

Shakti : An Android App for Mapping of Crime Against Women

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ABSTRACT

The world today is diverting towards equality between male and female”, this would be an ironical statement. Because though we are moving ahead towards modernization, the rate of crime against women is seen increasing day by day. In the digital world of today, every individual is having android phones. So with the basic idea that this android can be used as a safety weapon, there is a number of Android applications developed to date. But how long are we going to build this application? It’s time to identify the root cause of these crimes and diminish it. This paper presents Shakti- An Android application for the safety and mapping of crime against women. This application will help the government bodies and other social bodies to know the most frequent crime happening in every area or the rate of crimes happening in an area. By knowing the crime we can know its root cause, according to which we can apply the aid i.e. the government bodies or social bodies can implement a project for that particular crime in that particular area accordingly. Through this application, the victim can easily connect to the dear ones. Also, the user can contact NGO if they are not able to report to anyone about the crime

Keywords : Android, Women safety, Mapping of crime, Location, Help message, NGO.

I. INTRODUCTION

From past years, it has been recorded that the graph of crime against women has risen. Though the list of NGO’s, Women Empowerment campaigns, safety applications, and more steps for safety of women has continuously risen with time, but the crime graph is still incrementing. There are various government bodies as well as private organizations working for women empowerment and helping the victims. But the call of today is to find the root cause of these crimes and treat it accordingly. Rape, Sexual assault, Domestic violence, Dowry, these are major of the crime list. Everyone is talking about empowering women, blaming the society. What is making a society guilty? Is its people with narrow thinking and

evil minds, and these are the causes of illiteracy, lack of life values, in short- mindset of people.

In everyday Newspaper some areas are in headlines for “Rape” and Sexual “Assault cases”. Some areas are in headline for “Domestic Violence”. The projects that government runs for helping the victims are appreciable. How about not letting any women be a victim? For this a study is needed for every area and the type of crime occurring most frequently.

“Dowry” can be aided with a literate society. “Domestic Violence” needs a little work on the mindset of family; in-laws. “Rape” and “Sexual

Assault” can be stopped if the females are equipped with right safety tools, and self-defense training.

Here, we introduce an android app that ensures the safety of women. It reduces the risk and helps us in need by identifying the location of person who is in danger.

II. PROPOSED SYSTEM

For the need of surveying various areas and implementing appropriate programs in that area to diminish the roots of crime against women, we have developed an android application SHAKTI. In today’s world android phone is a basic thing which everyone carries, with SHAKTI in your android phone women now will feel secure and protected all the time.

Following are the features of our android application:

1. The user will rate a type of crime for their particular area. This data will be graphically represented in our website.
2. In cases when victim is unable to report against crime to the police, victim can complain to the social NGO through this application.
3. User will save three contacts of three family members. Whenever the user feels any danger like crime coming its way, the user can press volume key of its android phone five times and an emergency message for help will delivered to their family members along with the location URL through GPS.
4. Family members will also be notified if the victim’s phone battery is below 20%.

BLOCK DIAGRAM:

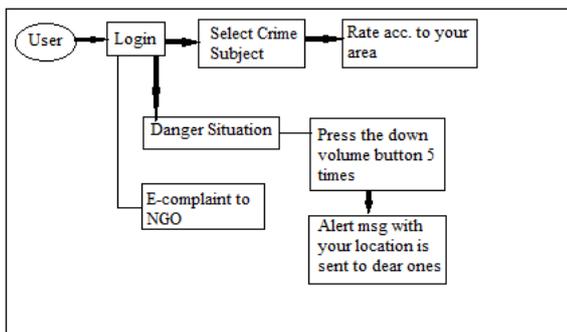


Fig 1. Depicts the data flow diagram of the client side of application.

