VISVESVARAYA TECHNOLOGICAL UNIVERSITY
"Jnana Sangama", Belagavi – 590 018, Karnataka

MINI PROJECT REPORT

ON

"Blood Donor"
Submitted in partial fulfillment of the requirements for the
Mobile Application Development Lab (18CSMP68)

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

Submitted by:
Sthuthi S : 1JT19CS120

under the guidance of

NAGARAJ. A
Associate Professor
Department of Computer Science and Engineering

Department of Computer Science and Engineering
Jyothy Institute of Technology
Tataguni, Off. Kanakapura Road,
Bengaluru – 560 082
2021 – 2022

JYOTHY INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering
Accredited by NBA, New Delhi
Tataguni, Off. Kanakapura Road, Bengaluru - 560 082

C E R T I F I C A T E

This is to certify that the Mini Project titled '**Blood Donor' carried** out by **Mr/Ms** STHUTHI S, **USN:** 1JT19CS120, a Bonafede student of Jyothy Institute of Technology, in partial fulfillment for the award of **Bachelor of Engineering**, in **Computer Science and Engineering** under Visvesvaraya Technological University, Belagavi, during the year 2021-2022.

The project report has been approved, as it satisfies the academic requirements in respect of Mini Project prescribed for the course Mobile Application Development Lab (18CSMP68).

Signature of Faculty Incharge   Signature of HOD

....   …..............................

 Prof. Nagaraj. A   Dr. Prabhanjan. S.
 Associate Professor of CSE   Prof & Head of Dept - CSE Dept
JIT, Bengaluru   JIT, Bengaluru

External Viva

Name of the Examiners   Signature with Date

1)

2)

D E C L A R A T I O N

I, STHUTHI S, 6th Semester student of Computer Science and Engineering, Jyothy Institute of Technology, Bangalore - 560 082, declare that the Mini Project of Mobile Application Development Lab (18CSMP68) is successfully completed.

This report is submitted in partial fulfillment of the requirements for award of Bachelor Degree in Computer Science and Engineering, during the academic year 2021-2022.

Date : 16-07-2022
Place : Bangalore

USN : 1JT19CS120

Name : STHUTHI S

A C K N O W L E D G E M E N T

This Mini Project is a result of accumulated guidance, direction and support of several important persons. I take this opportunity to express my gratitude to all, who have helped us to complete the Mini Project.

I express our sincere thanks to our Principal Dr K. Gopalakrishna, for providing us adequate facilities to undertake this Mini Project.

I would like to thank Dr. Prabhanjan. S, Head of Dept - CSE, for providing us an opportunity to carry out Mini Project and for his valuable guidance and support.

I would like to thank, Prof. Nagaraj. A, Faculty In Charge, for guiding us during the period of Mini Project.

I would like to thank all the faculty members of CSE department for the support extended during the course of Mini Project.

I would like to thank the non-teaching members of the Dept of CSE, for helping us during the Mini Project.

Last but not the least, I would like to thank our parents and friends without whose constant help, the completion of Mini Project would have not been possible.

