



ANDROID APP FOR WOMEN SECURITY SYSTEM

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Abstract— The project entitled as “**ANDROID APP FOR WOMEN SECURITY SYSTEM**”. The front end of this project is Java SE 7 Software Development Kit and back end is SQLite. In today's world, people using smart phones have increased rapidly and hence, a smart phone can be used efficiently for personal security or various other protection purposes. Women Security is a major concern in the current scenario and this Android Application for the Safety of Women tries to prevent the threats that might be occurring to women. The app can be activated by a single click, whenever need arises to alert the people associated with the woman. A single click on this app identifies the location of place through GPS and sends a message comprising this location URL to the registered contacts to help the one in dangerous situations. Continuous location tracking information via SMS helps to find the location of the victim quickly and she can be rescued safely.

Keywords— SMS, location, android application, contacts, security, tracking

I. INTRODUCTION

Women are exploring themselves in the various arena in this world and yet are facing many challenges and threats in their fields. Women security has become a major concern in the recent times and this app is developed as an effort for women safety. When a woman is in an uncomfortable situation she can press the panic button in the app and send the current location coordinate for use by police or friends to make the rescue operation easier. The Project entitled as “**Android App for Women Security System**” is developed by Android as front end and SQLite as back end. This is an application built for android handheld devices. It is an application that uses services of SMS, contacts, GPS to enhance the security feature. The application is built using the Android SDK as it is very effective in the development of the app, user friendly to both programmer and the user.

The existing system consists of making calls manually to the emergency contacts from the mobile phones when the women face an uncomfortable situation. By the time she makes the calls the opponents may become alert and may not allow her to do so. Or in the worst case she might have to face much more worst situation. By the time the contacted people come she might have the worst part of the situation done to her. Making the calls manually to the emergency contacts is a drawback of the existing system. Also it takes more time to intimate when there is an emergency situation.

The proposed system is developed to overcome the disadvantages of the existing system specified earlier. We can create Interactive Women Safety Security user application using Android Mobile Application.

The app developed has panic button that allows the user to press when she is in an unfavourable situation. Pressing this button intimates to her emergency contacts and to the nearest police station about her situation immediately. The police can reach the spot at the earliest before any thing worse could happen.

This system is being created using Android and SQLite. Since Android is our Front-End it looks more look and feels for the web application is very effective and secure. This look and feel of it is more users friendly and easy to operate on.

Advantages

- Takes less time to intimate the contacts.
- It takes very short time to publish the alert message and avoids any mishappenings.

II. METHODOLOGY

This project includes five modules and is listed below:

1. Authentication
2. Add Emergency Contacts:
3. Add Personal Information
4. Change personal Information
5. Sending SMS

A. Authentication:

Authentication module contains all the information about the authenticated Person. Authentication is the process of verifying the identity of a Person by obtaining some sort of credentials and using those credentials to verify the users' identity. If the credentials are valid, the authorization process starts. Authentication process always proceeds to Authorization process. User without her username and password can't enter into the login. If she is only the authenticated Person, then she can enter into her login.

B. Add Emergency Contacts:

In this module user add the Emergency Contacts. It contains information about the Id, Name, Mobile Number1 and Mobile Number2. The Emergency Contacts are stored in the database and retrieved when an emergency message needs to be sent.

C. Add Personal Information:

In this module user enters the Personal Information. It contains information about the Id, Name, Mobile Number, email id and address. The Personal Information is stored in the database.

D. Change Personal Information:

In this module the user can her change or update the Personal Information. It changes can be done to information like Name, Mobile Number, email Id, Address. The changed personal information gets updated in the database.

E. Sending SMS Information:

It is the core module of this application. In this module the women safety feature is added. This app is activated by a single click by the women whenever she feels that she is in a stranded situation. A single click on this app identifies the location of the place through GPS and sends a message comprising this location URL to the registered emergency contacts and to the nearest police station immediately and to carry out the rescue operation as soon as possible.

The figure 1 depicts the data flow that occurs in the system.

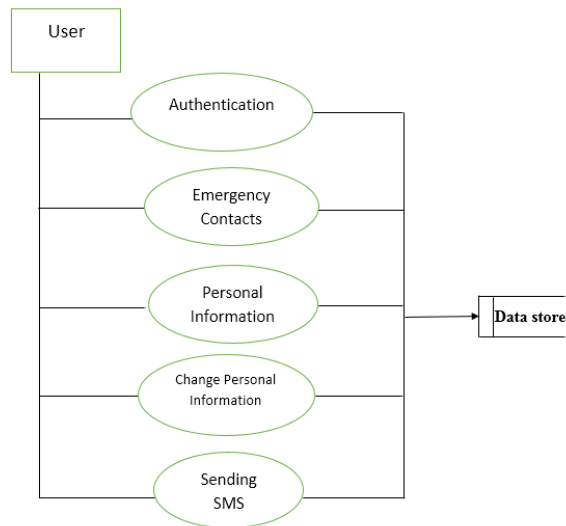


Fig 1. Data Flow diagram for the Android App for Women Security System

III.INPUT DESIGN

Input design in the process of converting user-originated inputs to a computer -based format. Input design is one of the most expensive phases of the operation of computerized system and is often the major problem of a system. In the project, the input design is made in various layouts with various methods. Following are the form designs developed for this app.



