Assignment no. 4

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Batch : F

Aim:

Mobile finder the android application.

Problem Statement:

Design Android application to convert the mobile profile from silent to normal using message broadcasting. It takes text message as an input and generate tune as an output.

1. Need of the Application:

If our mobile is misplaced nearby us and it is on silent profile then it is difficult to find the mobile. That time this app helps us to find our mobile. This application reduces our unnecessary work to find the mobile. When you are sending a saved message to your misplaced mobile then it automatically generates a tone and converts silent to normal profile.

2. Theory:

Android is a software stack for mobile devices that includes an operating system, middleware and key applications. The Android SDK provides the tools and APIs necessary to begin developing applications on the Android platform using the Java programming language. Android will ship with a set of core applications including an email client, SMS program, calendar, maps, browser, contacts, and others. All applications are written using the Java programming language.

2.1 Activities:

An Activity is an application component that provides a screen with which users can interact in order to do something, such as dial the phone, take a photo, send an email, or view a map. Each activity is given a window in which to draw its user interface. The window typically fills the screen, but may be smaller than the screen and float on top of other windows.

2.2 Services:

A Service is an application component that can perform long-running

operations in the background and does not provide a user interface. Another application component can start a service and it will continue to run in the background even if the user switches to another application. Additionally, a component can bind to a service to interact with it and even perform interprocess communication (IPC). For example, a service might handle network transactions, play music, perform file I/O, or interact with a content provider, all from the background.

2.3 Content Providers:

Content providers manage access to a structured set of data. They encapsulate the data, and provide mechanisms for defining data security. Content providers are the standard interface that connects data in one process with code running in another process.

2.4 Broadcast receiver (Intents):

There are two major classes of broadcasts that can be received:

Normal broadcasts (sent with Context.sendBroadcast) are completely asynchronous. All receivers of the broadcast are run in an undefined order, often at the same time. This is more efficient, but means that receivers cannot use the result or abort APIs included here. Ordered broadcasts (sent with Context.sendOrderedBroadcast) are delivered to one receiver at a time. As each receiver executes in turn, it can propagate a result to the next receiver, or it can completely abort the broadcast so that it won't be passed to other receivers. The order receivers run in can be controlled with the android:priorityattribute of the matching intent-filter; receivers with the same priority will be run in an arbitrary order.

2.5 The Manifest File:

Before the Android system can start an application component, the system must know that the component exists by reading the application's AndroidManifest.xml file (the "manifest" file). Your application must declare all its components in this file, which must be at the root of the application project directory.

1. Mobile Finder is the application build for android OS.
2. This application finds the mobile that is on silent profile.
3. It takes specific message as input like password.
4. It converts silent profile to normal profile.
5. It generates a tone when it takes a message that is specified in application.
6. This application is used to find mobile which is on silent profile. If

your mobile is misplaced nearby you and it is on silent profile then it is difficult to find the mobile. That time this app help you to find your mobile.

7. When you are sending a saved message to your misplaced mobile then it automatically generates a tone and convert silent to normal profile.

3. Employer's perspective:

Reliability, Integrity, Teamwork, Willingness to learn, Entrepreneurship, Self discipline, Communication, Self-motivation, Flexibility, Technical leadership.

3.1 Communication

You have to be a good talker and maybe also a good writer (depending on the job). You have to be content about speaking to people face-to-face or over the phone, and you may also need to write well enough to be understood in emails and memos. Employers should have communication skill when they discuss with customer for their problems. Employers should have ability to satisfy the customer means there requirement must be filled by developer.

3.2 Teamwork

You have to be good at working with people. This means both your workmates and other people that come into contact with your organization. Each and every employ must participate in any activity of organization. In this project there are many employee that are participate in a teamwork as follow.

1) Designer
2) Programmer
3) Tester
4) Project Manager
5) Program Manager etc.

3.3 Problem Solving

You have to be able to and solutions when faced with difficulties or setbacks. Even if you cant think of a solution straight away, you need to have a logical process for configuring things out. All the team members solve the problem of customer and problems arias in project. In this project there could be problem of hardware resources, software resources, Technical skill, cost of the system occurred. These problems are handled by developer itself.

3.4 Initiative and Enterprise

You need to be able to think about the bigger picture and the future of the organization your working for. Employers will value your ability to think creatively and to make improvements to the way things are. In this project developer think for new things like how to represent the users finger print, retina and other unique identities. Developer must add the new thing in project.

