Save Me: A GPS Based Women Safety Application

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Abstract_ Security for women has become a major issue as the number of crimes over women and girls increasing day-by-day. This article makes use of new perspective to use technology to protect women. We use an android based smart phone with an integrated feature that alert and provide location-based Information. This Document describe GPS based **"Women Security System"** that provides the combination of GPS devices as- well-as provide alerts and message with an emergency button Trigger. Whenever somebody is in trouble, they only have to press a button after that a message alert is sent to register contact list to the number registered first and give a message like "I AM In TROUBLE PLEASE HELP ME". Now a day safety of women is becoming very poor. With the help of this application, we can help women. The development in Android with Graphical User Interface provides the level of reliability, availability and compatibility.

A. Introduction:

Women are adept at mobilizing diverse groups for a common cause. They often work across ethnic, religious, political, and cultural divides to promote peace. We are all aware of importance of women's safety, but we must realize that they should be properly protected. Women's are not as physically strong as men, in an emergency situation a helping hand would be a relief for them. The best way to minimize your chances of becoming a victim of violent crime (robbery, sexual assault, rape, domestic violence) is to identify and call on resources to help you out of dangerous situations. Whether you're in immediate trouble or get separated from friends during a night out and don't know how to get home, having these apps on your phone

can reduce your risk and bring assistance when you need it. Although several were originally developed for students to reduce the risk of sexual assault on campus, they are suitable for all women In the light of recent outrage in Delhi which shook the nation and woke us to the safety issues for our daughters, people are gearing up in different ways to fight back. A host of new apps have been developed to provide security systems to women on their phones.

Here we introduce an app which ensures the safety of women. This helps to alert resources to help the one out of dangerous situations. These reduce risk and bring assistance when we need it and help us to identify the location of the one in danger. This app designed to provide security to women main purpose of this app to provide the awareness on the time of critical situation for women. Whenever u feel you are in danger or emergency just by clicking on POWER KEY the application sends SMS to those contact which you saved at the time of registration the SMS contain your message and your current location.

B. Objectives:

- To improve community safety with women in urban environments.
- The main objective of the project is to provide highly reliable security system for the safety of women.
- The basic aim of the system is to develop a low-cost solution for GPS based women tracking system (women safety system) and to track the current location of the person which has an android enabled mobile by extracting the longitude and latitude of that target person.
- To decrease the incidence (number of experiences) of harassment on women and girls.
- To increase the public's knowledge of what constitutes harassment and to increase women's confidence and desire to use public spaces in the city at night.

C. What is Mobile Computing?

Mobile computing is the discipline for creating an information management platform, which is free from spatial and temporal constraints. The freedom from these constraints allows its users to access and process desired information from anywhere in the space. The state of the

user, static or mobile, does not affect the information management capability of the mobile platform. A user can continue to access and manipulate desired data while traveling on plane, in car, on ship, etc. Thus, the discipline creates an illusion that the desired data and sufficient processing power are available on the spot, where as in reality they may be located far away. Otherwise, **Mobile computing** is a generic term used to refer to a variety of devices that allow people to access data and information from where ever they are.

Structure of mobile computing

Different types of devices used for the mobile computing:

1. Personal digital assistant/enterprise digital assistant
2. Smartphones
3. Tablet computers
4. Netbooks
5. Ultra-mobile PCs
6. Wearable computers
7. Palmtops/pocket computers

Applications of Mobile Computing:

1. Vehicles:

Tomorrow's cars will comprise many wireless communication systems and mobility aware applications. Music, news, road conditions, weather reports, and other broadcast information are received via digital audio broadcasting (DAB) with 1.5 M-bits/s. For personal communication, a global system for mobile communications (GSM) phone might be available offering voice and data connectivity with 384 k-bits/s. For remote areas satellite communication can be used, while the current position of the car is determined via global positioning system (GPS). In case of an accident, not only will the airbag be triggered, but also an emergency call to a service provider informing ambulance and police. Cars with this technology are already available. Future cars will also inform other cars about accidents via the ad hoc network to help them slow down in time, even before a driver can recognize the accident. Buses, trucks, and train are already transmitting

maintenance and logistic information to their home base, which helps o improve organization (fleet management), and thus save time and money.

2. Emergency:

Just imagine the possibilities of an ambulance with a high quality wireless connection to a hospital. After an accident, vital information about injured persons can be sent to the hospital immediately. There, all necessary steps for this particular type of accident can be prepared or further specialists can be consulted for an early diagnosis. Furthermore, wireless networks are the only means of communication in the case of natural disasters such as hurricanes or earthquakes.

3. Business:

Today's typical traveling salesman needs instant access to the company's database: to ensure that the files on his or her laptop reflect the actual state, to enable the company to keep track of all activities of their traveling employees, to keep databases consistent etc., with wireless access, the laptop can be turned into a true mobile office.

Advantages of Mobile Computing:

Mobile computing has changed the complete landscape of human being life. Following are the clear advantages of Mobile Computing:

1. Location flexibility:

This has enabled user to work from anywhere as long as there is a connection established. A user can work without being in a fixed position. Their mobility ensures that they are able to carry out numerous tasks at the same time perform their stated jobs.