Fig.2 Home page

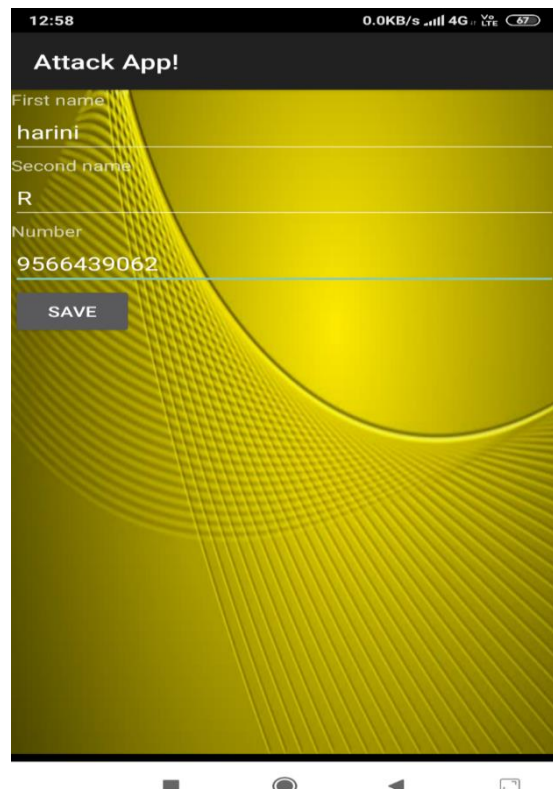


Fig. 3 Registration Page

IV. OUTPUT DESIGN

Output design is a process that involves designing output that have to be given to various users according to their requirements. Efficient, intelligible output design will improve the system relationship with the user and help in decision making. Since the reports are directly required by the management for taking decision and to draw conclusion, they must be designed with utmost care to the user. The options for the output and report are given in the system menu. When designing output, system analyst must accomplish the following:

- Determine the information to present.
- Arrange the present of information acceptable the format.
- Determine how to distribute the output.

The following are the figures of the output that were obtained when the application was executed.



Fig. 4 Main Page

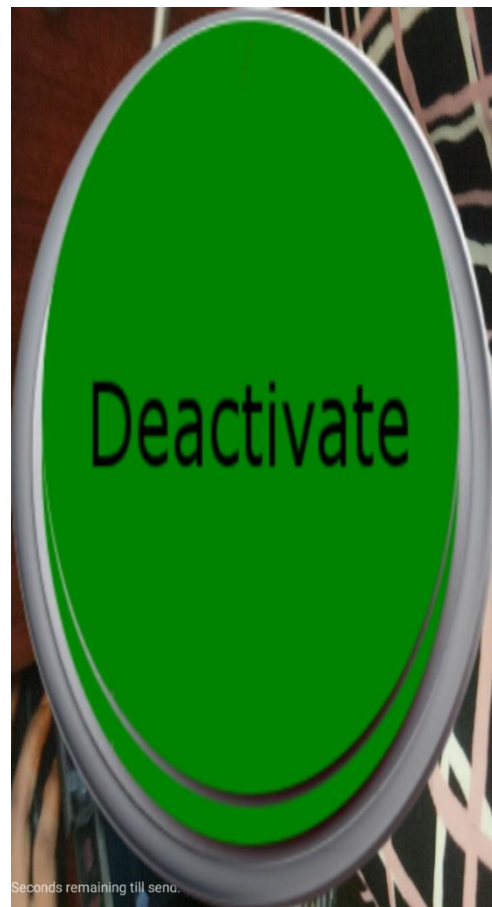


Fig. 5 Deactivate Page

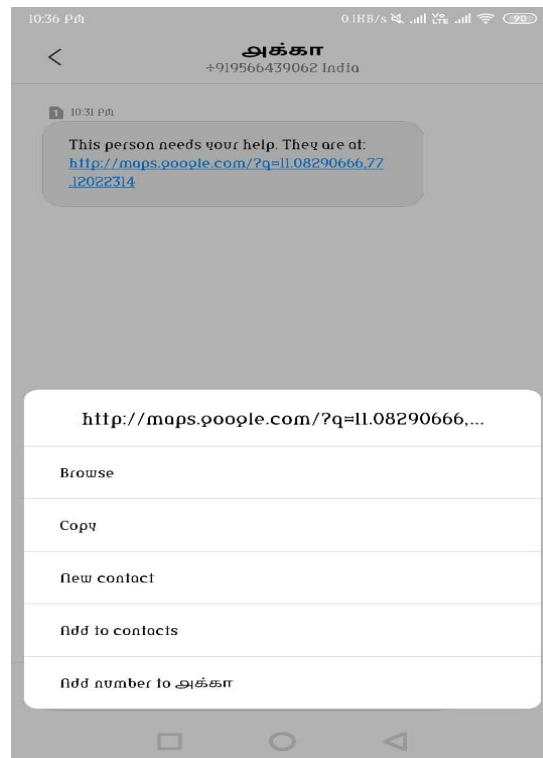


Fig 6 Received SMS Page

V. CONCLUSIONS

The “Andriod App for Women Security System” has been developed to satisfy all the proposed requirements. The process is maintained more simple and easy in ensuring the women safety. The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it ensures the immediate action to be taken when an unfavourable situation is encountered. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation. All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications.

VI.SCOPE FOR FUTURE DEVELOPMENT

There is scope for future development of this project. The Computer technology keeps finding new methods and technologies on a day to day basis. It is dynamic and not static. The skills which is prominent today will become obsolete in a few days. To keep in pace with the technical developments, the system may be additionally improved. So, it is not concluded. Yet it will improve with further augmentations. Augmentations can be done in an effectual manner. We can even apprise the same with further changes and can be integrated with minimal alteration. Thus the project is flexible and can be improved at anytime with more progressive features.

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