that spot. This project can be created using data which is based on the crime data we receive which based on the data provided our code can analyze past crime data and produce user reports.

## III. Proposed System Working

In this project, we can identify the crime rate in particular region on user interest. Already we store the pervious user cases in the database. Based on that reports we visualized the data by plotting some graphical representation. In this model we provide 3 different features for user those are:

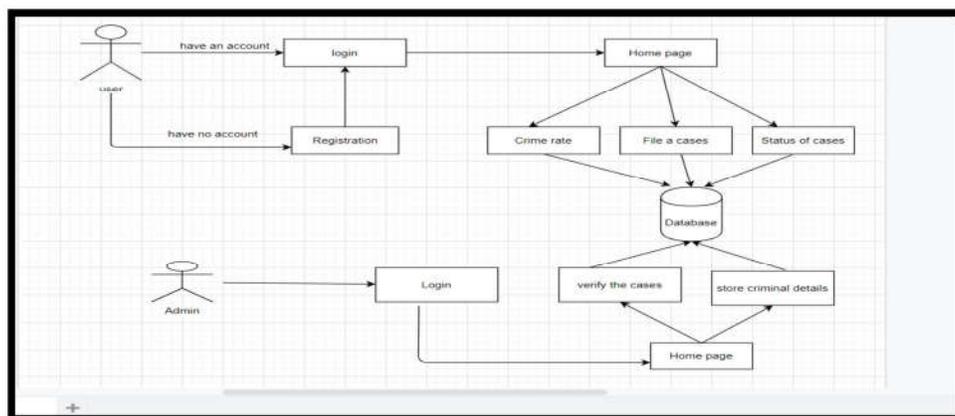
1. Crime rate based on location.
2. File a case on particular crime.
3. Get the status of the crime from admin.



**Figure 1: - user perform activities.**

**a) Architecture:**

In this model, we have 4 modules in user side and 2 modules in admin side. One is registration module where the user can create his own account by completing the registration process. The second module is crime rate checking after login this module in the one the action performed by the user here one dropdown box is displayed in that display the location name and select the particular location and corresponding crime chart is displayed. The third module is file a cases in this user can file the cases and send to admin for investigation. The last module in user side is check the cases status not know that at what stage the cases is going on. In admin side, the first module is accepting the cases send the various users if it is correct accept the cases otherwise take proper actions on user. The last module in admin side is adding the criminals details according to their location including the images of the criminals.



**Figure 2: - Architecture of your system**

**b) Algorithm steps:****User side: -**

1. Start.
2. Open the application.
3. Login into the site by giving valid credentials.
4. If you don't have any account, create an account by giving all the details required in the registration form.
5. Select the any one of the option in the list like crime rate, file a case and check the status of the crime.
6. After that provide required information in the selected option to get and storing the information.
7. Logout.
8. Stop.

**Admin side: -**

1. Start.
2. Option the application.
3. Login into the site by giving valid credentials.
4. Perform the required operation by selecting the options present in the navigation bar.
5. Save performed operation.
6. Logout.
7. Stop.

**c) Technologies:**

**SQL:** It means Structured Query Language. By using SQL, we can communicate with the database. SQL statements are used to update data on a database and retrieve data from the database. Most preferred commands in SQL are “insert”, “delete”, “update”, “create”, “drop” and “select”.

**PHP:** it is also called as Hypertext Preprocessor. it is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

**Bootstrap:** Bootstrap is a free front-end framework for faster and easier web development. Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins. Bootstrap also gives you the ability to easily create responsive designs.

## IV.RESULT

The following are the output screen of our project:



Figure 1 -: crime rate based on location.

The screenshot shows a web application interface with a navigation menu at the top: Home, Crime Rate, Report Complaint (selected), Overall Report, Report Status, and Logout. The main content area is titled 'Report your Complaint'. On the left, there is a large red square icon containing a white document and pencil. On the right, there is a form with a pink 'Data Not Submitted' message at the top. The form fields are: Email, Door Number (number), Location, and a dropdown menu labeled 'Select Crime'. Below the form is a pink 'Report' button.

Figure 2-: Files a case by user.

