A framework design for women's safety using android application

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ABSTRACT: In moment's world, indeed though there are so numerous profitable developments in our country, but crimes against women are inversely raising. Since we can not travel with them all the time, though it's necessary that they need protection. It's predictable that every single one of them is having smart phones with them. So this operation is to give security through smart phones. This system presents women security an Android Operation for the Safety of Women and this app has so numerous features like a GPS position transferring to the exigency connections with the present position of the person in trouble.

Keywords Protection, Smart phones, Security, GPS, Emergency, Location

1. INTRODUCTION

Women are frequently worked across racial, sacred, opinionated, and intellectual divides to encourage serenity. so we are so conscious about the safety of ladies, but we must know that they ought to be secured and freely travelled everywhere. Where a girl isn't most strong as compared to the physical strength of men, that why needs a aid to alleviate them from a crisis or any difficult situation? When a victim of violent crime (robbery, sex crime, rape, domestic violence) is identified then it must minimize and use some resources to safeguard them from unsafe situations. Whether a lady is in any critical situation like got separated from friends in the dead of night and doesn't know the way to travel alone to home moreover as feeling insecurities, at that moment by using this app on phone can reduce the explanation for risk and supply support whenever it's required. within the recent crime in Delhi which shivered the state and made us more tuned in to the security issues for our daughters, that's why the general public is

awaked and prepared to fight back in numerous ways. a wise app has been designed to produce safety features to women on their android phones. Here, we introduce a sensible android app that may attentive to the security of girls from any unavoidable circumstances. This app also minimizes the likelihood of risk and helps us to spot the situation where the person is at risk. Android is that the free and robust platform that's widely used mobile OS motorized by Linux kernel, thanks to that gain much popularity. Especially it had been designed by Google team and also managed its functionality with the assistance of the Java language. The advanced safety app is predicated on an android platform that utilizes the right way of memory management for accustom virtual machine and hardware resources in an android phone-in this fast paced world, Women Security may be a major issue of concern. We have stumble upon such a lot of unfortunate incidents happening with women and the rate is rapidly increasing day by day. Women nowadays are working women and the globalization has made us aware of gender equality. Earlier there have been so many restrictions for ladies and also the major belief was that they were only meant for household chores. With the changing scenario, women are paving paths for themselves and proving that they're not less than anyone. we will see women going to great success levels all told fields, may it's corporate, scientific, education, business or the other field. Safety of women matters substantially whether at home or outside the house or perhaps in the working place. In recent times there were so many crimes evolving against

women especially the case in Hyderabad was very dreadful and fearful. due to such crimes, women safety has become a serious topic and it's become a major trouble for girls in facing the planet. According to the statistics, it's found that each two out of there women have suffered trauma in the last year. in keeping with the survey of women, it's found that ladies are losing their confidence thanks to such incidents. By the survey of Central government's Women and Child Development Department, around 80% of the ladies in national capital have fear regarding their own and others' lives. there's no time and place for ladies getting harassed because as we've got seen every now then, the news and reports are really of concern. Even if it's day or night, young or old every single women is getting harassed. Actually women reasonably lost their faith in police officials, if not it are decreasing as the crime scenes are increasing and when the criminals get unpunished it makes no sense to trust the govt.. there's a tremendous must understand and resolve this problem of ladies safety in order that they can grow like men. it's a private safety product designed to protect you and your friends for 24/7. it's user-friendly application and might be accessed by anyone who has installed it in their smart phones. Our intention is to supply you with fastest and easiest method to evoke help. The basic approach (single click) is to convey the instant location and a distress message to the registered emergency numbers, so that unfortunate incident may be averted and to provide real time evidence for the action against the committers of crime. This can also help the police to cut back the crime rate

against women and also the evidence can be used for tracing the culprits. This application helps to require preventive measures as soon as possible during:

- Being stalked while moving.
- Attempt of physical or regulatory offense.
- Unsafe neighbors.
- Domestic violence

2. Existing System

There are various number of applications designed for the safety of women when they are in emergency situation. The disadvantages of using these applications are they only send the alert messages to the saved contacts but there is no option of calling. Because of previous systems there is less possibilities of overcome the threatening situations of women. Previous applications also have GPS tracking system for to track the live location of women but it has not specific range. In the existing system there is no image capturing feature, it should create many problems for them and the no safety mechanism to protect the girls from the inappropriate activities. In addition, in the existing system there is no alert mechanism, it should be done by manually only.

