Live Crime Reporting

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Abstract - In this paper, we have developed an Android Application that gives add-on advantages over Reporting the live crime along with the e-logging of complaints from within the application. In the wide spreading market of existing apps available on the Google Play Store there are apps that may facilitate the e-filling of the reports but there are no apps that volunteer the aid to quickly capture, record and report along with providing the assistance in case of locating the nearest hospitals to the victim. The Emergency contacts can be raised with a message to immediately look for the mishapening with their loved ones. The time required for getting the report of any case of missing person may be quickly reported. Having a centralized control over reporting the crime live shall serve as a boon to the society making the system fully transparent and an organizational-building better managerial accounts to help the police and judiciary councils in better control and monitoring. The person may report the crime without revealing his identity (the main reason why people are reluctant to report).

The App serves as an initiative to Digital India motto to equip the citizens of the country with the technological advances to serve the needful.

Keywords: Live Streaming Crime, Application Programing Interface(API), Non-Government Organization(NGO).

I. INTRODUCTION

The concept of Virality is very trendy yet not much useful in the way its enormous power can be applied at work or can be used for building a life saver mechanism. Taking in mind the potential of using this service, a life guarding application for the victims of injustice has been developed. This Application is a project dedicated to the people who have the willingness to aid against the injustice, but don’t have the courage to fight against the injustice. Also not only are the people who are caught by the mercy of ill humans are the one’s been helped, but also the misfortune are the one’s that will be also benefitted.

Live Crime Reporter works unlikely the News TV media Channels wherein the channels stream the video content that have put up on the social media. It is actually the self-based reporter for the one how is an eye witness at the spot of the crime scene. The anonymous person may report the crime that may have any form be it - sexual assault, a case of bribery, a murder or a case of natural calamity. People is most countries blame the police department or the fire extinguishers of the irresponsibility of being on time. The loss of life or property had been made already once the police reaches is what people complain of. Police justifies this by saying that the information deliverance time was late and the report generation mechanism and auditing took time. At most of the times the people argue against the ability of the police to catch the police. This application is a solution to all this. Whatever be it the case of crime- the time is reduced, evidences can be collected and the digitization of the mechanism all can be done through this app. Today Live Stream has been put on use by companies for just entertainment channels. There’s more to it which it still undone and is being implemented here.

Live Crime Reporter is really a blessing as this buzzing technology is being used to report and log the crimes. One can easily shot and send or stream the video of the crime. It can assist a person who wishes to help the victim to carry him/her to the nearby hospital. Inform the family of the person in case of any injuries or help the police in case of the tracing the missing one by the help of local commuters[1]. Existing services may just help one, report an incurred crime by just asking to fill the form i.e. “E-Reporting” much like someone filing a FIR online. This app has much wider scope and features mentioned above.

The Crime Stats for the India[2] show the annual raise since 2014, with the total number of crimes report as per the Ministry of statistics and Programmed Implementation as on 2014 as 28,51,563. These number are just those reported but an unnumbered set of crimes are left unreported and of many of them are left with missing reports or unavailability of proper documents or investigation files to reflect the crime. There isn’t a strong faith for police within the people. Judiciary Courts are handcuffed and bounded to prove the justice to the victim and jail the criminal due to the lack of evidences the prove or report the crime. Ever going need and demand to public safety has risen the concern for the government and judiciary bodies to implement a quick media response force to support the police at every level.

Governing the citizens with this app may prove the mission to indulge fear into the eyes of criminals come true. Now anybody caught or recorded with being involved in crime may be directly put into the bars through the virtue of video...
evidence as the live streamed content. In the first tired Countries the process of reporting has been automated there may are devices that may trace the driving speed and capture the license plate to parcel the report of speedy or rash driving. They also have alarming system for the users to raise the alarm.[3]

II. EXISTING SYSTEM

Existing Pen-Paper reporting system is very burdened and cumbersome. The digitized Application may make the approach of record keeping centralized and transparent along with bring up the quicker resolution time for reaching the crime spot[4]. Out of the total stats the National Ambulance Service 108 has served 43,816 lives of the people at duty to make them reach on time at the hospital nearby, inthe state of Himachal[5]. Imagine this stat for the entire country i.e. India itself, how lives could be saved by the quick and immediate response task force. Existing System requires the Police to be necessarily available at the hospital to verify operating on the victim. It also has a backlog that the Police intervention at the necessary locations is not available may be due to the unreachability of police or no local support in terms of people unwilling to corporate with them. Here in along with the Police, the NGO’s may also help serving the society where people are reluctant to medicate/help the person in need or caught with some crime.

