

PROJECT NAME: EMERGENCY HELP

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

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APPROVAL

This Project titled “**Emergency Help**”, submitted by Md. Nazmul Hasan, ID: 142-15-3982 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering(BSc) and approved as to its style and contents. The presentation has been held on 08 April 2018.

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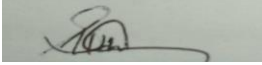
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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ms. Subhenur Latif** ,Assistant Professor, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

This project is on "**Emergency Help**". This is an android based application which needs an android device to run and helps the sufferer in need to emergency help in their critical moment. The aim of the application is to assist the user in finding their relatives or closed people on which time he badly needed them. Using all entire user will be able to get desired feedback. In the development of this application the most essential elements were an android device and an android application development tool. The development of this application is described in the project report .In this application system is basically divided into two core module, front-end design only for the admin.

After development session of this application we have tested it by different user and found it to be a well build application which works perfectly.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Nowadays we are going to technology and besides of technology, all the things are updated. Technology has gifted us so many things but one of the most important things is Smartphone, without a smart phone we could not think any moment. For that whole world are in our hands. From any area, a man can see what they want to see. In our smart phone , we use so many apps for the different purpose. There are so many apps based on smart phone operating system like as Android, iOS, and Windows. Our Emergency Help app is based on an Android operating system. It mainly containing location sends a message to your specific user on any emergency problem.

1.2 Motivation

In the state of emergency, we do not get as much as we want to get rid of. This time we are fully involved with technology but we don't know or could not use properly the technologies benefit. From a develop are area we could think we have nothing but to touch the technology and think about our self is two different thinks so much different thing. In virtually so many things are possible which we could not think now. In whole world there is border and its totally flat. In a smart phone we are use so many apps for different purpose.

According to 2013 report there is 78% total smart phone are sold which is based on android operating system. In every day we are facing so May problem and think about emergency help but that situation we could get any help. Somehow you can't tell anyone. So, thought about that we have done the Emergency help apps which is going on without internet and you in any situation you could send your location and text in user's mobile phone, how many people's you want to send its depends on you.

1.3 Objectives

We want to develop a app which is based on emergency situation help. The main purpose of our apps is to get to know any others to help in an emergency situation. We will provide the following unique features:

- Anyone can use this app without our paying money.
- This app detect location and send users both online and offline.
- User can send text to multiple people.
- To established a app without advertisement.
- Use can send message in multiple people

1.4 Expected Outcome

All other in the world is given more priority to technology-based work. Now, this situation is like all the people can't think anything without technology. We thought about one thing is how to help people to use technology and given more priority in a smart phone because all the people use a smart device. We have done an android based application which is called "Emergency Help". It helps you to send your location with text to multiple people in an emergency situation. People can get help to use it easily especially the girl's get help to use it because in every girl are facing lots of trouble in every single day.

1.5 Report Layout

The report is organized in six (6) chapters. Chapter two (2) gives an overview of the background study of the project. In chapter three (3) clearly described the requirement specification of the project where included the business process model, Use Case diagram and description and Design requirement. In chapter four (4) described the design specification ,In chapter five (5) described implementation, develop and testing the project and the chapter six (6) described conclusion and future scope of the project.

CHAPTER TWO

BACKGROUND

2.1 Introduction

Background study is planning and scope of the project. In this section we will provide this strategy. We adopted while development. The first step of planning is collection the issues and demands. Then analyzing market and data and finally deploy.

2.2 Related Works

In a few days ago, Bangladesh launched free emergency helpline which is 999. It has cover for three types services. One is crime means it's at the police station, the second one is fire service and the last one is ambulance [1]. But to call the main problem is in your cell phone the network should have available. In some of the situation, there's no option to call an emergency number. But in our apps, an important feature is when you send someone a text using "Emergency Help" app it will automatically send your location with your text. In our country called emergency help have in so many sectors but all of this is based on specific like as health system, call center, education problem, Fire services and so on. You could use this app for some of the specific reason but in our app, you can in any situation, an option. You can send your text police station, your parents and where you want to send. Just you have to save number this app which numbers you want to send. If you want to send multiple numbers and you can send. We tried to develop an app which is cover your problem in any situation to know your trusted person.