3. Literature survey

Akram et al. [11] developed a security device to guard women from vulnerable activity and lonely travelling on the road using IoT supported the fingerprint security method. This device alerts closure people furthermore as a station, if any wrong or criminal movements thereupon women. Saikumar et al. [12] proposed a gadget to locate a risky place

and lots of threats for girls through IoT modules like Arduino UNO controller. So this controller is additionally integrated with Bluetooth device, teaser and Android app. But the general system is tracked the risky spot of the ladies with the assistance of GSM and GPS module. Ullah et al. [13] have designed an IoT based smart system and android application that may track the closest location of the bus and station using the GPS module. Similarly, the IR sensor provides data about seat availability. But any women harassment situation occurred then press an alert button that available in an exceedingly seat. When the button pressed, it forwards the message to the closest police office with this spot of the bus. Roy et al. [14] have constructed a wearable sensor band that protects women from various threats like lonely walking on road and harassment. Whereas that band is meant through body sensor, Bluetooth module, GPS, SMS and mobile database system that job followed by a supervised method of machine learning.Sogi et al. [15] implemented a sensible security wearable ring for girls supported IoT modules that connected with Raspberry Pi controller, Pi camera and buzzer. this method is activated by pressing the button then the buzzer is

enabled and also the camera has captured a picture of abuser or attacker. in order that related information forwards to police through a Smartphone for taking protecting action. Khandoker et al. [16] build an android application to cut back the criminal and harassment movements through passing voice command or pressing the SOS key. So it also facilities the continual location tracking of victim spot that gives useful features in offline mode. So man et al. [17] designed a multipurpose smart

wrist band for the safety of ladies from various hazardous situations by observing through heartbeat movement, shivering and sweating through various sensors. additionally to locating the risky zone additionally because the health parameter of users or women, forwards automatically alert messages to an emergency station to produce security. An increasing number of crime against women has planted seeds of fear within the minds of Indian people. These fears ultimately end in the imposition of deadlines and strict rules which each woman must adjust to, willingly or unwillingly. rather than bringing confidence in a very girl, these rules gradually turn them into meek beings incapable of facing the skin world. To alleviate fears of relations and to assist a girl move around confidently, entrepreneurs have extended apps for women's safety. Here are 10 such apps, which, protecting them in every situation. will act as a watcher for the girl.

4. Proposed System

This system is for women's safety and overcomes being systems. This GPS system is that the " Women's Safety App". It consists of a GPS device, an Android phone. The unit will give status information like latitude, the longitude of theuser.The proposed App relies on advanced detectors. on every occasion a stoner makes a telephone, an exigency signal are visiting be generated automatically also an information alert are transferred to the connections that are added to the exigencycall.low- battery alarm when the stoner's battery are visiting be but 10, a coffee battery alert communication are visiting be transferred to the exigencycontacts.In the new

operation, we offer a stoner-friendly connection where the stoner can shoot announcement information in an exceedingly veritably simpler and further intelligent way. The stoner did not must forget all the important contact figures for his or her siblings or musketeers. The new system is also interactive for druggies and provides them the chance to induce to grasp the police, the sanitarium, and their position.
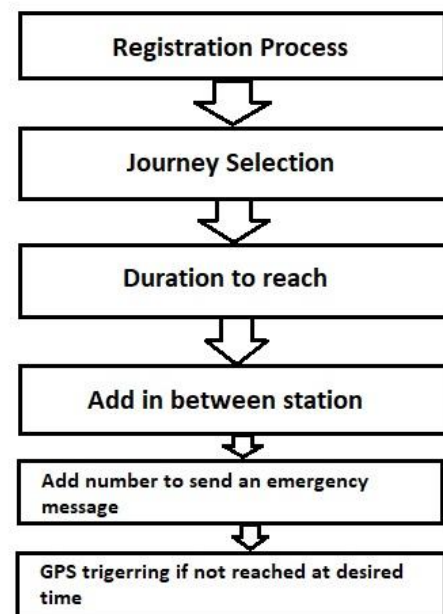