STHUTHI S [1JT19CS120]
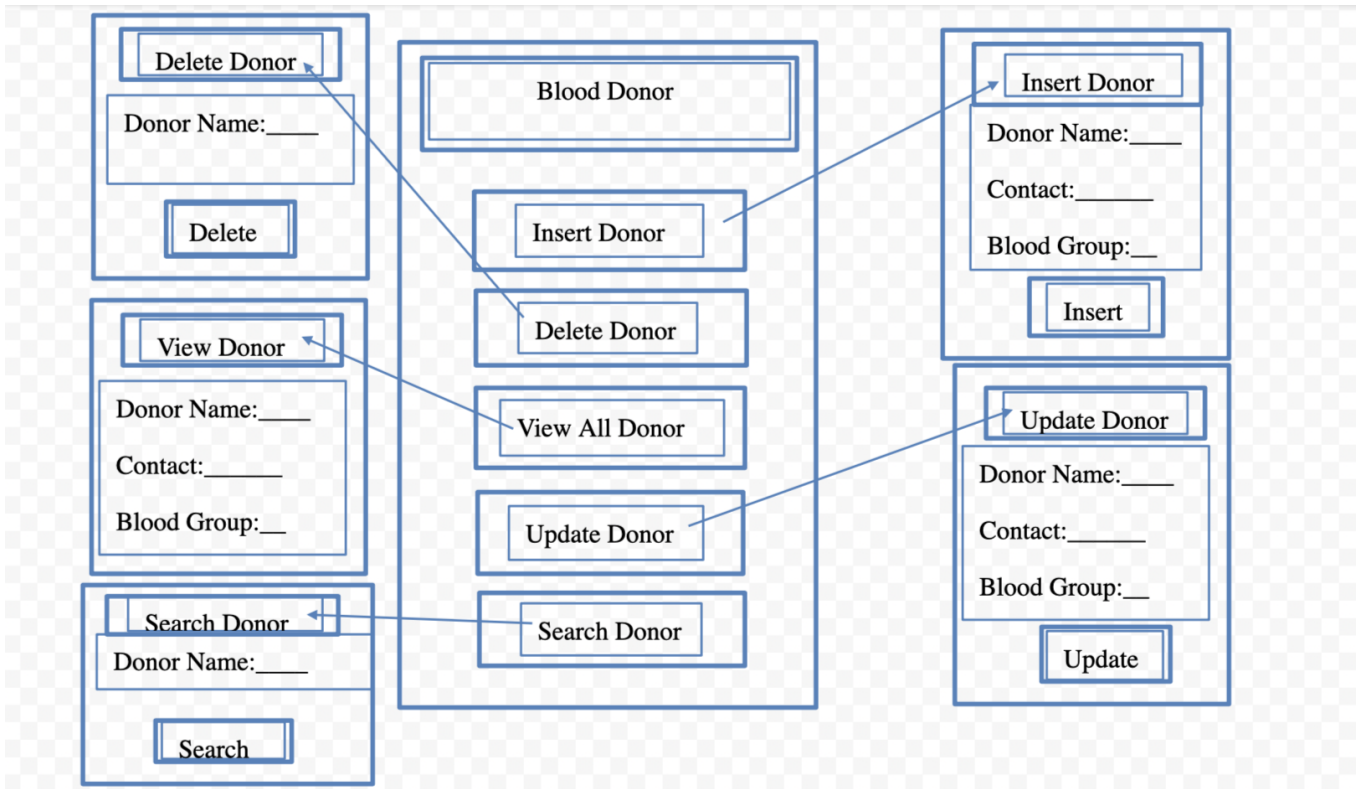
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CHAPTER   1

Problem statement
with
input and output diagram

Problem Statement:

Develop an android application – Blood Donor management application that helps the user to manage by adding details of Blood Donor, delete a Blood Donor, search a Blood Donor, update and display all the current Blood Donors in form of a list.

Input and Output Diagram:

CHAPTER   2

XML files Code

activity_insert.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".InsertActivity"
    android:background="@drawable/bd1">


    <EditText
        android:id="@+id/iName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="76dp"
        android:ems="10"
        android:hint="Name"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.83"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />


    <TextView
        android:id="@+id/textView2"
        android:layout_width="138dp"
        android:layout_height="43dp"
        android:layout_marginTop="84dp"
        android:text="Name :"
        android:textAlignment="center"
        android:textColor="#F10E0E"
        android:textSize="24dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.058"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />


    <TextView
        android:id="@+id/textView3"
        android:layout_width="138dp"
        android:layout_height="43dp"
        android:layout_marginTop="140dp"
        android:text="Contact :"
        android:textAlignment="center"
        android:textColor="#F10E0E"
        android:textSize="24dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.058"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />


    <TextView
        android:id="@+id/textView4"
        android:layout_width="146dp"
        android:layout_height="50dp"
        android:layout_marginTop="208dp"
        android:text="Blood Group :"
        android:textAlignment="center"
        android:textColor="#F10E0E"
        android:textSize="24dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.058"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
```

```xml
    <EditText
        android:id="@+id/icontact"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:hint="Contact"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.835"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/iName" />

    <EditText
        android:id="@+id/ibloodgroup"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="88dp"
        android:ems="10"
        android:hint="Blood Group"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.84"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/iName" />

