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CRIMINAL SPOT DETECTION

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ABSTRACT
The aim of this system is to develop an application that can provide up to-date information about the security level of a particular place that can be estimated by application users by viewing vulnerability information, ,and developing applications that Can make it easy for people closest to get the latest information in the form of location of the users and can shorten the steps needed to provide information to the relatives if they feel unsafe. The benefit of this system is that the closest people can take action as quickly as possible when the user of the application is in a state of danger, increasing the security and quiet of the users of the application because of its location can be monitored by its relatives, and increase the knowledge of its users about the places around it which will Increase his self-awareness .suppose particular person saw that the crime is happening then the person can take photograph of it and upload it on our application. So, because of it police can find the location of that person where the crime is happening. Based on such information police can able to reach to that location and they are able to take some actions against it.also we are using panic mode in it which shares the location of crime spot to police and admin. Also it gives emergency auto dialing feature.

KEYWORDS: Violence, Tackle Crime, Data Mining, Apriori Algorithm Geo-fencing.

INTRODUCTION

There are various ways to solve the problem of violence, but until now no one can stop the action completely. The non-completion of this issue requires that every individual, especially a woman, should increase their self-awareness. unfortunately, there is no one who can stop these issues or problems completely.so by observing all these things we are going to develop one android application basically our application is useful to give information for road users who will pass through unfamiliar areas, it would be good if before traveling user can find information about the security of the area to be passed.it also gives information about the events that have been occurred in particular environment. It sends a voice notification to the user that you are entering into dangerous zone. So basically, our application makes it easy for people to get the latest information and that information is in the form of location of the user. This information sends to their relatives if they feel unsafe. The benefit of our application is that closest people can take action as quickly as possible when the user is in state of danger. We are also providing crime reporting feature in which suppose particular person saw that the crime is happening then that person can take photograph of it and upload it on our application so because of that police can find location where the crime is happening based on such information police can

able to reach to that location and they are able to take action as quickly as possible. When the user of the application is in a state of danger, increasing the security and quiet of the users of the application because of its location can be monitored by its relatives, and increase the knowledge of its users about the places around it which will increase his self-awareness.

LITERATURE SURVEY

1: Detecting and Mapping Crime Hot Spots Based on Improved Attribute Oriented Induce Clustering
Authors: Xiang Zhang1,2*, Zhiang Hu1, Rong Li1 and Zheng Zheng1
Criminal spot detection is a very effective method for detecting high-crime-areas known as hot spots. Crime hot spot is a area where the number of criminal and their events is larger than that in any other places, or an area where people have a higher risk of crime events explain different types of crime phenomena that occur at different geographic levels. This method which is used most widely for detecting crime hot spots in the original crime data

2: A FRAMEWORK FOR TRACKING CRIMINALS USING IMAGE-BASED HEIGHT DETECTION TECHNIQUES
Authors: Onekama E.O1, Oludare S.A2, Alese B.K2
In recent times, the problem of terrorism has approached a global dimension. The operation of terrorists is risky and very hard to perform. Hence, tracking them requires careful planning. Since terrorists have s motives, they often hide their identities or use fake identities. In order to perform terrorist's attacks. In this we present a framework for tracking criminals using imaged-based height detection techniques. The framework involves four case studies of different postures. An algorithm was developed to capture the intrinsic parameters. The model developed was able to detect, both in the local as well as global, a person's height with no fore-knowledge of the zooming rate with which the picture was taken. Matlab R2009a was used as a programming tool in the implementation of the developed algorithm.

EXISTING SYSTEM

Crime is the most important issue. Not only for Indian government but also for common people mostly it is found that crime happening are more frequent certain specific location crime in the streets is a very serious problem and has become a great concern for the Government. Evert year the crime rate is increasing. One of the methods to reduce it is by increase community awareness and increase response time of crime detection. Difficult to find information about the area skipped when you want to travel became one of the factors lack of public awareness. Especially for road users who will pass through unfamiliar areas, it would be good if before traveling user can find information about the security of the area to be passed.