2.3 Comparative Studies

Mobile apps are one of the most renowned features in a smart mobile phone. Mainly there are three types of mobile application but the most usable application is based on an Android operating system. According to 2013 report, there are 70% Android-based smart phone are sold. Now days not only city people have used a smart phone but also rural

people have used a smart phone for a different purpose. From farming problem to medical problem, they are getting a solution using smart phone and apps. There are lots of apps based on the different problem. Our “Emergency Help” is an easily usable app to help you to get known in people to send text and your location. It has many features like as save multiple numbers save, edit, delete and this app automatic detect your location using Google provider location. Mainly we can explain our location in latitude and longitude. We implement both of types in our app so it can easily locate you and send multiple people.

2.4 Scope of the Problem

In every single day, lots of people face so many problems and they want help in an emergency situation but they could not get any help. So, it goes to the main problem. First one is they can't tell anyone. And the second one is they don't know what they have to do in that situation. In actions spot, some of the people may have but they don't know about this because of they understand. So, if invaded people can tell they might get help. Some of the people may know about a problem in some one's emergency situation but they could not help people because of don't know about the area of problem.

2.5 Challenges

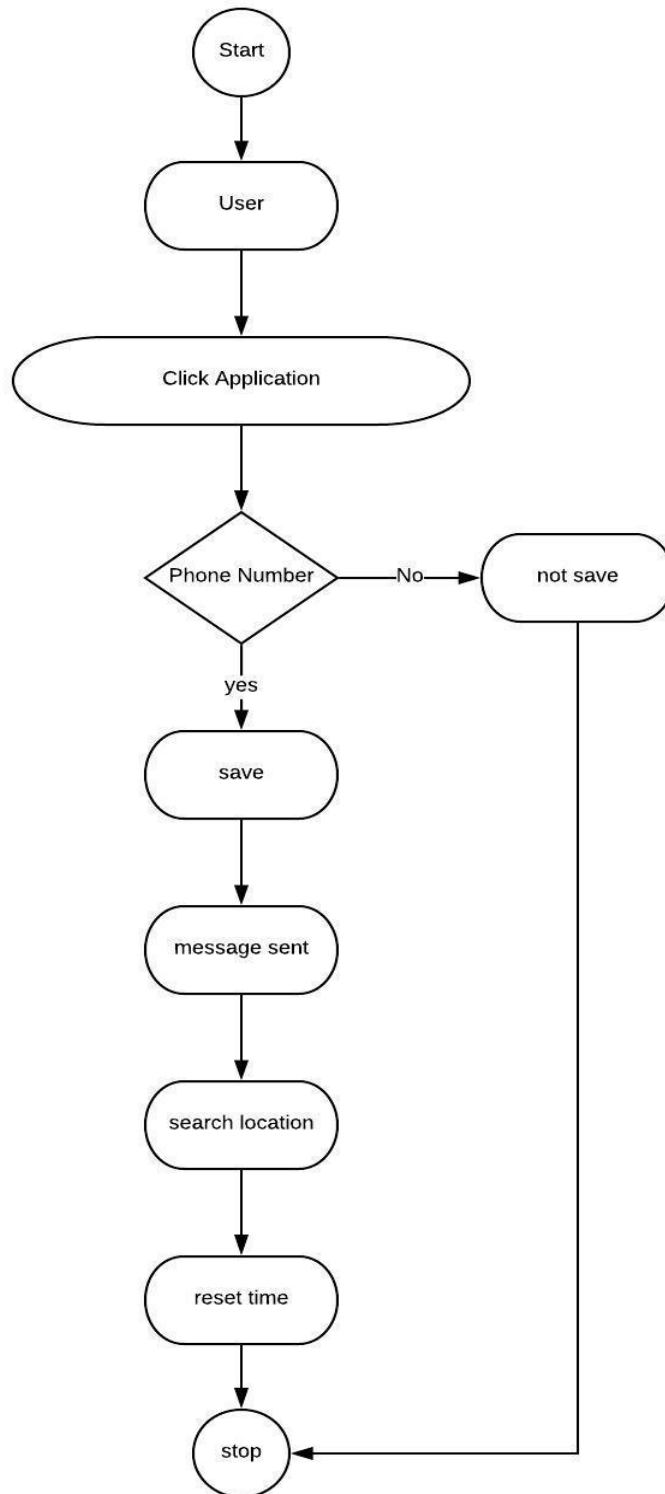
- To become successful in every step you have to take so many challenges. Though all around the world so many apps collect user's data and cell it in so many times but this are not professional.
- Make it simpler and user friendly.
- Have to sure the performance within the battery service.
- To make it more flexible and send on hand to hand we need funding.
- We are going add so many features then we need man power its one of the most important challenges.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