3.5 Planning and Organizing

You need to be able to organize yourself, plan project timelines and meet deadlines. Planning contains all WH type questions like how to do the project? What are the requirements of the project?, how to design the project ?, which technology should be used? How to test the project? Etc.

3.6 Self-Management

You need to be able to get on with your work without someone having to check up on you every minutes. You should also be able to stay on top of your own deadlines and be able to delegate tasks to make sure things get done on time. Developer must have to test their own code before going to tester it reduce the time required for testing by tester.

3.7 Time-Management

Developer must work with time limit specify in planning. Time is more important factor to increase a cost of project. As time increases cost of the project also increases. Each and every employee in the system must do their work within given time.

3.8 Learning

You should want to learn new things and be able to pick them up quickly. There are likely to be some changes to your job and to the structure of your workplace while you are working there. You should be able to take on new tasks and to meet the needs of a changing workplace.

3.9 Technology

Most jobs these days require you to use some form of technology. You'll need to know how to use a computer and how to touch-type for most of jobs, but there are other types of technology that you might need to be familiar with depending on the industry you work in. In this project there are many technologies are used like Biometric system, Steganography etc.

4. Students Perspective:

Basic computer skills, Technical skills, Use of modern tools, Advanced computer skills, System design, Communication and gestures, Responsibility, Verbal communication, Application of knowledge, Creativity, Gender Co-existence, respect, social and ethical responsibilities.

5. Software Requirement Specification:

1) SDK Manager:

SDK stands for Software Development Kit/. It provides different types of libraries required for our project.

2) JDK Manager:

JDK means Java Development Kit which is used to build the applications.

6. Hardware Requirement Specification:

1) Mobile with android platform.

7. Front End Tools:

1) ECLIPSE :

Eclipse is the software editor which is used to build and run the applications.

2) AVD Manager:

AVD means Android Virtual Device Manager. AVD is used to execute the application virtually means it creates virtual device for android platform.

8.Back End Tools:

1) ADT :

ADT stands for Android Development Toolkit. This kit is specially for building android application with help of different editors like Eclipse.

2) SQLite:

SQLite is the inbuilt Database or content provider which provides us space to store the data of our project.

9. E-R Diagram:

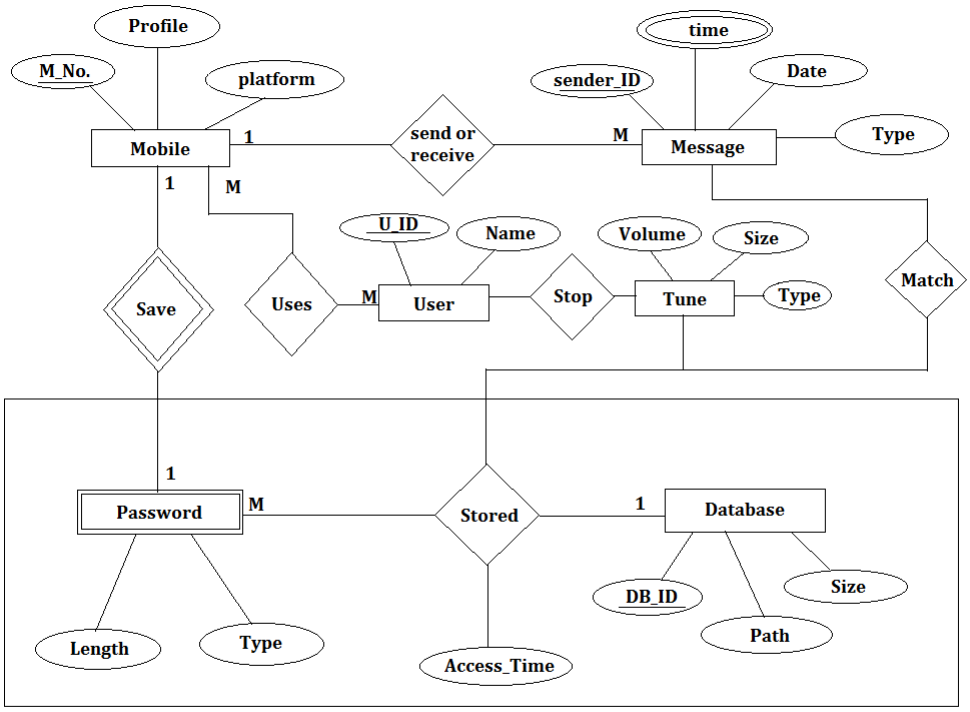


Fig. E-R Diagram.

