MINI PROJECT REPORT

on

MOBILE PROXY

Submitted in partial fulfilment for the completion of

BE-VI Semester

In

INFORMATION TECHNOLOGY

By

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Under the guidance of

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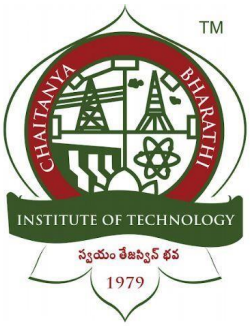

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CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
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CERTIFICATE

This is to certify that the project work entitled "**MOBILE PROXY**" submitted to **CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY,** in partial fulfilment of the requirements for the award of the completion of V semester of B.E in Information Technology, during the academic year 2019-2020, is a record of original work done by **B ARAVIND KUMAR (160117707033), N ARUN REDDY (160117737108)** during the period of study in the Department of IT, CBIT, HYDERABAD, under our supervision and guidance.

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DECLARATION

We, **B ARAVIND KUMAR** bearing Hall Ticket No. **160117737033** & **N ARUN REDDY** bearing Hall Ticket No. **160117737035**, hereby declare that the project report entitled "**MOBILE PROXY**" is being submitted by us in the department of information technology, Chaitanya Bharathi Institute of Technology(A). This is record of bonafide work carried out by us under the guidance and supervision of **NVS. Sridevi**, Assistant professor, Department of IT, CBIT. No part of the report is copied from books / journals /internet and wherever the portion is taken, the same has been duly referred.

The results embodied in the dissertation have not been submitted to any other Universities or Institutes for the award of any degree or diploma.

ABSTRACT

This project is an android application which solves some of the real time problems. It acts as your personal offline assistant to help you with the common problems faced in daily life. This project can solve some of the projects like: Getting a contact number from a phone, Getting the location of the phone, Lock the phone and even change the Ringer profile. All of this can be done just by sending a text message from any normal phone.

We provide you a very simple offline packet of Android app which solves all the issues. All you need to do is simply send an SMS from any basic phone with the passcode you set on your Android app. The app works totally in the background, A user just has to set a passcode. Now he does not need to do anything else after that, the app will automatically detect Incoming message filter it and search for the passcode on success reads command and perform the task as per user requirement.

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1. INTRODUCTION

1.1 MOTIVATION

This program is developed such that it should helpful be very helpful for each and every smartphone user, When a user forgot his phone somewhere, they can lock their device, get a contact's phone number or get the last known location of the phone. They can even change the ringer profile. All of this can be done by just sending a message from any normal phone.

We actually saw many of our friends facing some of these issues and got motivated to try solving them.

1.2 PROBLEM STATEMENT

This project aims at developing a simple Android Application which solves 4 of the basic problems faced by any smartphone user now-a-days. It also provides a simple and efficient system in solving them.

1.3 OBJECTIVE OF PROJECT

The project is mainly based on the following objectives:

- To create a project on Android
- To concise the memory of the program as much as possible.
- To learn to be able to develop complex programs aimed at solving a particular task in the field according to the user requirements.
- To be able to learn to work in group and to share responsibilities.

1.4 EXISTING SYSTEM

The well known Google’s Find My Device can be considered as an existing system. But, to use that service both the phones have to be connected to the internet. Also, the user has to login to do that. which takes a series of steps and wastes a lot of time.

1.5 PROPOSED SYSTEM

Providing a fully functional offline app, this could solve the problems faced by the existing system and saves a huge amount of time.