BPM or Business Process Modeling is the process of constructing structural view of a system or process. It includes some process, starts and symbol, condition this are looks like a flow chart. In our system we construct a BPM model which shows how to sent message to the save number. If there are no number save the system stop. If there are save number then sent message and location .This number and name save in the Database .Following Figure 3.1 shows flow chart diagram.



Z

Figure 3.1: Flow Chart Diagram

3.2: Requirement Collection and Analysis

- Requirement collection and analysis is very important to develop any kind
- Of android Apps. It meets the goal of the user and the admin. In our application
- Concerned with the requirement of the user and the admin so, we went to them and
- Tried to know what their requirements for this app are.

3.3: Use Case Modeling

Use case model is a graphic description of the interactions among the elements of a system. A use case is a methodology used in the system analysis to identify and clarify system requirements .Following Figure 3.3 shows the use case modeling of the app.

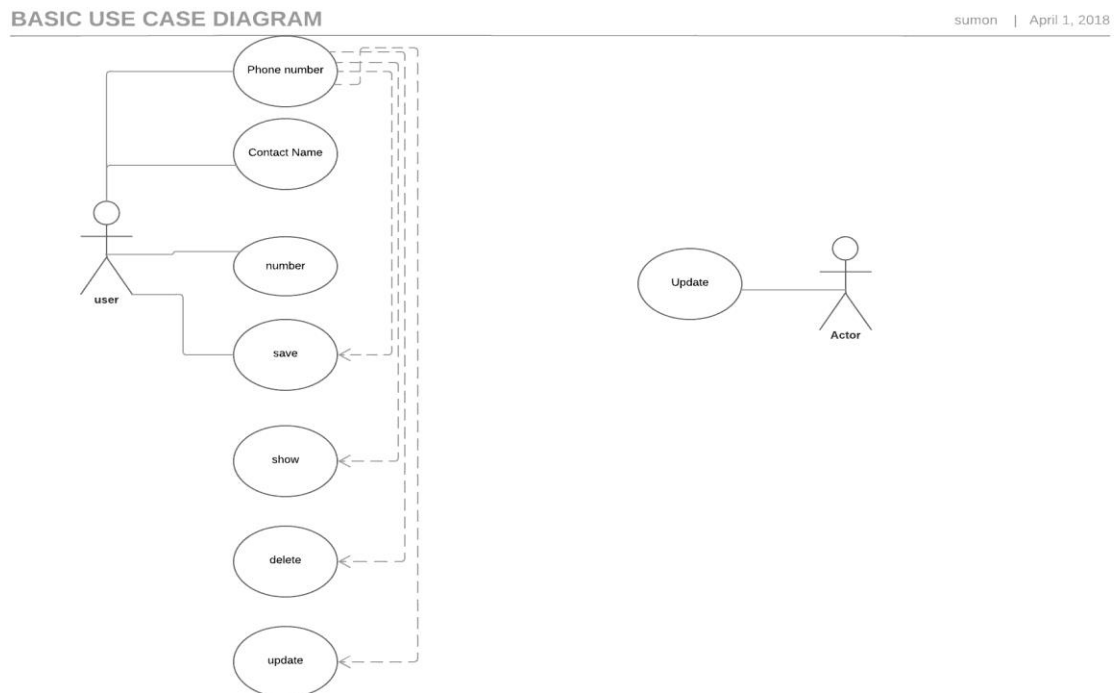


Figure 3.2: Use Case Modeling

Update:

Use case: Update

Actor: Admin

Pre-condition: None

Scenario: admin can update all kind of data of the application

Admin can update location

Phone Number

Use case: Phone Number

Actor: User

Pre-condition:

- Android OS based handset.
- Turn on location
- No internet connection

Scenario:

- User can save number
- Show number
- Delete number
- Update number

Alternative Scenario:

If user does not save number then the system stop

Post-condition: Application will be running without an error.