III. IMPLEMENTATION

Shakti android application is being implemented using the following technologies: (1) Android (2) Java (3) SQL (4) Cloud (5) Web Technologies (6) Database (7) GPS

- 1) Android: Android is the most widely used mobile OS motorized by Linux kernel. This is the first complimentary platform which is robust and is expected to gain much popularity. It was developed by Google team and allows writing managed code in the Java language. The current system is developed on the basis of android platform. Android utilizes a custom virtual machine that was designed to optimize memory and hardware resources in a smart phone. Android does not differentiate between the phone’s core applications and third-party applications. Any application that is built will definitely have equal access to a phone’s capabilities providing users with a broad spectrum of applications and services
- 2) Java: Java is an object-oriented, class-based, concurrent, secured and general-purpose computer-programming language. After front-end elements are finalized java classes and packages are used to make them work.
- 3) SQL: Structured Query Language or SQL is a standard Database language which is used to create, maintain and retrieve the relational database. It is particularly used to work with structured data where there is a relation associated within the data itself.
- 4) Cloud: Cloud storage involves stashing data on hardware in a remote physical location, which can be accessed from any device via the internet. Clients send files to a data server maintained by a cloud provider instead of (or as well as) storing it on their own hard drives.
- 5) Web Technologies: The data collected in this android women safety application we be displayed using website.

- 6) Database: A database is an organized collection of data, generally stored and accessed electronically from a computer system where databases are more complex they are often develop using formal design and modeling techniques. Android comes with in-built SQLite database. SQLite supports all the relational database features.
- 7) GPS: GPS or Global Positioning System is a satellite navigation system that furnishes location and time information in all climate conditions to the user. GPS is used for navigation in planes, ships, cars and trucks also. The system gives critical abilities to military and civilian users around the globe. GPS provides continuous real time, 3-dimensional positioning, navigation and timing worldwide.

IV. WORKING

Shakti : An android app for mapping of crime against women is implemented into two modules: (1) Client side, (2) Server Side.

(1) Client Side: Client side involves interaction of user. User can register in the application through their mobile number. Once registered they can login any time. After successful login user first need to enter its area and its pin code, select the frequently happening crime from the drop-down list and then rate the crime. In this way the data about various areas will be collected from user.

Next the users need to enter three family members contact number with an emergency message. In situation of any crime user will have to press the volume button five times. Saved emergency message will be forwarded to the saved contact numbers along with the victim’s location through GPS.

User can also ask for help to the NGO directly through our application.

(2)Server Side: Data entered by the users (members registered, crime reported) via app is uploaded to web server, the crime details for various will be graphically represented on the website and

complaint is sent via text message to registered NGO for further processing and authenticity. Also admins get all the privileges through this server.

V. Application Layout



Fig 2. Depicts the logo of the Shakti Application.

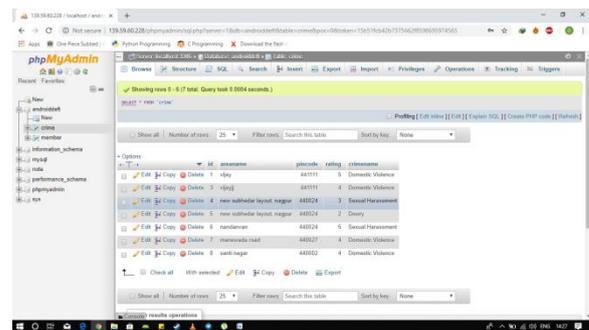


Fig 3. Depicts the data entries in the database.

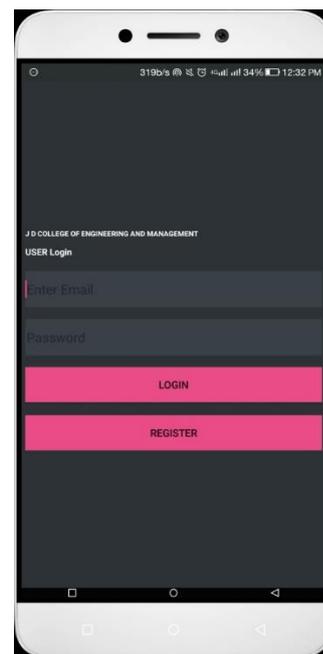


Fig 4. Depicts the login page where your can log in themselves through password.