    <Button
        android:id="@+id/insert"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="304dp"
        android:backgroundTint="#F15050"
        android:text="Insert Donor"
        android:textColor="#FFFFFF"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_update.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".UpdateActivity"
    android:background="@drawable/bd1">
    <TextView
        android:id="@+id/updateheading"
        android:layout_width="413dp"
        android:layout_height="77dp"
        android:background="#F64343"
        android:text="Update Donor"
        android:textAlignment="center"
        android:textColor="#ffffff"
        android:textSize="45dp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
    <EditText
        android:id="@+id/ubloodgroup"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:text=""
    android:textColor="#FF0000"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.924"
    app:layout_constraintTop_toTopOf="@+id/itype" />
<EditText
    android:id="@+id/ucontact"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:text=""
    android:textColor="#FF0000"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.913"
    app:layout_constraintTop_toTopOf="@+id/iqty" />
<EditText
    android:id="@+id/uname"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPersonName"
    android:text=""
    android:textColor="#FF0000"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.921"
    app:layout_constraintTop_toTopOf="@+id/iname" />
<TextView
    android:id="@+id/iname"
    android:layout_width="160dp"
    android:layout_height="66dp"
    android:layout_marginTop="28dp"
    android:text="Donor Name :"
    android:textColor="#F64343"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.063"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/updateheading" />


<TextView
    android:id="@+id/iqty"
    android:layout_width="160dp"
    android:layout_height="66dp"
    android:layout_marginTop="28dp"
    android:text="Contact:"
    android:textColor="#F64343"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.063"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/iname" />
<TextView
    android:id="@+id/itype"
    android:layout_width="160dp"
    android:layout_height="66dp"
    android:layout_marginTop="28dp"
    android:text="Blood Group:"
    android:textColor="#F64343"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.064"
```

```xml
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/iqty" />


    <Button
        android:id="@+id/updateitem"
        android:layout_width="162dp"
        android:layout_height="91dp"
        android:layout_marginTop="104dp"
        android:backgroundTint="#F64343"
        android:onClick="onClick"
        android:text="Update Donor"
        android:textColor="#FFFFFF"
        android:textSize="30dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/itype"
        tools:ignore="OnClick" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

activity_main.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:padding="10dp"
    android:background="@drawable/bd1">


    <Button
        android:id="@+id/insertBtn"
        android:layout_width="382dp"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="10dp"
        android:layout_marginTop="60dp"
        android:layout_marginEnd="9dp"
        android:backgroundTint="#F3BCBC"
        android:text="Insert new Donor"
        android:textSize="18dp" />

    <Button
        android:id="@+id/viewBtn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/insertBtn"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="10dp"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="9dp"
        android:backgroundTint="#F39A9A"
```

```
        android:text="View all Donors"
        android:textSize="18dp" />


    <Button
        android:id="@+id/deleteBtn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/viewBtn"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="10dp"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="9dp"
        android:backgroundTint="#F17777"
        android:text="Delete the Donor"
        android:textSize="18dp" />


    <Button
        android:id="@+id/updateBtn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/deleteBtn"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="10dp"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="9dp"
        android:backgroundTint="#ED5656"
        android:text="Update the details"
        android:textSize="18dp" />


    <Button
        android:id="@+id/searchBtn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/updateBtn"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
        android:layout_marginStart="10dp"
        android:layout_marginTop="10dp"
        android:layout_marginEnd="9dp"
        android:backgroundTint="#F13838"
        android:text="Search the donor"
        android:textSize="18dp" />