Contact Name

Use case: Contact Name

Actor: User

Pre-condition:

- Android OS based handset
- Not need internet connection

Scenario:

- can insert name of the user

Alternative Scenario: If user does not save their name and number system stop

Number

Use Case: Number

Actor: User

Pre-condition:

- Android OS based handset
- Not need internet connection

3.4: Logical Data Model

My project logical data model has relational table named Admin and User. Here, we describe how these entities connected with each other.

The total relational model has shown the following figure 3.4

CHAPTER 4

DESIGN SPECIFICATION

4.1: Front-end Design

Front page design of an android application must be the attention of the users. To make my Application attractive we use Graphical User Interface (GUI). We design our project can easily understandable GUI so the user can easily access this app. In the front page we use simply detect location, phone number and message sent logo. In this app user can not complete any registration from.

4.2: Back-end Design

Back-end design only seen by the programmer. How will the application interact with the User is implemented in the back end. User cannot interact with the back end design. In my project firstly save name and number. We also provide update and delete this information to the apps .We store this information in the database. Here we use android Sqlite database.

4.3: System Architecture

System architecture shows the behavior and structure of a system, how the system works and how users interacts it .Following Figure 4.3 shows System Architecture

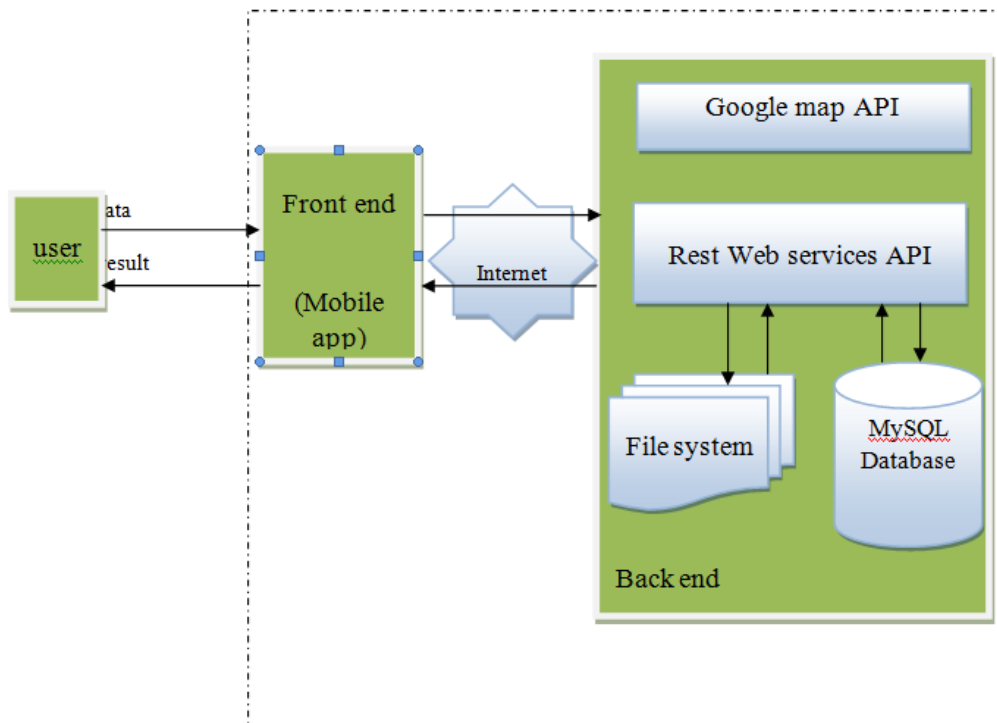


Figure 4.3 System Architecture

4.4: Database Design

Database design is the process of producing a detailed data model of database .Figure below the Database Design of our application. This database acts as host of data from which the application can fetch data whenever it needs.