People in many countries have low humanitarian belief of helping the needed ones, being fearful of what if the criminal caught them shooting the entire crime episode with the innocent. Once a person opens up the app the FLASH_MODE[6] shall automatically be set to disable to stop criminal know that he’s been recorded. For low light Conditions the app may turn off the Camera and switch the mode to device’s AUDIO_RECORDER mode to just tap the voice for the evidence.

On a recent study over an Application available on the Google App Store under the name titled "Crime Reporting" by Developer "Betaden". It was written to be aimed at:

1)To address the need of the concern citizens who wants a fast crime reporting.

2)To develop a system that will help the government to solve the high crime rate and accidents.

3)To have an accurate time reporting in the country that makes the response of the authority faster.

4)To modernize the system of reporting a crime in the country which may recognize the country as one of the safest in the world.

5)To ensure that the system will be simple to use, user-friendly and portable on the user to use.

6)To conduct trial test to ensure that the system will give satisfaction to the user by its performance.

7)To evaluate the proposed system of its reliability, accuracy and speed.

8)To secure that the user’s identity will be enclosed to the database officer only.

While this application only worked for the scenario of an accident the system was still under unprepared state and required a lot of Bug fixes to qualify the implements mentioned in its aim. The system uses a local server to get the responses of in-occurred crime and then creates the e-report for the same. So there isn't any mobile application across the Google, Apple or Windows stores that provide such a solution. While as the complexities in investing the crime is increasing day by day the need of the hour to tackle with the clever, cruel minds is an "Urgent".

Our system advances over these shortcomings along with the add-on advantages of live streaming. It gives user the flexibility of generating the e-report. One may use this application as a system to recover someone who is being kidnapped or is lost.

III. PROPOSED SYSTEM

The proposed system aims at facilitating the commuter helping the suffer. This shall also facilitate the police to keep an eagle's eye watch over the crime. Shall save the life of the patient by reducing the time need to file in the report manually. One may not require police verification report before admitting the patient to the hospital in case of Emergency since the e-report shall do what is needed to file-in as police consent. The person’s Emergency contacts may be messaged in alongside in that case[7]. Each of the modules used within the app shall be able to satisfactorily do their job.

A. ARCHITECTURE OF PROPOSED SYSTEM

The model has the sided architecture. On one side is the Client side that facilitates the use of application for capturing or recording the crime and generate the report of the crime taken along with the location of the crime. This shall be directly send to the police or NGO's for immediate help. A consent letter to the Emergency numbers of the victim can also be added. The app facilitates locating the nearby hospital to immediately ask for the 108 Ambulance or the hospital’s help for being on time.
The server side shall facilitate the generation of e-police report from the nearby thane the complain has been logged in, so that by the time patient reaches the hospital the report may be shown to start the operations in case of Emergencies. Although there are Govt. Rules now. But for some cases still, many believe the attendance of police as a necessity. Also the server side shall be responsible to store a record of the reported evidences. Shall be applicable to communicate with the centralized police database to fasten up the task of tracing the criminal from the records. Shall also act as the face-matching tool in case someone reports about lost-found person. Fig.1 Shows the proposed system.

**B. SYSTEM FLOW**

The Implementation is an android application. Whenever the crime is reported a streaming session is created. The reporter is asked to enable the Location and based on the location selected by the user the fired query fetches and automatically selects the nearby police station or NGO through the use of Google Maps. When the shoot starts a streaming session is created which is valid until the video has ended and the streamed content is continuously being telecasted to the server at the police station. After the session is over, report is automatically generated, verified and send by the selected police station or the NGO that have been asked for the help (in the beginning). After the report if the user wishes to carry the victim alongside with them then the application may facilitate the opted hospital choices for him. From the report that has been sent to the police, once the entire filling is done and the crime is digitally verified by the police and the confirmation report is send in no delays to the user back again to show at the hospitals to begin with the treatment for the victim. Thus along with the sharing of content app facilitates creating reports, locating hospitals and assistance as various phases of help virtually. Along with the further processing a concerning message may be send to the family of the person if the emergency contacts are found with them as the asset to the victim. In case there is any case of the someone who is being looked for one may upload the pictures along with the selected location of vicinity through the app.