10. Mathematical Model:

Let P be the set of tools used in development of application.
P={a,b,c,d}
Where
a– >Eclipse
b– >JDK 1.6
c– >SDK
d– >ADT

Let S be the system
S={A, · · · }
Let X be s set functions used in the program
X={r,s,t,u,v,w}

r− >Save Password in application.
s− >Update Password.
t− >Compare save password with incoming message.
u− >Convert profile.
v− >generate ring tone.
w− >stop the tone.
S={A,X, · · · }
Identify input as I
I={ l }
Where
l− >Text message.
these are the basic requirements for this program to run.
S={ A,X,I,· · }
Identify installation of Eclipse and configuring SDK tool as L
S={ A,X,I,L,· · }
Identify output as O
S={ A,X,I,L,O}
Where O− >successful Execution of the application and satisfy the given requirement.
Identify F as case of failure
f={ a,b,c,d,e }
S={ A,X,I,L,O,F}
Where F can be
a. Internal error occurred
b. Unable to load a source file.
c. Header file not included
d. virtual device unable to run.
e. Syntax error

11. System Modules:

11.1 Create Password:

In this model we are taking string ass a password from user and save it into the database for further use.

11.2 Update Password:

In this module we provide the facility to the user to update his old password and create new password to maintain his/her security.

11.3 Receive Message:

In this module we are using the concept of message broadcast receiver to receive the message and compare with the password saved in our application.

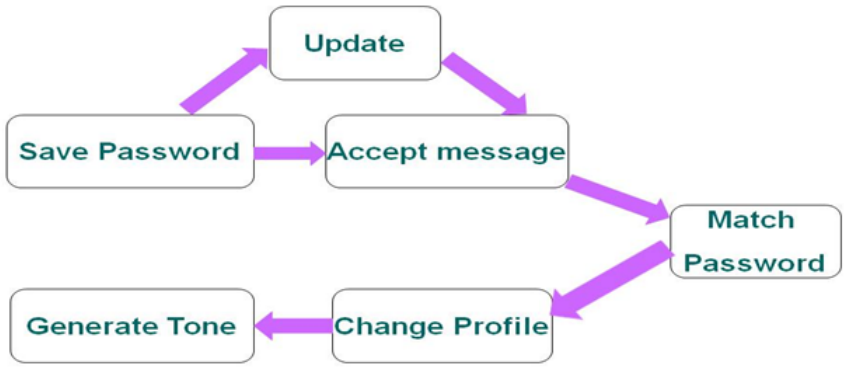
11.4 Convert profile:

This is the very module in our system. It's function is to convert the profile from silent to normal.

12. Algorithm:

1) Start
2) Take input as a password.
3) Save that password in database or update old password.
4) Accept message from another phone and compare with saved password.
5) If they are same then convert silent profile of mobile to normal profile.
6) Generates a tune to find the mobile.
7) Otherwise do nothing.
8) Stop.

13. Flow Chart:



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14. Advantages:

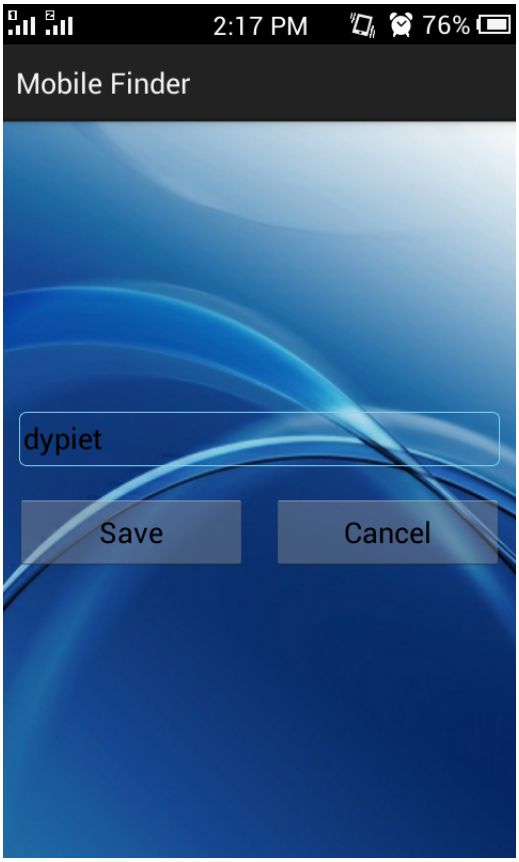
1) We can easily find our misplaced mobile which is on silent profile.
2) If password is match then message will not stored in in-box of mobile.
3) After generating the tune without pressing the stop button or home button we cannot stop the tune.
4) No need to install the app on both sender and receivers mobile.
5) We can send message through any mobile.