4.5: Implementation Requirement

To complete a project we need different types of tools, software and components. To complete our project we also need some components and tools to implement our project .It are an android based application so we used android based tools and components to implement our project. Here short description of the tools and components that we use to implement of our application.

4.5.1: Android Studio

Android studio is very popular platform to implement any kind of android application .We use android studio as our application IDE (integrated development environment). It provides great features to the programmer to implement android apps .Its can open source platform programmer develop various types of android application prefers android studio[2].

4.5.2: Java Development Kit (JDK)

Java Development Kit is an implementation of either one of the Java EF, Java ME or Java SE platforms [3].

4.5.3: Android Virtual Device (AVD)

Android Virtual Device provides graphical interface which run the android application this called emulator. A QEMU-based emulation tools can be used to test and debug applications of an actual Android run-time environment [4].

CHAPTER 5

TESTING AND IMPLEMENTATION

5.1 Implementation of Database

In this chapter we see how we implement database. In previous chapter we describe that we use to store information of the user database. Here we use android Sqlite database to perform the action. To store information in the database the user firstly save data. Here user entry there name and phone number. If they need to delete or update this information they do it. Following Figure 5.1 Shows Dtabase

```
public class MyDBFunctions extends SQLiteOpenHelper {  
  
    private static final String DATABASE_NAME = "mydb";  
    private static final String TABLE_NAME = "mytab";  
  
    private static final String TAB_ID = "id";  
    private static final String TAB_NAME = "name";  
    private static final String TAB_DAYS = "days";  
  
    MyDBFunctions(Context c) { super(c, DATABASE_NAME, factory: null, version: 1); }  
  
    @Override  
    public void onCreate(SQLiteDatabase db) {  
  
        String s = "CREATE TABLE "+TABLE_NAME+" (" +TAB_ID+" INTEGER PRIMARY KEY, "+TAB_NAME+" TEXT, "+TAB_DAYS+" TEXT)";  
        db.execSQL(s);  
  
    }  
}
```

Figure 5.1: Database

5.2 Implementation of Front-end Design

Only the front end design is seen by the user. It should be user friendly and convenient to use. The front page user interface shows three items: Detect location, Phone number, and message sent button. The user can select any of these like detect location, phone number, and message sent button. Following Figure 5.2 shows the Front-end Design of our app.