This mechanism is built over the cloud i.e. Amazon AWS. Cloud Deployed application provide 24x7 scalability and robustness to the application. The cloud architecture is defined as below Fig.2. According to the architecture the mobile shall stream the content to the AWS S3 i.e. a Storage services, this service shall facilitate the processing of the video that is being streamed from the mobile application to the streaming engine. In between the “Transcoding” jobs shall do the job of processing where in the video shall be converted into the formats playable for the most of the player’s in any of the devices. The CDN distribution network is being developed by the means of AWS cloudfront and is being wrapped over the by the streaming engine of wowza service.

![Diagram](image.png)

**Fig.1 Architecture of Proposed System**

**Fig.2 Video Transcoding job on AWS**

Just like the normal face detection and mapping engines[8] the application shall look into the database maintained for those reported lost and there's any case where the person has been found. The lost and found databases shall pull over all of the matched cases and report the police nearby to pick the concerned person from that location for the matched identity along with the search index of the identification number of the case with which the person was involved.
There's obviously a question on the efficiency of the algorithm used to perfectly grab the search results, but as far as concerned with the development of this application this efficiency can be enhanced. SMQT algorithm is used for face detection, it has a progressive focus on the details of the image and when the luminance is considered SMQT proves to be an edge apart from other algorithms [9].

In the entire process the person details shall not be shared with the police and may only be retrieved once the person gives permission to know the police his name and address. This appraises the secrecy of the application to protect identity of the user in case user fears whether/ if the help may prove to be fatal for this life. Also being anonymous may help reporting happen fearlessly and easily without any worries. This identity however shall be stored inside the central repositories of the CBI as the details may be required at the time of presenting the evidences to the Judiciary Council. These kinds of evidences prove to a valid and to the point proofs when taking decisions.

The Governors may directly have been given the report stats for the reported crimes and then they may take strict charge of their commanders for the insufficiency of their authorities to have control over the crime for each district wherever there is a hike. Statistics help to correctly denote the percentage of the crime rate in a location and when these monthly report will reach the officers desk at the end of each month and they will be asked to respond to the cause of this kind of report they will immediately look forward to have a good report at the end also the problem of the Hospitals unable to maintain the stats of the people correctly shall be removed. All we could imagine is a clear and accurate count of the people reported for each case.

India has seen a raising rate in increase in the crime ever since the 'Nirbhaya' case of New Delhi specially with the ladies and girls. People have turn out into animals and so cruel that they now have no sense of with whom and how brutally they hurt the other people. When the crime rate cannot be stopped at the immediate effect a needed initiative can be taken to avoid the things at the immediate dispose. The fig.2 shows the flow of the process.

C. APPLICATION DEVELOPMENT

The final motto of this problem shall be building up an android application. Android is an open source mobile phone operating system based on Linux. To build the app, we have used the Android studio and IDE to code the application. For the database purpose MySQL has been given the command. The Interface available for the police to view the content in made using the Java Servlets. Face-matching shall be done through the use of MATLAB. Google Maps API shall be at Dispose when the transaction handling is done for the location grabbing purposes.

IV. SUMMARY

The subject of this paper is intended to frame an application for mobile devices and facilitate the users to help others caught in some crime or met with some accident or any other mishap happening. It is the moral duty of a person to help others in grieve and to fight against the crime when the heap of crime turns out to be high. Our App uses the live streaming feature to record the crime and report for the mishap happening. It solely depends on the user to help all way long or ask police or other authorities to take charge of the rest of the case.
Not only did the app help in reporting the crime rather it suggests the helper to the survivor helping him look for the nearby hospital or rather make a call to the emergency ambulance. Prepare an e-report digitally verified by the police showing their consent to proceed with the operation over the victim without waiting for them since an immediate response could make the survival possible. If the person is lost and someone finds the concerned person in and around he/she may look for a match by the app so as to report the availability of the person nearby.

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VI. REFERENCES


IX. Mikael Nilson, Mattias Dahl, I. Claesson, Gray-Scale image-enhancement using SMQT. https://www.researchgate.net/publication/224622111_Gray-Scale_image_enhancement_using_the_SMQT