2. Saves Time:

The time consumed or wasted by travelling from different locations or to the office and back, have been slashed. One can now access all the important documents and files over a secure channel or portal and work as if they were on their computer. It has enhanced telecommuting in many companies. This also reduces unnecessary expenses that might be incurred.

3. Enhanced Productivity:

Productive nature has been boosted by the fact that a worker can simply work efficiently and effectively from which ever location they see comfortable and suitable. Users are able to work with comfortable environments.

4. Ease of research:

Research has been made easier, since users will go to the field and search for facts and feed them back to the system. It has also made it easier for field officer and researchers to collect and feed data from wherever they without making unnecessary trip to and from the office to the field.

5. Entertainment:

Video and audio recordings can now be streamed on the go using mobile computing. It's easy to access a wide variety of movies, educational and informative material. With the improvement and availability of high-speed data connections at considerable costs, one is able to get all the entertainment they want as they browser the internet for streamed data. One can be able to watch news, movies, and documentaries among other entertainment offers over the internet. This was not such

before mobile computing dawned on the computing world.

6. Streamlining of Business Processes:

Business processes are now easily available through secured connections. Basing on the factor of security, adequate measures have been put in place to ensure authentication and authorization of the user accessing those services.

Some business functions can be run over secure links and also the sharing of information between business partners. Also, it's worth noting that lengthy travelling has been reduced, since there is the use of voice and video conferencing.

D.Literature Survey:

The purpose of literature review was to establish the potential topics and suggest ideas for another research, reporting published materials on existing conceptual framework, theories, techniques, processes, styles and instruments of other researchers related to the topic under investigation. At the same time to identify why some of the literature was noteworthy and which literature had made important theoretical contributions to the field being

studied. It helped align our scope of study and in determining the various variables to be included. As for this research, the main purpose of literature review was to grasp comprehensive ideas on the extent of digital library initiatives and projects that had taken place worldwide and the factors and conditions that had influenced and contributed to their success.

1) Android Application for women security system

AUTHORS: Kavita Sharma, Anand More

Women's security is a critical issue in today's world and it's very much needed for every individual to be acting over such an issue. This document describes a GPS and GSM based "women security system" that provides the combi-nation of GPS device as well as provide alerts and messages with an emergency button trigger. When-ever some body is in trouble they might not have so much time, all that they have to do is pressing the volume key. Our system provides a realizable, cost-effective solution to problem detection. Now a days due

to recently happened cases such as rape by drivers or colleagues, burglary etc., women security, especially women security has become the foremost priority of the world. System uses the Global Positioning System (GPS) technology to find out the location of women. The information of women position provided by the device can be viewed on Google maps using Internet or specialized software. We focus on the proposed model that can be used to deal with the problem of security issue of women using GPS and GSM based tracking system.

2) SCIWARS Android App for Women Safety

AUTHOR: Vaijayanti Pawar, Prof. N.R.Wankhade, Dipika Nikam.

Every human on this planet is working hard for a comfortable living and wants to safeguard his investment that he has made in his day-to-day work. Ultimately, at the end of the day we all seek for security of life and our belongings. The major question to ask your self is we really secure? The world is not perfect and we are susceptible to the

dangers that exist in the society hence the urge to feel protected and safe is fulfilled by the use of hidden cameras. A hidden spy video camera can be available anywhere. We should be conscious about this aspect, because we might be in a particular place, where our actions will be recorded without us being aware of it. Unfortunately, the very reasons that make this device so effective can also lead to its misuse by some. Sex scandals involving women and children have occurred due to being recorded illegally. Profits are made through exploiting this to others whose actions have been monitored by a hidden camera. Victims" lives are bust through the same technology that should have been used to make people feel secure. There should be some way or technique which can help the person from spy cameras to maintain their privacy. So, we have to propose SCIWARS (Spy Camera Identification and Women Attack Rescue System) intelligent alerts system which will help to prevent from being victim of any kind of attack or spy cameras. This system contains two modules, first module will detect Hidden cameras, which are hidden in hotels room, changing rooms. The second module will helps victims from attack like physical violence, if victims feels unsecure and helpless at any time

then by pressing any key of her mobile continuously the alert message is send to nearest police control room, family, Ambulance, Friends which are in emergency list that alert message will contains the entire location of that victims place and images of that location which are taken by camera of her mobile. This will helps victims to avoid attack and it also helps to police to reach that place as fast as possible for provide help to victim and save her from attack.

E. Conclusion and Future Enhancement:

This mobile application is very much helpful for any women. Because when a woman is in danger position then she can simply Press the power button of her smart phone for a while and this Safety mobile app send SMS to the registered mobile numbers along with the current location of women. The users can register up to 5 mobile numbers and can manage them. The Women Safety Mobile Application meets all the user requirements as mentioned before. On a whole the Application is efficient and accurate in location and sending sms.

Future Enhancements:

This mobile application is helpful in future when any problem arises in travelling or any kind of situations. As the technology emerges, it is possible to upgrade the system and can be adaptable to desired environment. Because it is based on object-oriented design, any further changes can be easily adaptable. Based on the future security issues, security can be improved using emerging technologies.

1. Forgot password can be implemented
2. Application can be host in real server and in play store.

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