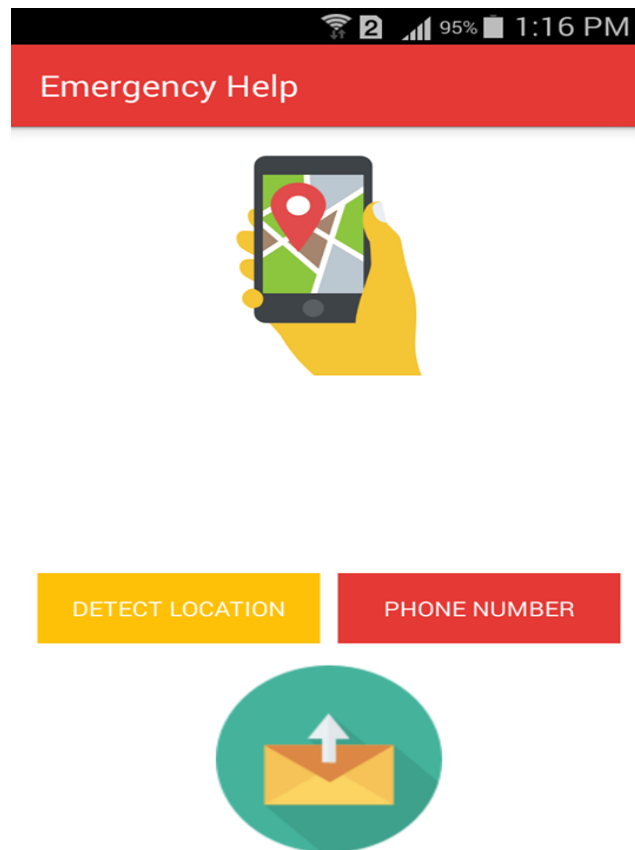


Figure 5.2: Home Page

5.2.1 Save number

If any user wants to use our apps at first he or she install our apps. User click phone number button. Then user can enter contact name, enter his or her number .User save more number in this page. After complete contact name and number from user sent save button successfully data save .Following Figure 5.2.1 shows how to Save Number.

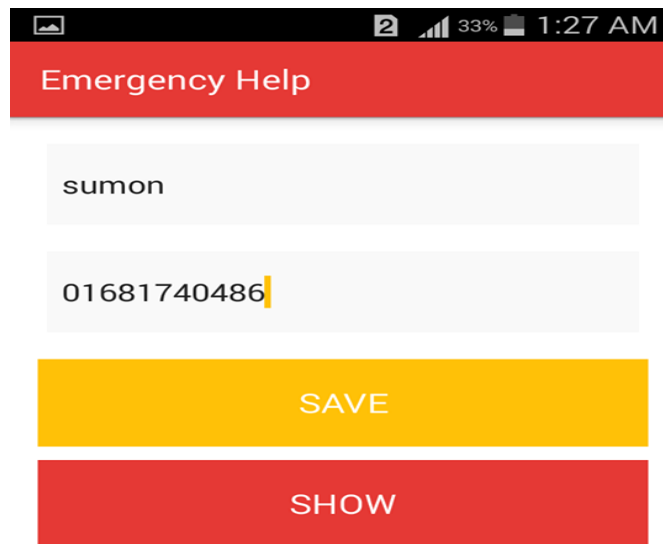


Figure 5.2.1.: Save Number

5.2.2 Update and Delete

If user can want to show the save number they show the save number .Show the save number user click show button then user see all the save number that he or she save emergency help apps. User can also update or delete number .If user delete save number user click delete button and remove name and number complete this work number is delete successfully .User can also update number in this apps .If user need update user click update button then he update name and number .Following figure 5.2.2 shows how Delete and Update number of our app.