2. SYSTEM REQUIREMENT SPECIFICATIONS

2.1 Hardware Requirements

RAM: A minimum of 2 GB

Disk Space: 10 to 20 MB

2.2 Software Requirements

Operating systems: Android Version 5.1.1 or above

2.3 Tools and Technologies Used

Android Studio

Adobe XD

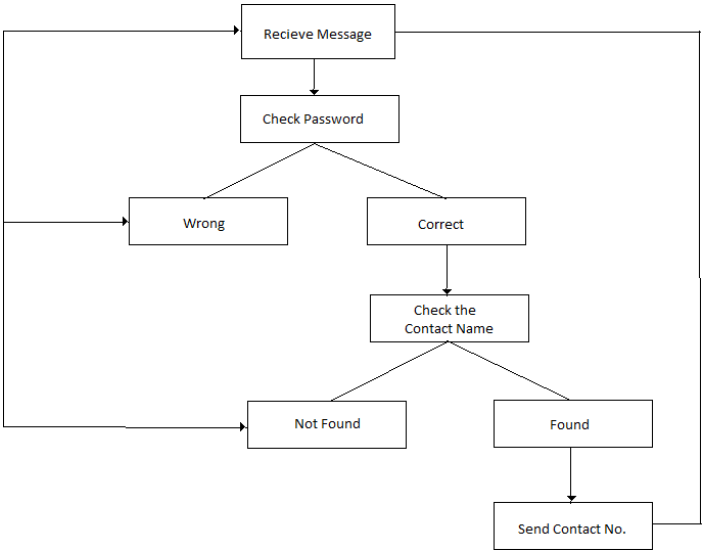
Material Design

3. SYSTEM DESIGN

In order to make the design of the project, it is necessary to read and send messages from the application. Also, it has a password check for every incoming message. Hence, the user can:

- Change Password
- Edit Username
- Edit Phone Number
- Send messages

Directly from the application.



The major modules are listed below:

- RefreshInbox method, through which the application checks for any new message arrived.
- Lock method, which locks the device via Admin Lock.
- FindContact method, which finds and returns the phone number of a contact.

4. IMPLEMENTATION

4.1 Detailed Description of code

This project is implemented in two phases. One, when a message is received and two, decoding the message and giving the reply.

The first screen consists of an inbox area and a messaging area. The inbox area will be automatically set to the most recently received message. After analysing this, the messaging area is filled with a corresponding message.

For the application to run in background, a function RefreshInbox is written and is being called every 5 seconds in the background.

```
public void refreshInbox(){
    ContentResolver cResolver = getContentResolver();
    Cursor smsInboxCursor = cResolver.query(Uri.parse("content://sms/inbox"),
            null,null,null,null);
    int indexBody = smsInboxCursor.getColumnIndex("body");
    int indexAddress = smsInboxCursor.getColumnIndex("address");
    if(indexBody<0|| !smsInboxCursor.moveToFirst()) return;
    rphno=smsInboxCursor.getString(indexAddress);
    rmsg=smsInboxCursor.getString(indexBody);
    tvFrom.setText(rphno);
    tvMsg.setText(rmsg);
    getPwd();
```

For getting the required contact, we made a function called readContact using contacts contract.

```
public String readContact(String cname){

    if(checkPermission(Manifest.permission.READ_CONTACTS)){
        ContentResolver resolver=getContentResolver();
        Cursor cursor=resolver.query(ContactsContract.Contacts.CONTENT_URI,null,null,null,null);
        while(cursor.moveToNext()){
            String id = cursor.getString(cursor.getColumnIndex(ContactsContract.Contacts._ID));
            String name=cursor.getString(cursor.getColumnIndex(ContactsContract.Contacts.DISPLAY_NAME));

            Cursor phoneCursor=resolver.query(ContactsContract.CommonDataKinds.Phone.CONTENT_URI,null,
                    ContactsContract.CommonDataKinds.Phone.CONTACT_ID + " = ?", new String[]{id}, null);


            while (phoneCursor.moveToNext() && name.contains(cname)) {
                String phoneNumber=phoneCursor.getString(phoneCursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.NUMBER));
                notif1("Contact","Contact has succesfully been sent");
                return phoneNumber;
            }
        }
    }
    notif1("Contact","Requested Contact not found");
    return "Not Found";
}
```

The location is retrieved using onLocationChanged function, which is being called every time the location is being changed.

```
@Override
public void onLocationChanged(Location location) {

    double latitude=location.getLatitude();
    double longitude=location.getLongitude();
    etMessage.setText("Latitude:"+latitude+"\nLongitude:"+longitude);

}
```

