

CHAPTER 1

INTRODUCTION

1.1 Introduction of project

This is an Android application that works as a safety alarm or emergency alarm. It consists of two modules: users and responders. When a user needs help, they can inform others of their location and send a distress message with just one click. Users and responders can register, and they each have different authorities. Only responders can close an alarm by responding to the user's alert. Using this application, a user can quickly get help, and there is one more feature that allows users to indicate their status by selecting options like 'safe,' 'unsafe,' or 'injured.' When an alarm is raised by a user, all users receive a notification, and if any of them want to help, they can respond. The actual operation of this application is as follows: when a user raises an alarm, both users and responders can access detailed information about the user, including their name, gender, and location. The application utilizes G-map to track the user's location and provide real-time updates, and users can also update their status as 'safe' or 'unsafe.' Furthermore, this application allows users to call emergency numbers such as ambulance, police, and fire services. All accidents that occur are stored in an event/accident list with all the relevant details. The project includes a backend database for user profiles, location data, and emergency contacts. Notifications and alerts are sent to all users with information about the accident and user details

The purpose storing the data of all accident with there all details we analyze this data and finds the places where more accidents are occurred. While using this application when at any time no any responder present their response to these alarm then one additional feature is emergency call by click through this application user call our helpers like police, ambulance and fire. This feature is also used when there is no internet access, when internet is not available then alarm is not raise due to lake of internet no any chance to inform anyone then emergency calling feature is used. To identify the status of user three colors are used to dedicate the status like yellow, orange and red, where yellow is colored status id uploaded when user is safe but it needs help. When user upload there status as unsafe then orange colored status is seen to responder. Same as this when user upload there status as injured on the map the box which point the location of this user that is blinked with red color. This feature help responder to get actual condition of user on that place.

1.2 Problem definition

Therefore, this project aims to effectively build a robust platform for women's empowerment in our society. We endeavored to achieve this by creating a mobile application Women safety application Using Android, we will implement Accessing GPS Locations. Through GPS, the current address of the user is send to responder. We implement this application as an emergency alarm which can raise by one click of user when this alarm is raise details of user is access to the responder. To quickly access the location and provide the help to them.

1.3 Scope of project

The scope of a project for a women safety application can be quite extensive, as it involves multiple features and functionalities to ensure the safety and well-being of women. Here is a comprehensive scope outline for such an application:

- **User Registration and Profile Management:**
Users should be able to create and manage their profiles securely. Where any user can change or modify their profile.
- **Emergency Alarm:**
When user needs help they can easily click on help button and raise the emergency alarm.
- **Location Tracking:**
When user raise this alarm with there all details and location access by all responder.
- **Accidents notification:**
All user get notify when any user raise alarm for help. They also can access the details of user and their Geo location.
- **Status uploading:**
User can upload their live status as like safe, unsafe or injured.
- **Emergency call:**
User are able to call on emergency number like police, fire and ambulance through this application.
- **Accidents information storing:**
Information of all accidents is store in this application for analyzing purpose, by analyze this data when can avoid the accidents raise in this area or improve the security of this

area.

CHAPTER 2

LITERATURE SURVEY

2.1 Literature Survey /Comparison with similar systems

We looked at various market-ready applications for women's safety as part of our literature review. The goal is to examine how these apps function and determine how they might be enhanced and differentiated. In this app we also provide that one feature that was store the information of event/accident occur to the user it can help us analyze the spots where more accidents are raise. The one specific function is that user can login in system by using email. The assistance request containing the user's (woman in danger) GPS coordinates are then forwarded to a network of emergency contacts and police management rooms via SMS. In contrast to most mobile applications offered within the market, a voice-triggered alarm permits the user to need facilitate quickly. As future work, the applying may be enforced on different mobile platforms like iOS and Windows for a wider reach, it's not restricted completely for women and may be utilized by males and children alike. We watch he previous applications for this idea in those application the one feature the common that is tracking the location of user in those application they only track the location of user and only responder are able to access he location of user. This is drawback of those application. After thinking on it we implement idea of this application.

2.2 Specification

This is an android application so android smartphones are easily available to any user by using this smart phone user can request to save them or help them through this application. Once the alarm is raised by the user with is details of user and their location send to the responder. When location is accessed to them they will quickly help to this user. The main specification of this application is quickly access the location of that user provide help to them. One more specification about this system is user can upload their live status that is seen by all user that are logged in system and responder also. When no any responder response to this alarm then through this application user can directly contact with police, fire and ambulance. Hence the specification of this system is improve the security of women this system is not only for women but also men and child also use it. When any alarm is raise the information about this like time, date and place is stored in system which can stored and analyzed it. From this analyzing we can find the places that are insecure for women.