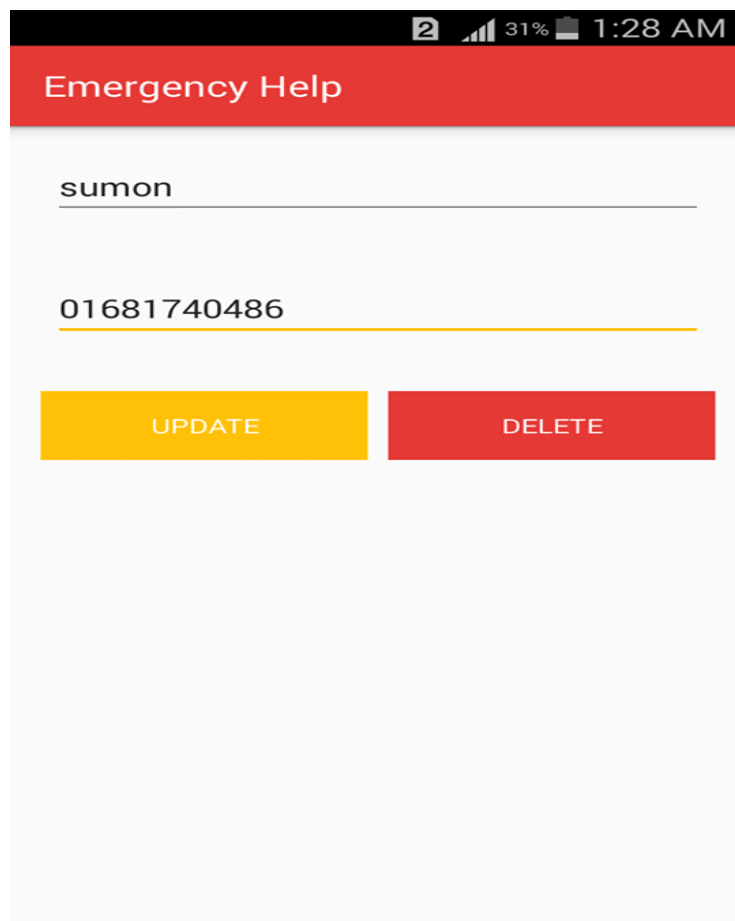


Figure 5.2.2: Update and Delete

5.2.3 Sent Message

When users face any emergency situation .User go to our apps and click message sent button. Sent message and location all the save number .To sent message user need minimum charge to sent message .Following Figure 5.2.3 shows how to sent message successfully.



Figure 5.2.3: Sent Message

5.2.4 Message

When user click sent button message are sent all the save number .In this message write “This is an Emergency, I’m in trouble and need help”. Here also a maps.google.com link .Following Figure 5.2.4 shows Message.

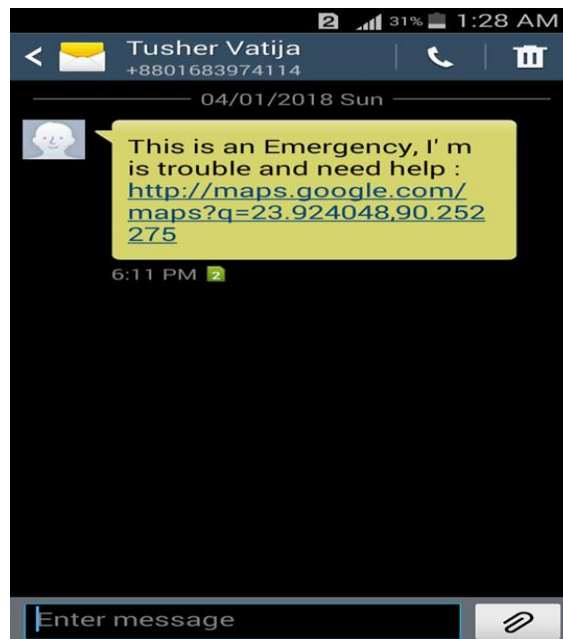


Figure 5.2.4: Message

5.2.5 Location

When person who receive the message and click link he show a maps.google.com location .If the person are in offline but he see the location of the users [5] .When person in offline person wait few minutes to see the location .If person are in online they see the location immediately .Following Figure 5.2.5 shows the location.