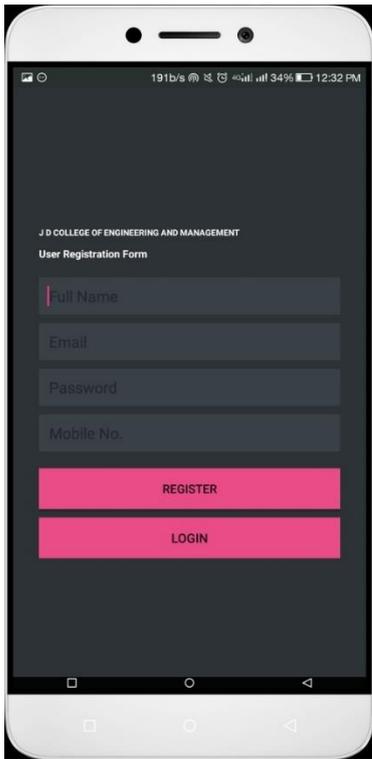


Fig 5. Depicts the login page of the application.

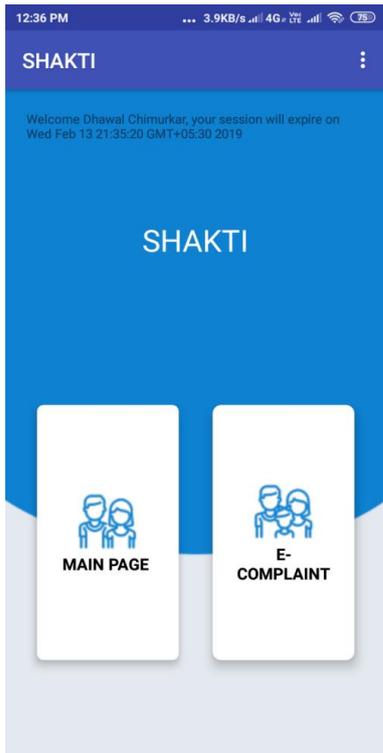


Fig 6. Depicts the main page of the application.

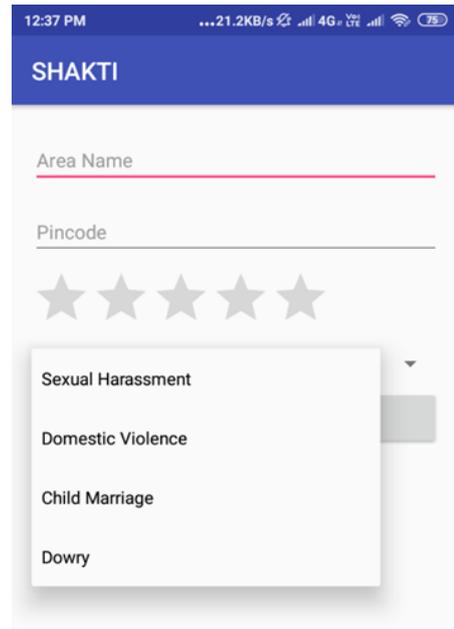


Fig 7. Depicts the rating of crime page where user can enter its area with pin code and select the type of crime which user wants to rate.