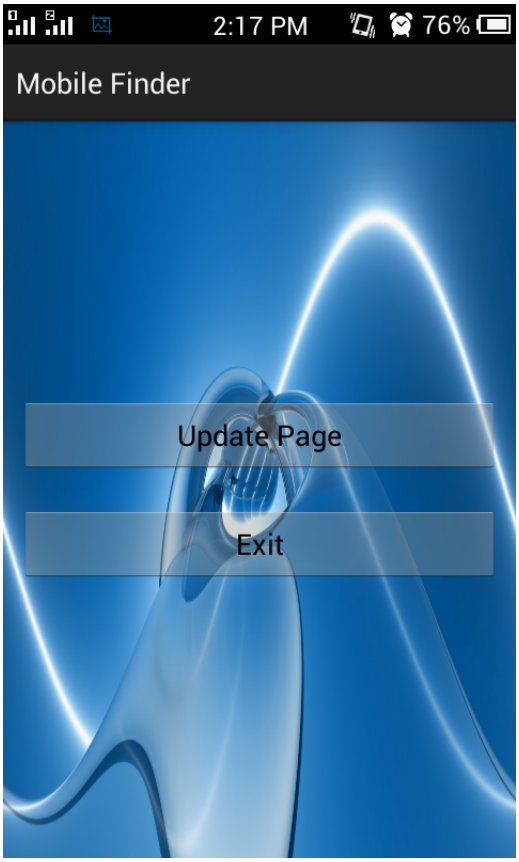
15. Disadvantages:

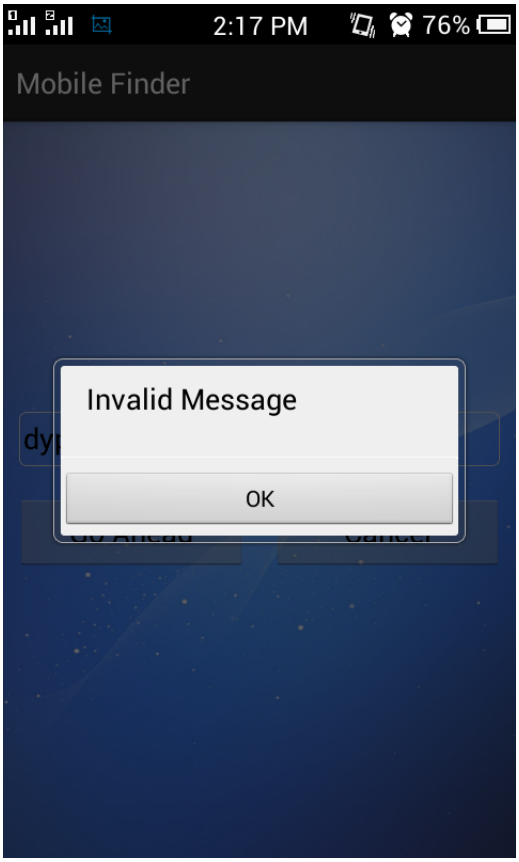
1) We can only find the misplaced mobile nearby us.
2) If the password is known to anyone then he can misused it.

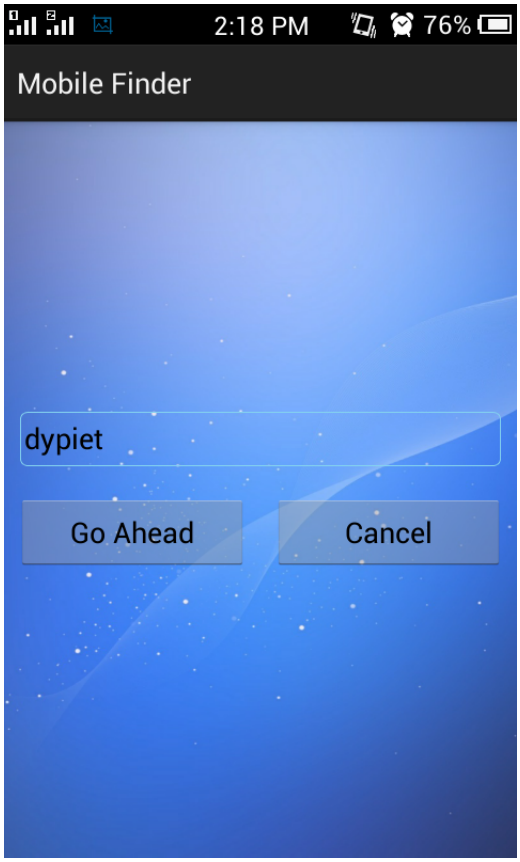
16. Output:

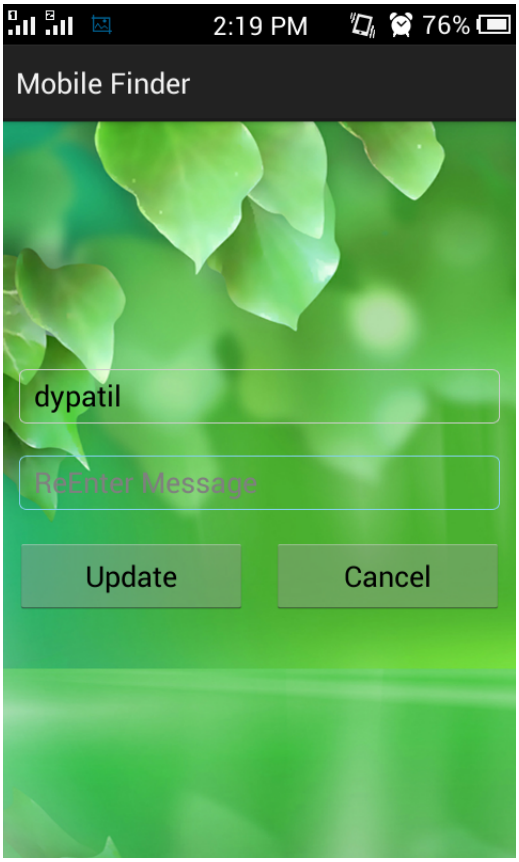

2:16 PM
76%
Mobile Finder
MOBILE
Mobile
Finder 1.0
Powered By
DYPIET

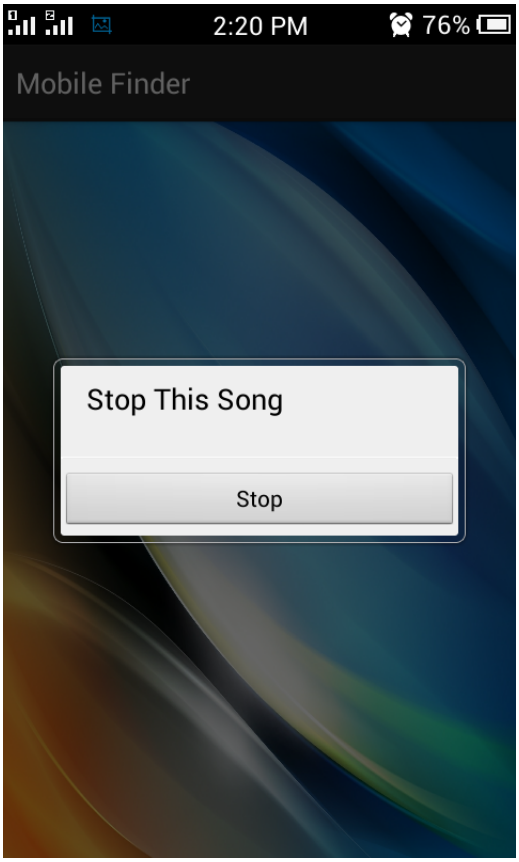

2:17 PM
76%
Mobile Finder
dypiet
Save
Cancel


2:17 PM
76%
Mobile Finder
Update Page
Exit


2:17 PM
76%
Mobile Finder
Invalid Message
OK


2:18 PM
76%
Mobile Finder
dypiet
Go Ahead
Cancel


2:19 PM
76%
Mobile Finder
dypatil
ReEnter Message
Update
Cancel



17. Conclusion:

We successfully implement this project using android development kit under the guidance of our teachers. This application help us to find the mobile and reduce our unnecessary work, it provided many facilities like small size, better user interface and many more.