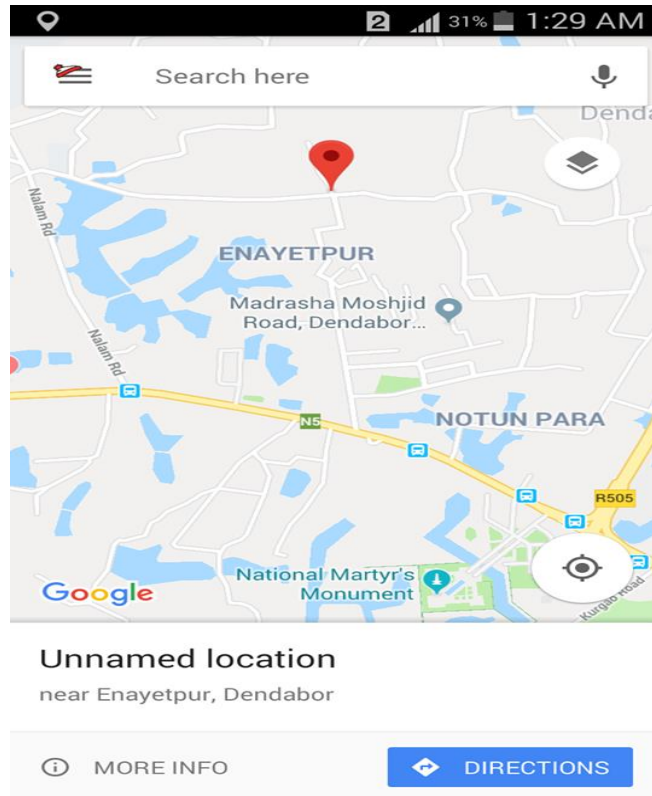


Figure 5.2.5: Location

CHAPTER 6

CONCLUSION

6.1 Discussion

Finally the project report “EMERGENCY HELP” has come to its final stage. This application developed with much care that it is free of errors and at the same time it is essential and less time consuming. I tried my best level to develop this application as dynamic as possible. The whole system is strongly secured. This application has been finished but doesn't mean that it is over. This is the only beginning of my journey to improve my application. I have some exceptional plan to improve this application on high position than previous one. I can say strongly that this application is easier and helpful for all kind of users.

6.2 Future Scope

This has much scope to extend this system as per user requirements. Hopefully I will add a voice call system and also implement sent image system on that mentioned people who is selected on my application. I know this is not easy to develop but I insured and confidence that would be added my system .According to my experience that this one is very helpful for the people, especially for the women.

6.3 Limitation

Finally the project have successfully implemented some computer programming language “Emergency Help” but here also some limitation in our project. Some Features are lacking here. Here we use old version android. Google map update are not support. Get permission for high security Mobile.

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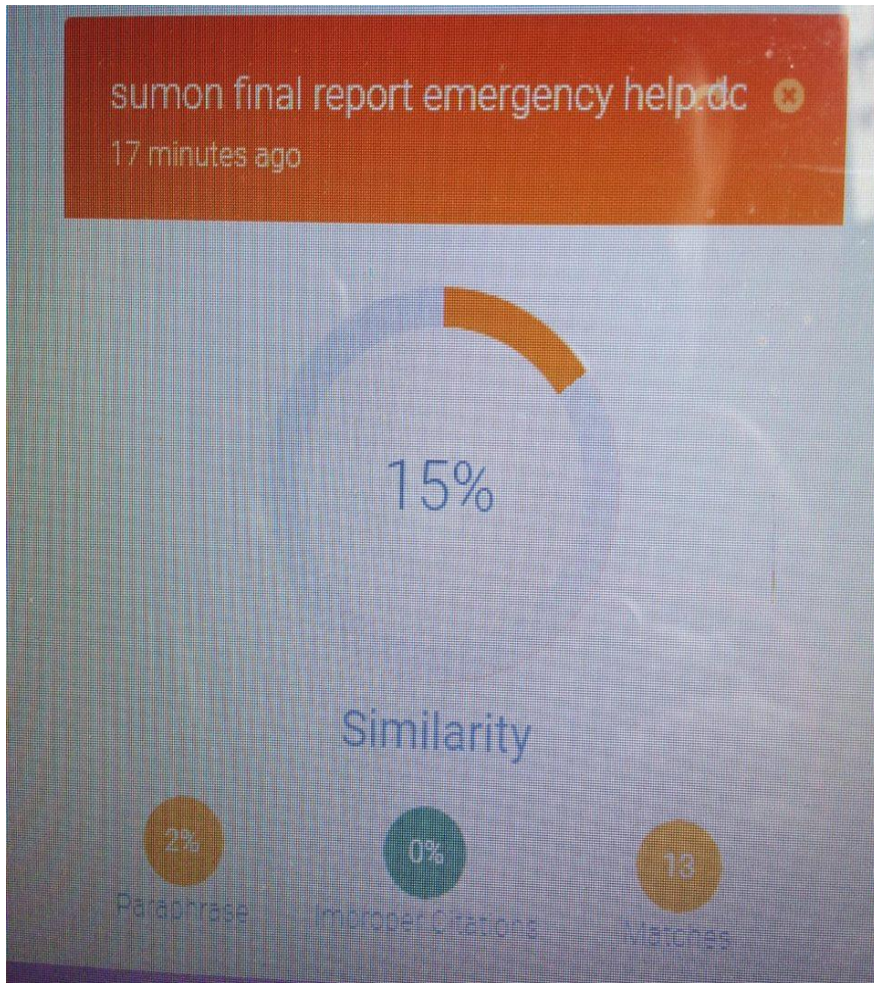


Figure: Plagiarism Screenshot Report