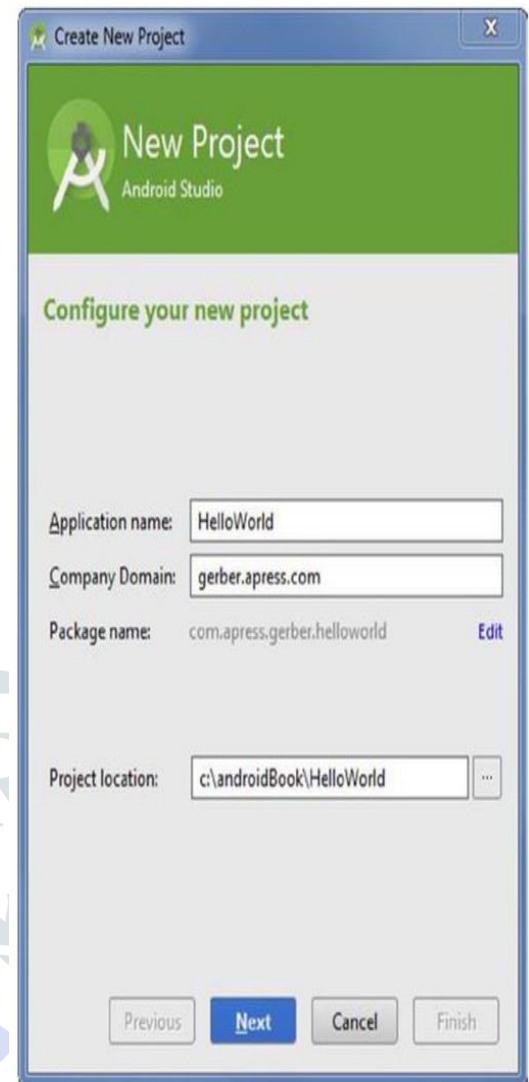**Fig. 1 Flowchart of the proposed system**

5. Methodology

Women's security is a critical issue in moment's world and it's veritably important demanded for every existent to be acting over such an issue. This document describes a GPS grounded " Women Security System" that provides the combination of GPS device as well as give cautions when the woman did n't suitable to reach the destination applicable time. Our system provides a doable, cost effective result to problem discovery.

Nowadays due to lately happed cases similar as rape by motorists or associates, burglaryetc.,

women security, especially women security has come the foremost precedence of the world. System uses the Global Positioning System (GPS) technology to find out the position of women. The information of women position handed by the device can be viewed on Google maps using Internet or specialized software. The companies are looking for- ward to the security problem and requires a system that will efficiently estimate the problem of women security working in night shifts, traveling alone. We concentrate on the proposed model that can be used to deal with the problem of security issue of women using GPS grounded shadowing system.

• Design

• UserInterfaces

• Triggers

• Storedprocedure

• Androidplant

• Installing Android Studio

In the New Project wizard that appears (see Figure), type Hello World in the Operation Name field and typegerber.apress.com in the Company Domain field. Notice that the package name is the rear company sphere plus the name of the design. Install your Hello World design in the root of your labs parent directory. As mentioned before, we use C android Book if you 're running Windows However, your labs parent directory name won't begin with a letter, but rather a forward rent, If you 're running Mac or Linux.

Fig.2 Configure your new project

The Android operating system can run on numerous platforms, including game consoles, boxes, watches, spectacles, smart phones, and tablet computers. By dereliction, the Phone and Tablet check box will be named, and API-8 will be named as the minimal SDK.

