

# E-Rakshak: An Online FIR System

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**Abstract—** The notable crime reporting platforms are lopsided and not intuitive the process of reporting crimes to security agencies still remain very difficult.

**Keywords—**Face Recognition, Open CV.

## I. INTRODUCTION

This is an Online FIR Filing System. As there are many complaints lodged in a day so it is quite difficult to manage all these FIR's for Police Department. By this system we can categorize, organize and manage data easily received from people. After the registration process, User can login and file an FIR by only single click and all the details will be sent to the police department instantly. After receiving the details from the user, Police Department can start the investigation process. So it is a fast process and can help the Police Department to start the investigation as soon as possible. After filing the FIR, user can check his/her status by just logging in to the website.

## II. BACKGROUND

We developed this system by observing problems of people, woman and small kids in our society. To give justification to the people at the right time is main aim of our system. Current scenario is that if we are in any trouble then we have to go police station to register our complaint. This is physical and time consuming process. Because if there is no nearby police station then it is time consuming and energy wasting. If the complaint is against any reputed person then there may be some violent situation also created. There is no need to physically go to police station many times to check status of our complaint. So by observing all these problems we developed Online FIR System for public security.

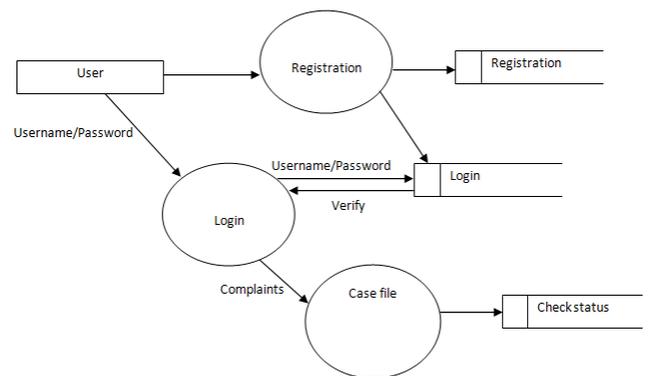
## III. METHODOLOGY

- A. We have used quantitative methods to gather data and analyze our system. In these methods we have performed different test cases on our system.

These includes cases like when:

- Different persons try to authorize and file an FIR.
- Same person try to authorize and file an FIR.
- The faces are same but due to lighting conditions system denies the similarity.
- Similar looking persons try to authorize and file an FIR.

### B. System Model:



## IV. MATERIALS

As for the materials, we have used OpenCV to detect similarity and difference between faces. OpenCV is the huge open-source library for the computer vision, machine learning, and image processing and now it plays a major role in real-time operation which is very important in today's systems. By using it, one can process images and videos to identify objects, faces, or even handwriting of a human. When it integrated with various libraries, such as NumPy, python is capable of processing the OpenCV array structure for analysis.

To identify image pattern and its various features we use vector space and perform mathematical operations on these features.

## V. RESULTS

After following the methodologies, the system was created with the integration of Face Recognition. The system formed is reliable and can help users to file an FIR easily. Also with the addition of Face Recognition, the system formed provides better authorization and security.

### A. The Modules created were:

1) *Registration Module*: In this module, first of all User will register with proper data (where username and E-mail id must be unique for everyone). Once User can registered then he/she can login in this system and put their details and register FIR.

2) *Sending details module*: In this module, we can send all information of the user to the police station. The user information is like name, gender, age, address, place, pin code, mobile number, location, documents for authentication, snapshot of user using webcam and all other data of user. All the details will be sent to the server side and Records will be maintained in a database and FIR status can be modified by the admin.

3) *FIR Registered Module*: FIR registered module: In this module we can take all the information of the user from the database. After receiving all the information we will match the image taken from webcam and the image extracted from the document and then only will give the feedback that FIR is successfully registered. After filing FIR user can check status of their FIR.

### B. Screenshots



**Register**

E-Mail ID

Password

Confirm Password

**SIGN UP**

Already have an account? [Login](#)



### Fill Your Details here!

First Name

Prabhav

Last Name

Jain

DOB

16-10-2001

Age

19

Gender

Male



### Upload Documents here!

Choose file | No file chosen

**UPLOAD**

## VI. CONCLUSION

A completely integrated and compact system is developed that can be used by the common man as well as the police and this system would be like a win-win situation for both of them. This project will be widely used in the future by the police department, the common man, security agencies and even hospitals(for accident and assault victims).The greatest strength of this project is that it offers new features as well as retaining the original characteristics of the existing systems(For Example: Criminal Database).

## VII. ACKNOWLEDGMENT

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