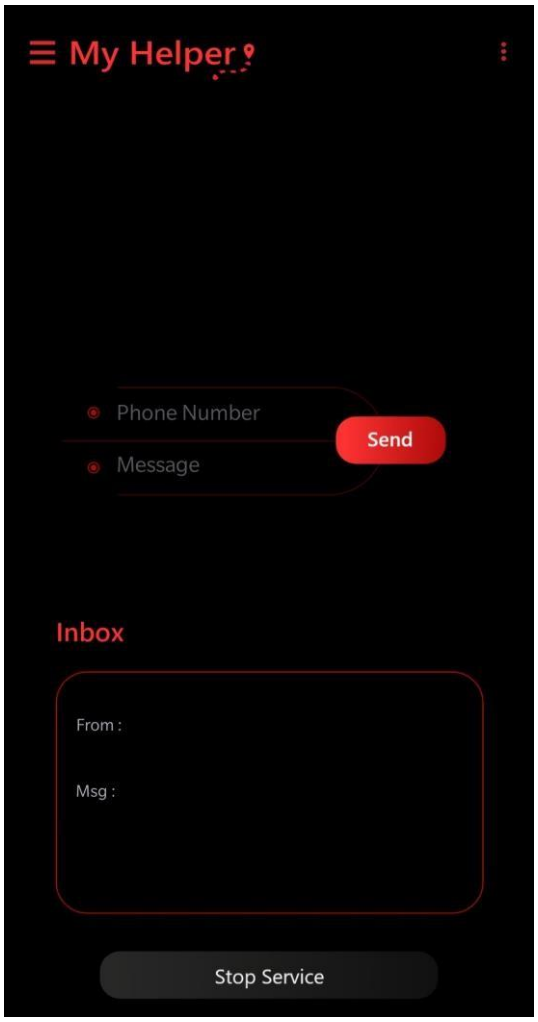
After completing the respective actions, the reply is being sent using sendSMS.

```
public void sendSMS(){
    String msg =etMessage.getText().toString().trim();
    String phoneNum = etPhoneNum.getText().toString().trim();
    if(!etMessage.getText().toString().equals("") || !etPhoneNum.getText().toString().equals("")) {
        SmsManager smsMan = SmsManager.getDefault();
        //smsMan.sendTextMessage(phoneNum, null ,msg , null, null);
        Toast.makeText(MainActivity.this, "SMS Sent to " + phoneNum, Toast.LENGTH_LONG).show();
    }
}
```

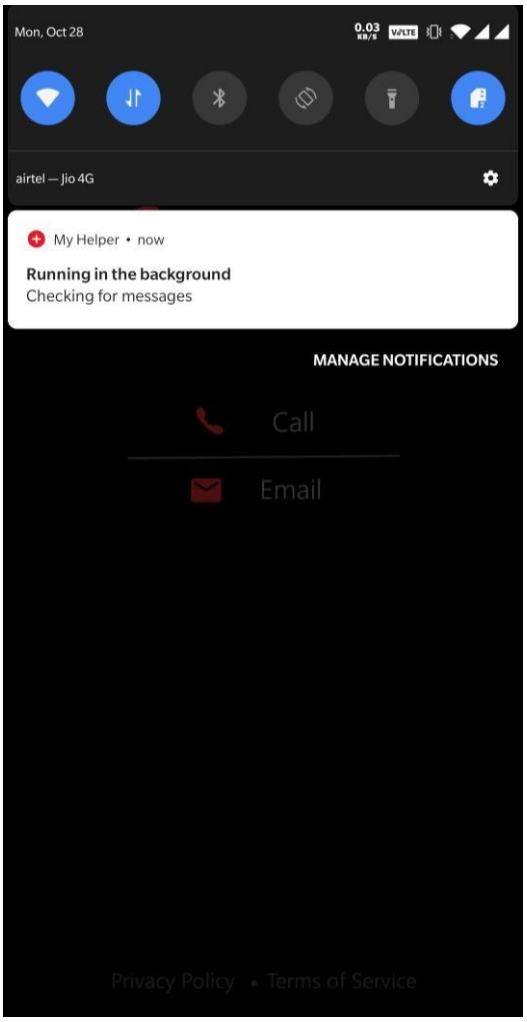
Also, there are additional features to this application like customizing username, password, and phone number of the user.