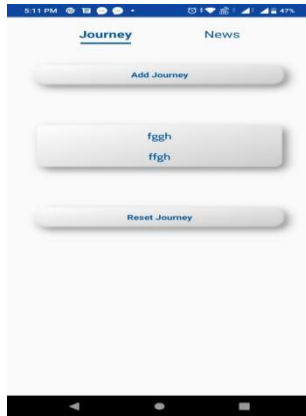## 6. Performance Analysis

6.1 Screenshot of the mobile window
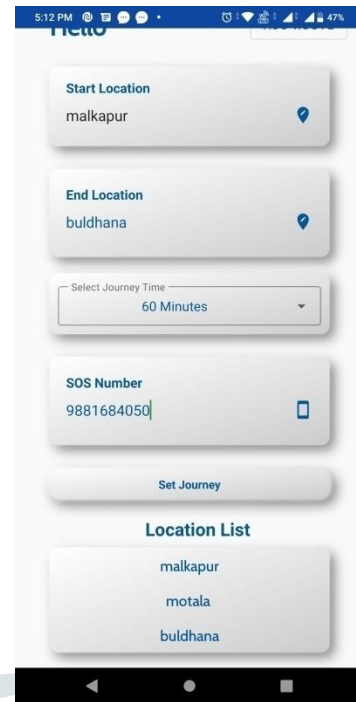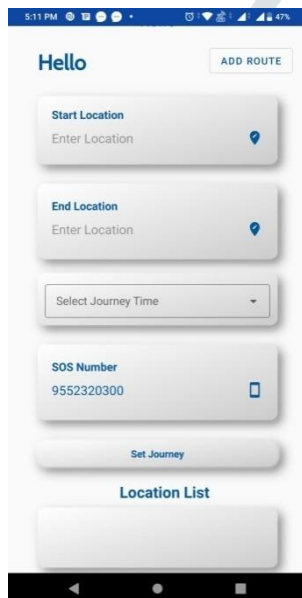

Fig. 3 Adding route window for app

Fig.4 Setting starting and end location
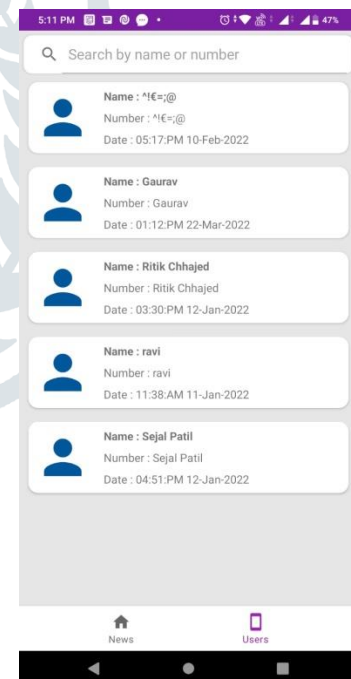

Fig.5 Assigning emergency number

Fig.6 Number of registered user in the app

7. Conclusion And Future Scope

7.1 Conclusion

Android offers a unified approach to operation development for mobile bias which means inventors need only develop for Android, and their operations should be suitable to run on different bias powered by Android. The source law for Android is available under free and open source software licenses. The many reasons which make android an ideal platform development is Open source, Larger inventor and community reach, Increased marketing, Inter App Integration, Reduce cost of development, Advanced success rate and Rich development terrain.

It can be concluded that our App provides a safe and secure terrain to the women in the society, and allows them to work till late nights. Anyone before doing any crime against the women will be dissuaded and it help reducing the crime rate against the women. This operation will act like a armament for women that will insure the safety and security which works on the Smartphone with the android operating system.

7.2 Future Scope

With farther exploration and invention, our design can be enforced on a small wearable device like watch, pendent, wristband which will be make using GPS and GSM modules. On driving this system the GPS data will acquired by the GPS module and will decoded into a valid Google maps link and shoot through textbook dispatches to enlisted family, musketeers.

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