



## ANDROID PHONE TRACKING SYSTEM

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### Abstract-

Most of situating frameworks have been intended to work inside conditions that have a long haul stable large scale structure with potential little scope dynamics. A keen situating framework for following cop in exceptionally unique modern situations, for example, mystery missions by utilizing Android Application. We show how these maps can be utilized related to social powers to precisely anticipate human movement and increment the following exactness.

### 1. INTRODUCTION

Most of situating frameworks have been intended to work inside conditions that have a long haul stable large scale structure with potential little scope dynamics. A tale situating framework for following police officer covertly missions by utilizing Android Application. It shows how these maps can be used in conjunction with social forces to accurately predict human motion and increase the tracking accuracy.

The positioning systems have been designed to operate within environments that have a long-term stable macro-structure with potential small-scale dynamics. It is very difficult to predict the person who is beside

us. Sometime mistakes may occur due to misunderstanding between their team met. An accident is occurred in police mission. A policeman shot another policeman who is in their same team due to insufficient tracking and misunderstanding between them. To track the people in secret mission this mobile app is very useful in police department.

### 2. LITERATURE SURVEY

#### 2.1.1. Device-Free Human Localization Using Panoramic Camera and Indoor Map

The widespread application of camera-based surveillance systems has inspired extensive investigation on



human localization. A device-free localization method using panoramic camera and indoor map. After pre-processing the images observed with a panoramic camera, we detect human object as foreground using the widely used background subtraction method. Then we search all the foreground pixels and find the pixel whose location can represent the object's location best.

### **2.1.2. Tracking People in Highly Dynamic Industrial Environments**

Existing CCTV camera infrastructure found in many industrial settings along with radio and inertial sensors within each worker's mobile phone to accurately track multiple people. This multi-target multi-sensor tracking framework also allows our system to use cross-modality training in order to deal with the environment dynamics. In particular, we show how our system uses cross-modality training in order to automatically keep track environmental changes (i.e. new walls) by utilizing occlusion maps.

### **2.1.3. Localization in highly dynamic environments using dual-timescale**

#### **NDT-MCL.**

Dual-Timescale Normal Distributions Transform Monte Carlo Localization (DTNDT-MCL) - is a particle filter based localization method, which simultaneously keeps track of the pose using an a priori known static map and a short-term map. The short-term map is continuously updated and uses Normal Distributions Transform Occupancy maps to maintain the current state of the environment. A key novelty of this approach is that it does not have to select an entire timescale map but rather use the best timescale locally. [3] proposed a novel method for secure transportation of railway systems has been proposed in this project. In existing methods, most of the methods are manual resulting in a lot of human errors. This project proposes a system which can be controlled automatically without any outside help. This project has a model concerning two train sections and a gate section. The railway sections are used to show the movement of trains and a gate section is used to show the



happenings in the railway crossings. The scope of this project is to monitor the train sections to prevent collisions between two trains or between humans and trains and to avoid accidents in the railway crossings. Also an additional approach towards effective power utilization has been discussed. Five topics are discussed in this project : 1) Detection of obstacles in front of the train;2) Detection of cracks and movements in the tracks;3) Detection of human presence inside the train and controlling the electrical devices accordingly 4) Updating the location of train and sharing it with other trains automatically 5) Controlling the gate section during railway crossing. This project can be used to avoid accidents in the railway tracks.

### **Methodology**

Provide an android app to be used in the secret mission of the police department. The main purpose of this app is to avoid accident during secret mission and make a link between the members in the team. It show how these maps can be used in conjunction with social forces to accurately predict human motion and increase the tracking

accuracy. This will make the policeman concentrate in their work and help to show the location of other team members in the mission.

### **3.1.Android Studio:**

Android Studio is software which is used to develop mobile application. In this application, there are four modules in this application. First module is Authentication; this will provide security for the mobile application by using the data in the database. This is done by matching the given user ID and password with the data in the database. If data were similar then the screen will move on to the next page. Second module is LocationTracking; this will show the location of all the users who were logged in. The location is updated in the database for every movement of the user. Then the location is displayed in the map page. Third module is Safety Lock; this module is to provide security after the user logged in. This is to avoid the usage of application by external access. The map page is locked every ten second for avoiding misuse of the application. Last module is database; this

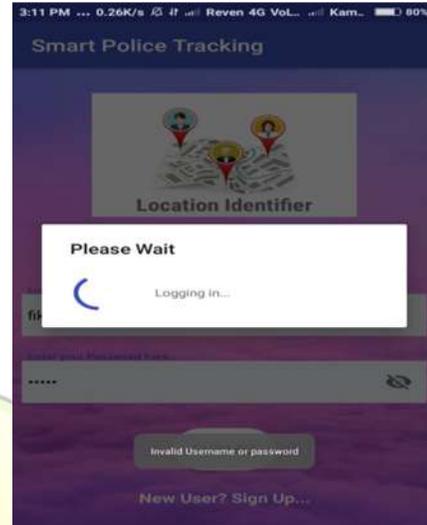
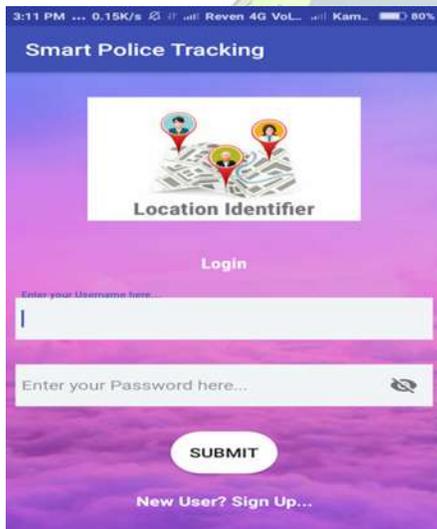


will store the information of the users and also used for authentication.