CHAPTER 3

METHODOLOGY

3.1 Objective of project

The objectives this project aims to achieve are as the following:

- To study on the existing mobile application for women personal safety features and carry out the study on the effectiveness of smartphone towards the purpose of women safety.
- To develop a mobile application that enhances the safety of women by provide a reliable app which can used during threatening situations.
- To ensure personal safety and access to an emergency alarm, emergency call and location of them quickly and provide help to them.
- To access the live status of user when they are in trouble.
- To store the list of all accidents.
- To quickly inform for help

3.2 User Requirement

User requirement for this project are:

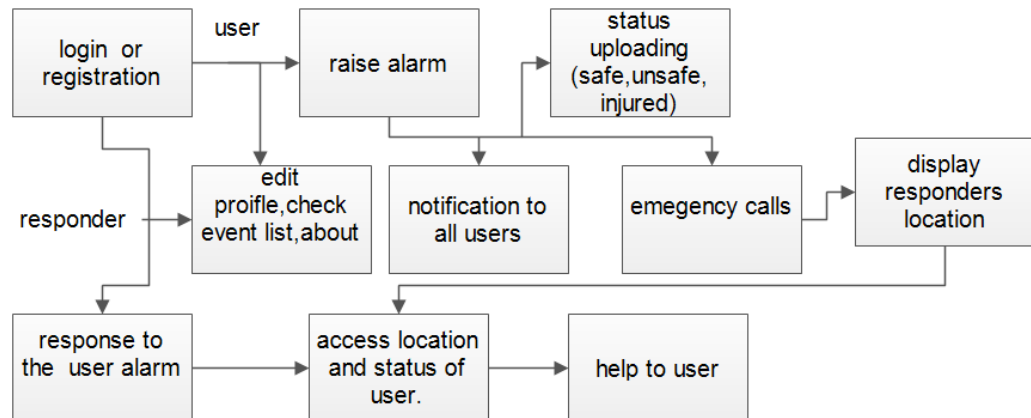
- This application is work user friendly and look and feel is good.
- Cross platform functionality.
- Language is easy to handle
- Easy login and registration into system.
- When alarm is raise it quickly goes to responder.
- Appropriate location is access to the responder when user raise the alarm.
- When user upload their status it quickly displays on responders screen.
- When there is lake of internet then emergency calling feature is work as fast as soon.
- When any accident is occur it stored in database.

3.3 Proposed Detailed Methodology

This is an android application which names “Secure Life”. This application works for women safety for getting quickly help from any one. In this application mainly two modules are one is user and another is responders. On the home page or first operation performed in this application is login into system when user is new to this application then they register into application otherwise they login with their username and password. In registration form user can add their details like username, password, gender, address, age, DOB, criteria of user etc. when user goes to another tab help button is displays on screen which is used for raising the alarm one more control is there for getting information about the application and to modify profile. When user raise alarm it will goes to responder. On the background UI of this application is Google map is displayed there which point the location of user. The next tab opened after raising the alarm is uploading live status like safe, unsafe and injured. When user upload status as safe then on the responders screen where location on user is point it displays with yellow color, same as unsafe it point the location with orange color and when user upload status as injured it point the location with red color. User can able to see which responder is responding to their alarm and also location of responder. When any user raise the alarm it will notify to all user about it all user able to access their location.

Second module of this application is responder which are response to user when alarm is raise. Responder also login into system with username and password when any new responder want to login into system they register into system as responder. Responder also able to modify profile. When any alarm is raise responder will response to this alarm, until any 2 responder does not response to this alarm this alarm in not stopped. Only two condition of closing alarm that user is also able to close the alarm and when 2 responder response to the alarm this automatically it will closes. Responder are able to see live status of user as per that they take quickly action on it. The one more feature of this application is storing data of all accidents or alarm raised by the user, it could help to analyzed the data and point the places or locations where more accidents are raised. When this places are identified then we can take precaution on it and take any action before any accidents is occur. To store the data of all user, responders and accidents. For storing this data database is used. Not only women but also men and child can use this application for safety purpose.

- **Architecture diagram:**



3.4 Hardware and Software Requirement

Hardware requirement:

- Computer or pc(any)
- Processor(i3-i5 or latest)
- RAM(4 GB)

Software requirement:

- Operating system(window7 or latest)
- Visual studio coding
- React native and express frameworks
- Sockets(map, map-direction)

3.5 Cost Estimation

NA

CHAPTER 4

REFERENCES AND BIOGRAPHY

4.1 Books Referred

1. Women's Personal Safety 101 (By Samuel Scott · 2009)
2. Women's Safety, Women's Voices (By Victoria. Office of Women's Policy)

4.2 Web References

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