</RelativeLayout>
```

search_activity.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".SearchActivity"
    android:background="@drawable/bd1">


    <TextView
        android:id="@+id/searchheading"
        android:layout_width="413dp"
        android:layout_height="77dp"
        android:background="#F64343"
        android:text="Search Donor"
        android:textAlignment="center"
```

```xml
        android:textColor="#ffffff"
        android:textSize="45dp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/iid"
        android:layout_width="184dp"
        android:layout_height="90dp"
        android:layout_marginTop="20dp"
        android:text="Enter Donor Name:"
        android:textColor="#FF0015"
        android:textSize="25dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.063"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/searchheading" />
    <TextView
        android:id="@+id/uid"
        android:layout_width="220dp"
        android:layout_height="45dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:text=""
        android:textColor="#0096ff"
        android:textSize="25dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.916"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/iqty" />


    <Button
        android:id="@+id/searchitem"
        android:layout_width="210dp"
        android:layout_height="92dp"
        android:layout_marginTop="44dp"
        android:backgroundTint="#FF0000"
        android:onClick="onClick"
        android:text="Search Donor"
        android:textColor="#FFFFFF"
        android:textSize="30dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/iid"
        tools:ignore="OnClick" />
    <TextView
        android:id="@+id/dtype"
        android:layout_width="220dp"
        android:layout_height="45dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:text=""
        android:textColor="#0096ff"
        android:textSize="25dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.916"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/itype" />
    <TextView
        android:id="@+id/did"
        android:layout_width="220dp"
        android:layout_height="45dp"
        android:ems="10"
        android:inputType="textPersonName"
```

```
    android:text=""
    android:textColor="#0096ff"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.916"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="@+id/search_id" />
<TextView
    android:id="@+id/dname"
    android:layout_width="220dp"
    android:layout_height="45dp"
    android:ems="10"
    android:inputType="textPersonName"
    android:text=""
    android:textColor="#0096ff"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.916"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="@+id/iname" />
<TextView
    android:id="@+id/iname"
    android:layout_width="160dp"
    android:layout_height="45dp"
    android:textColor="#0096ff"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.063"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/search_id" />


<TextView
    android:id="@+id/iqty"
    android:layout_width="160dp"
    android:layout_height="45dp"
    android:textColor="#0096ff"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.063"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/iname" />
<TextView
    android:id="@+id/itype"
    android:layout_width="160dp"
    android:layout_height="45dp"
    android:textColor="#0096ff"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.063"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/iqty" />
<TextView
    android:id="@+id/search_id"
    android:layout_width="160dp"
    android:layout_height="45dp"
    android:layout_marginTop="48dp"
    android:textColor="#0096ff"
    android:textSize="25dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.063"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/searchitem" />

<Button
    android:id="@+id/back"
```

```xml
            android:layout_width="171dp"
            android:layout_height="64dp"
            android:layout_marginTop="48dp"
            android:backgroundTint="#FF0000"
            android:onClick="onClick"
            android:text="Menu"
            android:textColor="#FFFFFF"
            android:textSize="30dp"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/itype"
            tools:ignore="OnClick" />




    <EditText
            android:id="@+id/keyId"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:ems="10"
            android:textColor="#FF0000"
            android:inputType="textNoSuggestions"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.92"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="@+id/iid" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

view_activity.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    tools:context=".ViewActivity"
    android:background="@drawable/bd1">
    <TextView
        android:id="@+id/selectheading"
        android:layout_width="413dp"
        android:layout_height="77dp"
        android:background="#F64343"
        android:textColor="#ffffff"
        android:text="View Donor"
        android:textAlignment="center"
        android:textSize="45dp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/items"
        android:layout_width="409dp"
        android:layout_height="600dp"
        android:layout_marginTop="76dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/selectheading" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

my_row.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="150dp"
    xmlns:app="http://schemas.android.com/apk/res-auto">

    <EditText
        android:id="@+id/rbloodgroup"
        android:layout_width="200dp"
        android:layout_height="40dp"
        android:ems="10"
        android:enabled="false"
        android:inputType="textPersonName"
        android:textColor="#FF0000"
        android:textSize="20dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.748"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/vtype" />

    <EditText
        android:id="@+id/rname"
        android:layout_width="200dp"
        android:layout_height="40dp"
        android:ems="10"
        android:enabled="false"
        android:inputType="textPersonName"
        android:textColor="#FF0000"
        android:textSize="20dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.748"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/vname" />

    <EditText
        android:id="@+id/rcontact"
        android:layout_width="200dp"
        android:layout_height="40dp"
        android:ems="10"
        android:enabled="false"
        android:inputType="textPersonName"
        android:textColor="#FF0000"
        android:textSize="20dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.748"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/vqty" />

    <TextView
        android:id="@+id/vname"
        android:layout_width="142dp"
        android:layout_height="40dp"
        android:background="#FF0008"
        android:text="Donor Name"
        android:textAlignment="center"
        android:textColor="#ffffff"
        android:textSize="26dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.059"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.03" />
```

```xml
<TextView
    android:id="@+id/vqty"
    android:layout_width="142dp"
    android:layout_height="40dp"
    android:background="#FF0008"
    android:text="Blood Group"
    android:textAlignment="center"
    android:textColor="#ffffff"
    android:textSize="26dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.059"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/vname" />

<TextView
    android:id="@+id/vtype"
    android:layout_width="142dp"
    android:layout_height="40dp"
    android:background="#FF0008"
    android:text="Contact"
    android:textAlignment="center"
    android:textColor="#ffffff"
    android:textSize="26dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.059"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/vqty" />

<TextView
    android:id="@+id/textView"
    android:layout_width="342dp"
    android:layout_height="17dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.231"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/vtype" />
<TextView
    android:id="@+id/textView2"
    android:layout_width="342dp"
    android:layout_height="17dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.231"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

login_activity.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".LoginActivity"
    android:background="@drawable/bd2">

    <TextView
```

```
        android:id="@+id/textView"
        android:layout_width="52dp"
        android:layout_height="27dp"
        android:layout_marginTop="80dp"
        android:text="Login"
        android:textColor="#F30000"
        android:textSize="20dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/username"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="44dp"
        android:ems="10"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView"
        android:hint="Username"/>

    <EditText
        android:id="@+id/password"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="64dp"
        android:ems="10"
        android:hint="Password
"
        android:inputType="textPassword"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/username" />

    <Button
        android:id="@+id/login"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="39dp"
        android:backgroundTint="#F44646"
        android:text="Login"
        android:textColor="#FBFBFB"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/password" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

delete_activity.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".DeleteActivity"
    android:background="@drawable/bd1">

    <TextView
        android:id="@+id/deleteheading"
        android:layout_width="413dp"
        android:layout_height="77dp"
```

```xml
        android:background="#FF0000"
        android:text="Delete Donor"
        android:textAlignment="center"
        android:textColor="#ffffff"
        android:textSize="45dp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/iid"
        android:layout_width="160dp"
        android:layout_height="94dp"
        android:layout_marginTop="44dp"
        android:text="Enter Donor Name :"
        android:textColor="#FF0000"
        android:textSize="25dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.103"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/deleteheading" />
    <EditText
        android:id="@+id/uid"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="8dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:text=""
        android:textColor="#FF0000"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.913"
        app:layout_constraintStart_toStartOf="@+id/iid"
        app:layout_constraintTop_toTopOf="@+id/iid" />

    <Button
        android:id="@+id/deleteitem"
        android:layout_width="185dp"
        android:layout_height="92dp"
        android:layout_marginTop="172dp"
        android:backgroundTint="#FF0000"
        android:onClick="onClick"
        android:text="Delete Donor"
        android:textColor="#FFFFFF"
        android:textSize="30dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="@+id/iid" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

CHAPTER 3

Java files Code

ItemsAdapter.java:

```java
package com.example.madlabminiproject;

import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.EditText;
import android.widget.Toast;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import java.util.ArrayList;

public class ItemsAdapter extends RecyclerView.Adapter<ItemsAdapter.ViewHolder>
{
    ArrayList<Items> itemList;
    Context context;
    RecyclerView rv;
    final View.OnClickListener onClickListener = new MyOnClickListener();
    public static class ViewHolder extends RecyclerView.ViewHolder
    {
        EditText name,contact,bloodgroup;
        public ViewHolder(@NonNull View itemView)
        {
            super(itemView);
            name= itemView.findViewById(R.id.rname);
            contact = itemView.findViewById(R.id.rcontact);
            bloodgroup = itemView.findViewById(R.id.rbloodgroup);
        }
    }
    public ItemsAdapter(Context context, ArrayList<Items> itemList, RecyclerView rv)
    {
        this.context = context;
        this.itemList = itemList;
        this.rv = rv;
    }
    @NonNull
    @Override
    public ItemsAdapter.ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType)
    {
        LayoutInflater inflater = LayoutInflater.from(context);
        View view = inflater.inflate(R.layout.my_row,parent,false);
        view.setOnClickListener(onClickListener);
        ViewHolder viewHolder = new ViewHolder(view);
        return viewHolder;
    }
    @Override
    public void onBindViewHolder(@NonNull ItemsAdapter.ViewHolder holder, int position)
    {
        Items item = itemList.get(position);
        holder.name.setText(item.getName());
        holder.contact.setText(item.getBloodgroup());
        holder.bloodgroup.setText(item.getContact());
    }
    @Override
    public int getItemCount() {
        return itemList.size();
    }
```