### 3.2. MODULES

#### 3.2.1. Authentication

Checking the given user ID and password is matched with the data in the database. If the data is matched then the application is logged into map page.



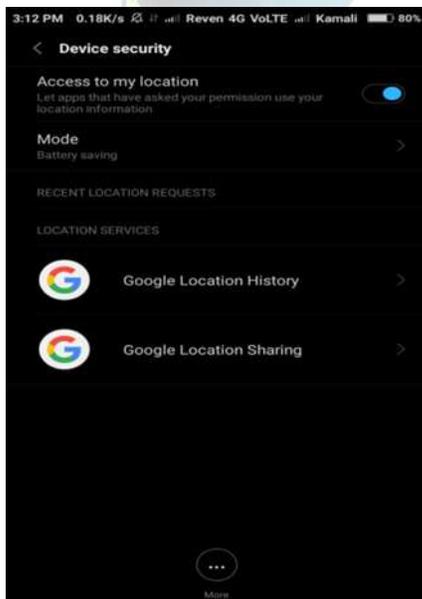
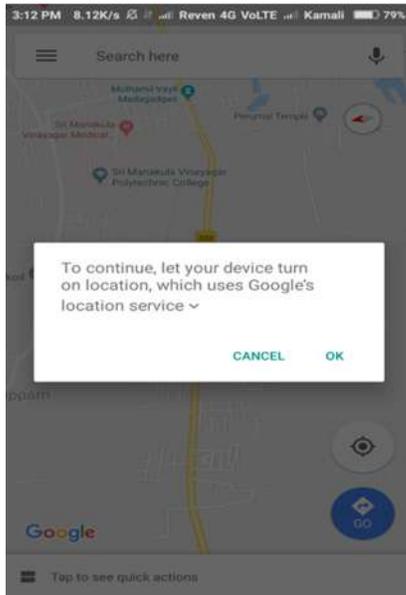
#### 3.2.2. Location Tracking

Map page display the location of every user who were logged in the application. For every movement the latitude and longitude is updated in the database. By using the data location is changed in the map page.





### 3.2.3. Mobile Authentication



in the database. We have already put the information of the user like (name, ID, password, image). If the data is similar then the map page is login. Else the application was exited. It is used to provide security for the application. [6] discussed about a disclosure which is made regarding a wallet safety where a locking system is designed along with an automatic credit –debit card eject system. The wallet is provided with a screen display to select the card and to provide finger print authentication to access the wallet and to select the card which needs to be ejected out of the wallet for usage. The wallet is connected to a mobile device which can remotely monitoring its usage and location in case wallet is lost.

### 3.3 SYSTEM ARCHITECTURE

The users enter the user name and password.

These information is checked with the data

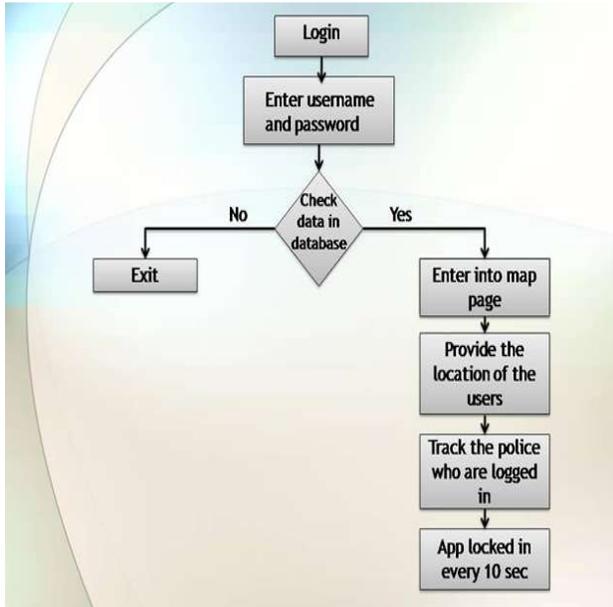


Fig 3.3 System architecture

### 3.4 ADVANTAGES

- This will reduce the cost.
- Easy to monitor policemen.
- Avoid accident due to misunderstanding.
- It is portable.
- Accuracy is very high.
- Security is high.

## 4. SYSTEM REQUIREMENTS

### 4.1. Hardware requirements

PROCESSOR: AMD PRO A4-3350B APU with Radeon R4 Graphics 2.00 GHz.

RAM : 4 GB RAM

HARD DISK : 512 GB

KEYBOARD : 102KEYS

### 4.2. Software requirements

Operating system : Windows 10

IDE : Android Studio 2.3.3

Front End : XML

Coding Language : Java, PHP

Database : SQL Server

## 5. Conclusion

By using this application we can easily detect the location of the policeman. It will help us to provide an efficient tracking to monitor other team met in the secret mission. When they were going for the secret mission this application is easy to carry. Because, it is an Android app run in mobile phone.



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