SYSTEM ARCHITECTURE

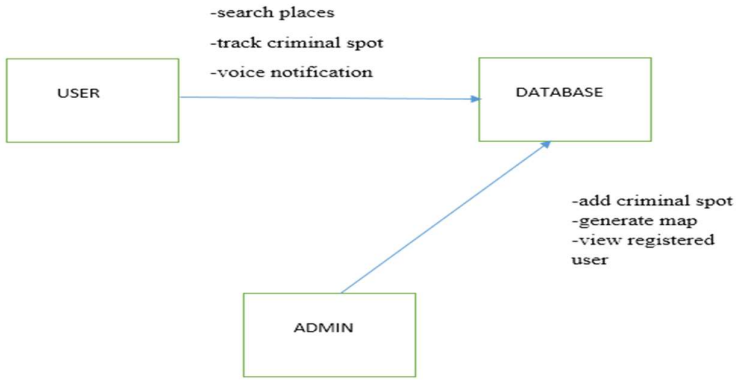
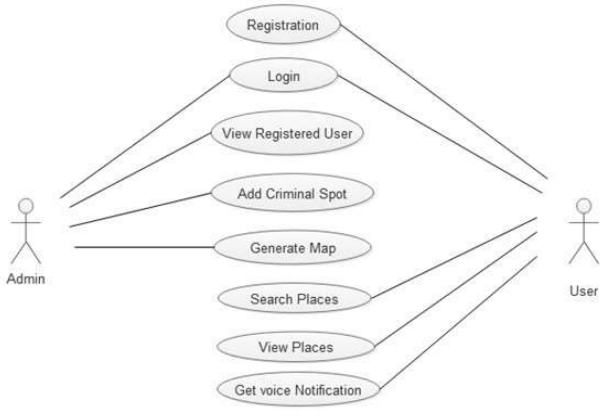


Figure 3. System Architecture

USE CASE DIAGRAM



MATHEMATICAL MODEL
METHODOLOGIES:

The algorithm in which every operation is uniquely defined is called deterministic algorithms. The algorithm in which every operation may not have unique result, rather there can be specified set of possibilities for every operation, such algorithms are called Non deterministic algorithms. Non deterministic means no particular rule is followed to make guess. The algorithms are classified into groups depending on their computing time.

P Class: This group consists of all algorithms whose computing times are polynomial time that is there computing time is bounded by polynomials of small degree. Eg. Insertion sort, merge sort, quick sort have polynomial computing time.

NP Class: This group consists of all algorithms whose computing time are non- deterministic polynomial time.Eg. Traveling salesman problem The NP class problem can be classified into two groups:

NP Hard Problems: Normally optimization problems are NP-Hard problems. All NP complete problems are NP hard but some NP hard are not NP complete. A problem is NP hard if and only if It's at least as hard as NP complete problem.

NP complete problems: Normally decision problems are NP-Complete problems. Non deterministic polynomial time complete problems. Decision Problems: Any problem having the answer either zero or one is called decision problem. Explanation: Consider any decision problem, where for any given n number of inputs, decision-oriented solution is available. Our system will deal with authentication which is decision problem based system and gives solution as valid or invalid, thus our Problem is NP-Complete.

MATHEMATICAL MODEL:

Let S is the system to get voice notification on the criminal spots.
S = { I, O, F, DD, NDD, Success, Failure}
Where,
I = Input
I = {Criminal Spots, no of times the crime occur at specific place, map, location}
O = Output
O = {Voice notification, view criminal spot, place recommendation}
F = {Register, Login, add location, view location, send notification, search location, view users}
Success – All processes executed successfully
Failure – problem in software

STATE MACHINE DIAGRAM

Figure 4.State Machine Diagram

RESULTS

This system gets the input from admin to get the alert message on user's mobile that the user is enters into dangerous zone.

The output of system is shown by android application which send a voice notification to the user of our application when they enter into unsafe area.it shows history of the events that have been occurred in a particular environment. The main outcome of our project is to find criminal and black spot and to identify the causes of crime to reduce the crime level. To find out frequent crime location. With the help of crime reporting the person can upload the photograph of crime spot which is received by police to reach to that crime location and to take action.

CONCLUSION

Thus, we have concluded that, whether a place is a dangerous area or not through the information of on criminal spot the Journey application that includes reports around the criminal spots to make them aware.

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