5. TESTING & RESULT ANALYSIS

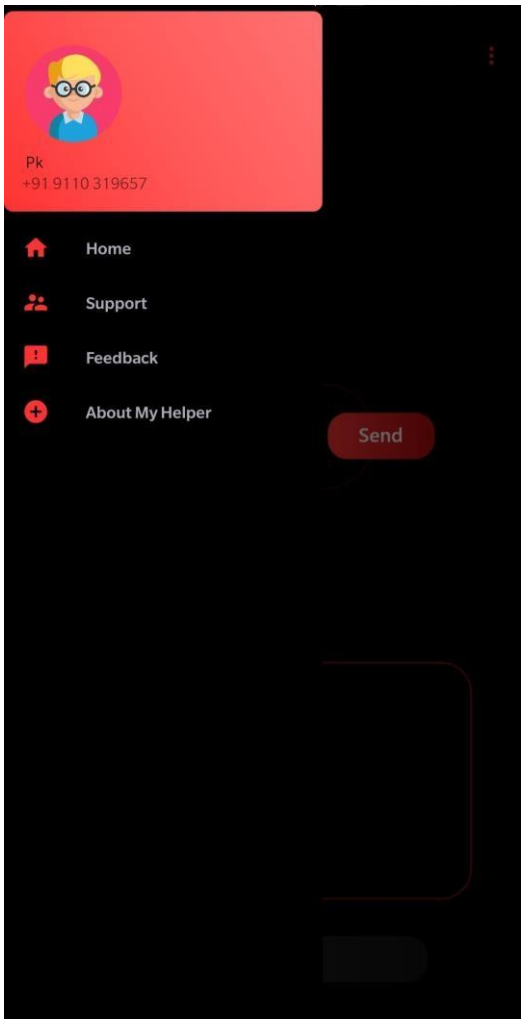
5.1 Results & Screenshots



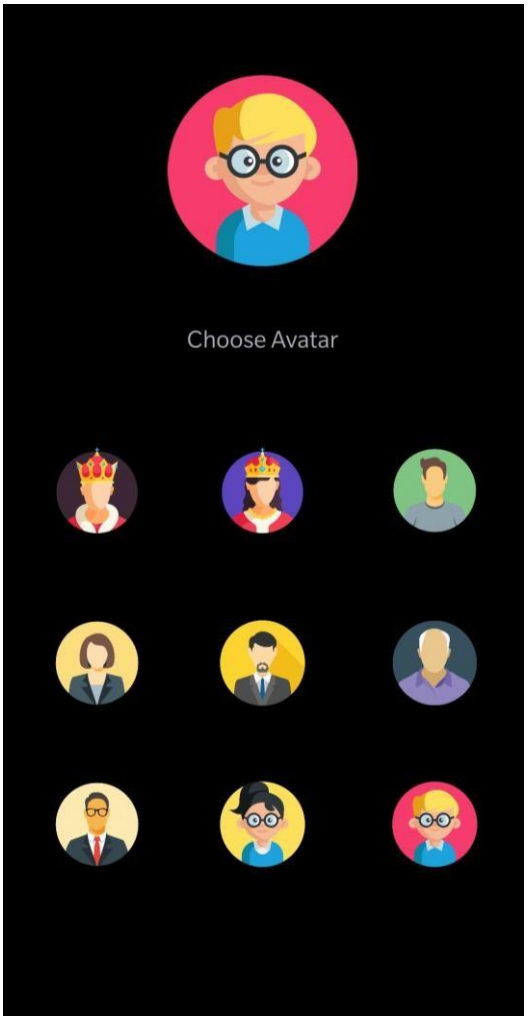
Screen 1: Main Page



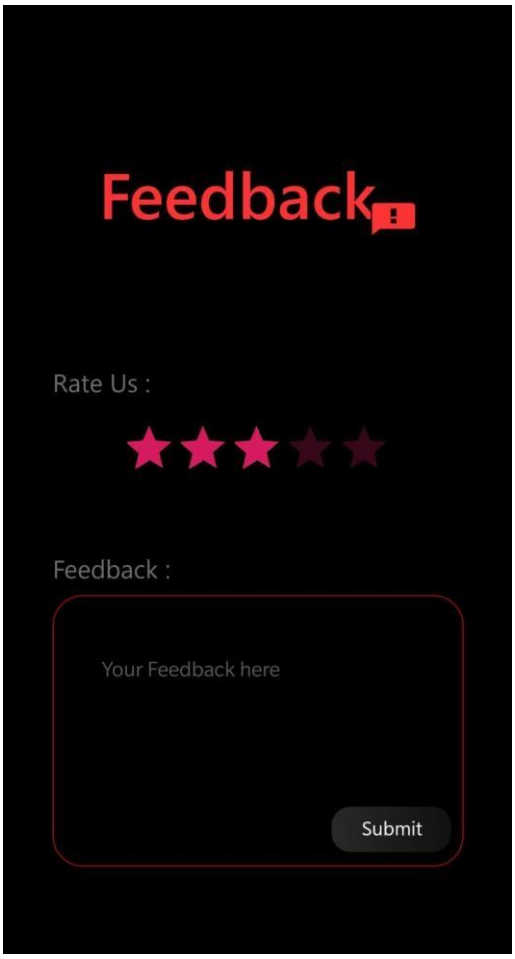
Screen 2: Background



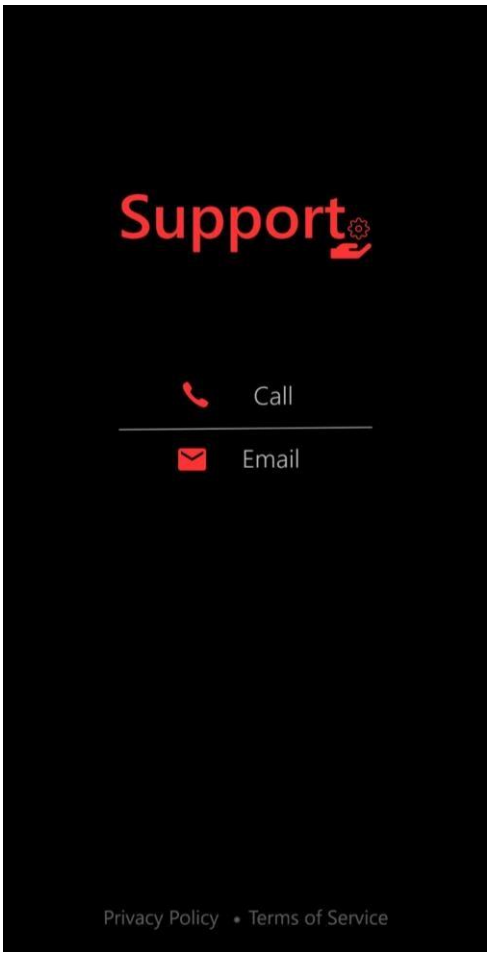
Screen 3: Side Menu



Screen 4: Avatar Change



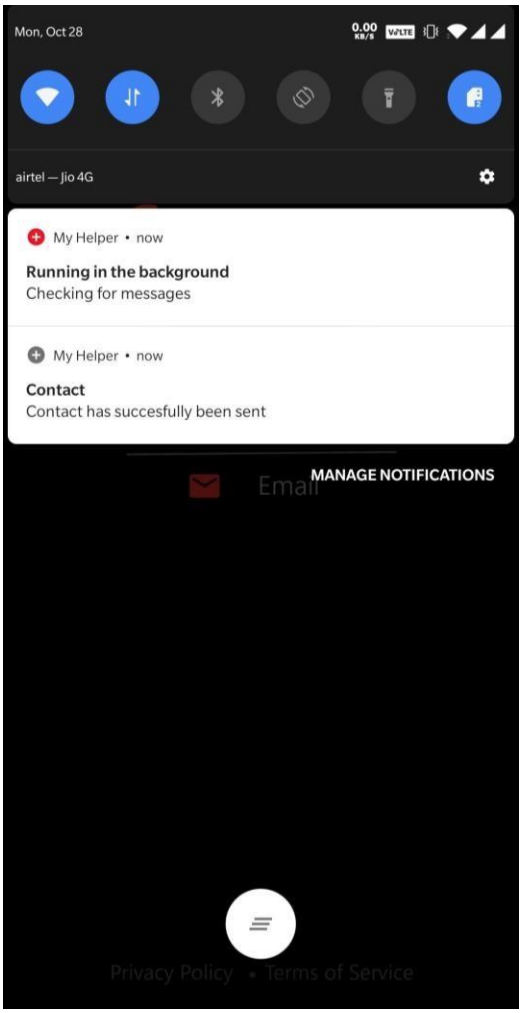
Screen 5: Feedback



Screen 6: Support

Screen 7: Settings

Screen 8: About



Screen 9: Success

6. CONCLUSION & FUTURE SCOPE

Thus, we built an Android application which claims to solve all the four issues. The proposed system is user friendly and helps in making many people lives happier. Due to the password protection, users can safely assure that their contacts are safe and secure. Also, due to the offline feature your works can be done quickly and effectively.

The goals achieved by the game are:

- Cleaner Interface.
- Running application in the background
- Less response times.
- User friendly.

In future, we are going to make the app available in play store after making improvements in UI/UX. We are planning in reducing the battery consumption and making replies faster. We are also trying in making location retrieval better.

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