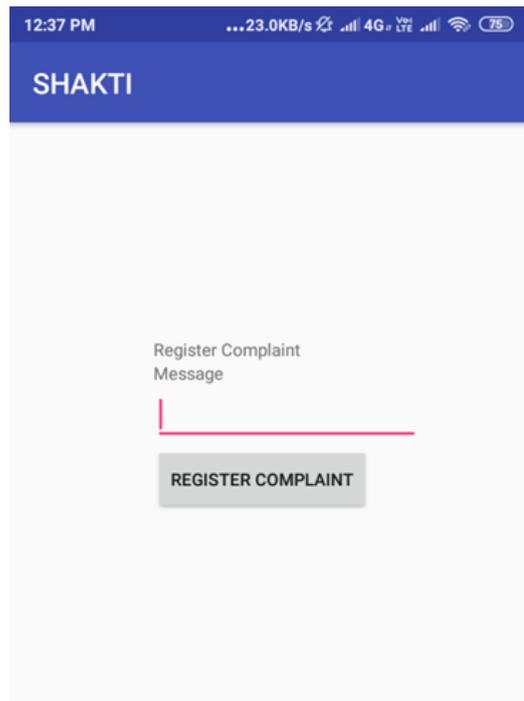


Fig 8. depicts the NGO complaint page

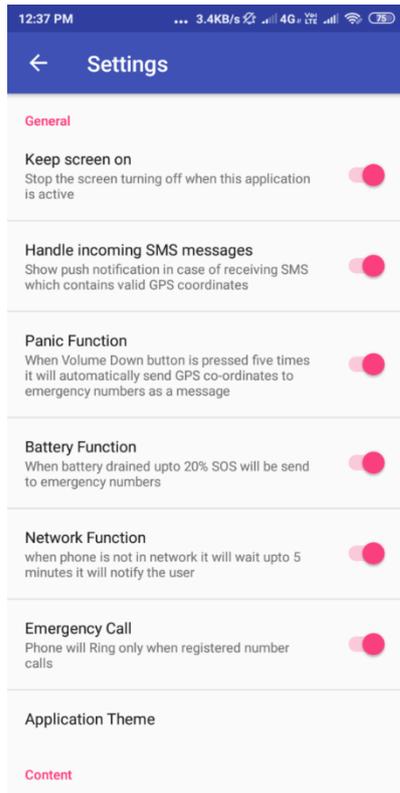


Fig 9. Depicts the permissions required by the application.

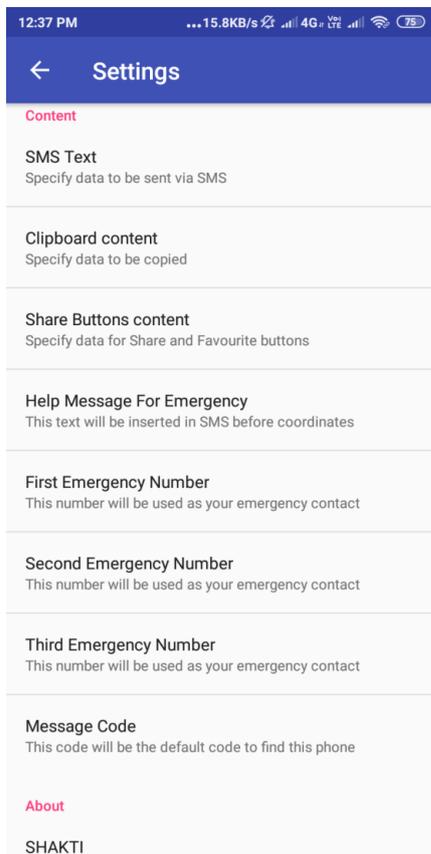


Fig 10. Depicting the app page for entering three contact numbers.

VI. ADVANTAGES AND LIMITATION

(A) ADVANTAGES:

- Through this application it will be very helpful to the social bodies to look after each area particularly and implement effective programs against the violence and aid the root causes of crime against women.
- The user can easily connect to family members and inform them with the location.

(B) DISADVANTAGES:

- For more secure registration one time password is required.
- It needs good network and internet connectivity.

VII.FUTURE SCOPE

- Can be implemented in cities under Gov. and Social Bodies working for women safety.
- Can be linked to the NGO sites with more improvements.
- Can be updated with features like self-defense techniques for women.

VIII. CONCLUSION

Shakti will help to easily know the major crimes against women and violence happening under different areas. Thus, the social bodies working for security of women can implement an aid to those areas to halt the crimes.

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X. REFERENCES

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