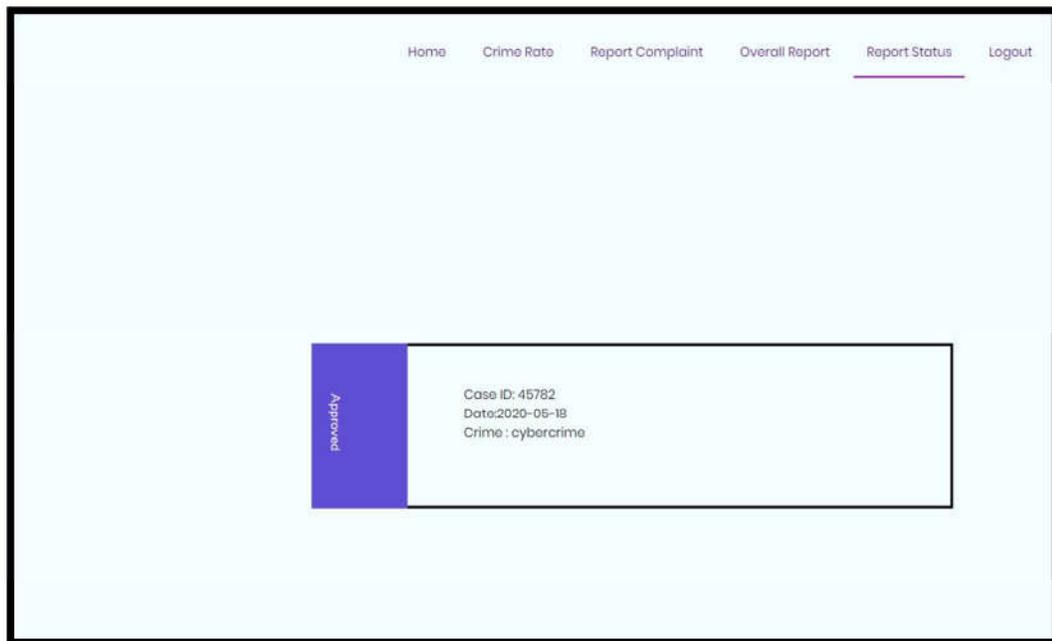


Figure 3 -: Cases status report.

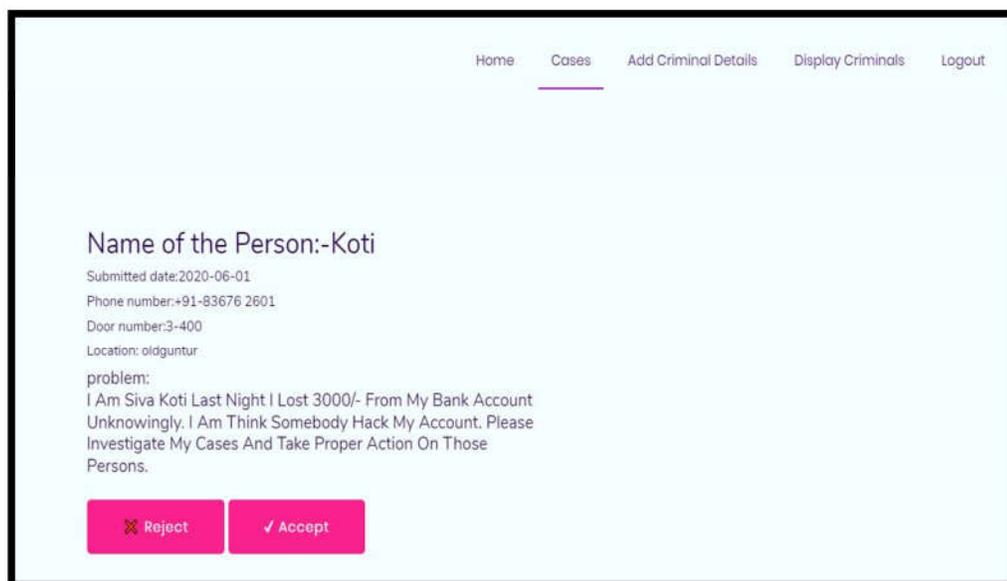


Figure 4 -: Admin side cases verification.

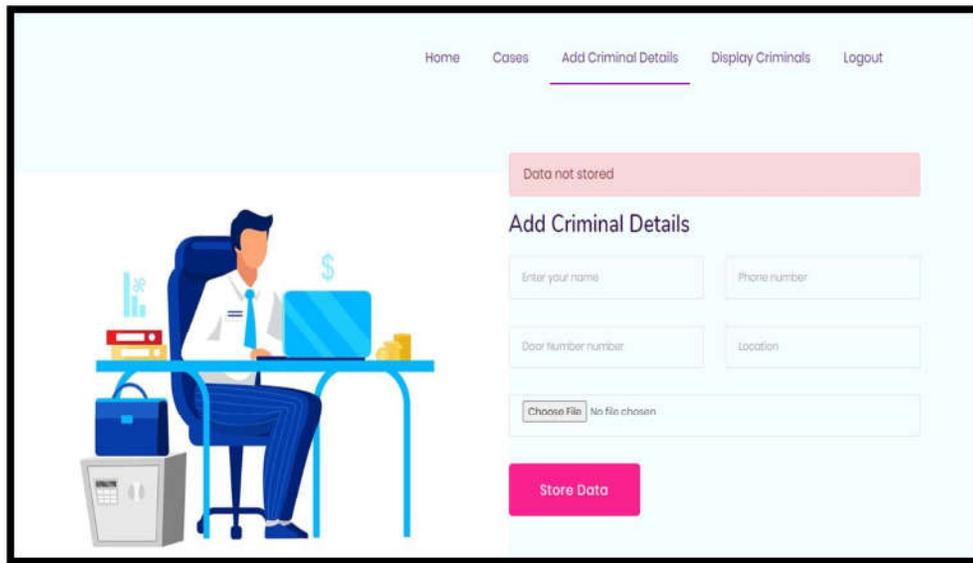


Figure 5 -: Add Criminal details based on locations by the admin.

## V. CONCLUSION AND FUTURE WORKS

### Conclusion:

For this study, with the aid of PHP, we applied the data mining classification technique to detect the crime rate of the given place by the user. We collect data from previous records of crime that occurred or were registered by police department. Therefore, we are reviewing the data in such a way that any time there is a change in police department documents. This step took considerable time and effort to pre-process and format the data to suit the classifier for data mining.

### Future works:

Due to the better performance of both classification techniques, an accuracy of around 70 per cent has been achieved. The model 's accuracy can be enhanced in Future by using new methods and better technology or tools. Our Future work is to automate the administrative manual work.

## VI. REFERENCES

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