```java
    public class MyOnClickListener implements View.OnClickListener
    {
        @Override
        public void onClick(View v)
        {
            int itemPosition = rv.getChildLayoutPosition(v);
            String item = itemList.get(itemPosition).getName();
            Toast.makeText(context,item,Toast.LENGTH_LONG).show();
        }
    }
}
```

MainActivity.java:

```java
package com.example.madlabminiproject;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity implements View.OnClickListener{

    Button insert,update,delete,view,search;
    DBHelper DB;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        insert=findViewById(R.id.insertBtn);
        update=findViewById(R.id.updateBtn);
        delete=findViewById(R.id.deleteBtn);
        search=findViewById(R.id.searchBtn);
        view=findViewById(R.id.viewBtn);
        DB=new DBHelper(this);
        insert.setOnClickListener(this);
        update.setOnClickListener(this);
        delete.setOnClickListener(this);
        search.setOnClickListener(this);
        view.setOnClickListener(this);
    }

    @Override
    public void onClick(View v) {
        if(v.equals(view))
        {
            Intent it = new Intent(this, ViewActivity.class);
            startActivity(it);
        }
        else if(v.equals(search))
        {
            Intent it = new Intent(this, SearchActivity.class);
            startActivity(it);
        }
        if(v.equals(delete))
        {
            Intent it = new Intent(this, DeleteActivity.class);
            startActivity(it);
        }
```

```
        if(v.equals(update))
        {
            Intent it = new Intent(this, UpdateActivity.class);
            startActivity(it);
        }
        if(v.equals(insert))
        {
            Intent it = new Intent(this, InsertActivity.class);
            startActivity(it);
        }


    }
}
```

InsertActivity.java:

```java
package com.example.madlabminiproject;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class InsertActivity extends AppCompatActivity implements View.OnClickListener{

  Button insert;
  EditText name,bloodgroup,contact;
  @Override
  protected void onCreate(Bundle savedInstanceState)
  {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_insert);
    name=findViewById(R.id.iName);
    contact=findViewById(R.id.icontact);
    bloodgroup=findViewById(R.id.ibloodgroup);
    insert=findViewById(R.id.insert);
    insert.setOnClickListener(this);
  }
  public void onClick(View v)
  {


    if(v.equals(insert))
    {
      String res;
      long r = new
DBHelper(this).addItem(name.getText().toString(),contact.getText().toString(),bloodgroup.getText().toString());
      if(r==-1)
      {
        res= "Insertion of item "+name.getText().toString()+" failed !!";
      }
      else
      {
        res= "Item "+name.getText().toString()+" successfully inserted !!";
      }
      Toast to = Toast.makeText(this,res, Toast.LENGTH_LONG);
      to.show();
```

```java
        Intent it = new Intent(this,MainActivity.class);
        startActivity(it);
    }
  }
}
```

UpdateActivity.java:

```java
package com.example.madlabminiproject;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class UpdateActivity extends AppCompatActivity implements View.OnClickListener {


  EditText id,name,contact,bloodgroup;
  Button update;
  @Override
  protected void onCreate(Bundle savedInstanceState)
  {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_update);
    name=findViewById(R.id.uname);
    contact=findViewById(R.id.ucontact);
    bloodgroup=findViewById(R.id.ubloodgroup);
    update=findViewById(R.id.updateitem);
  }
  @Override
  public void onClick(View v)
  {
    if(v.equals(update))
    {
      String res;
      long r = new
          DBHelper(this).updateItem(name.getText().toString(),contact.getText().toString(),bloodgroup.getText().toString());
      if(r==-1)
        res = "Updating "+name.getText().toString()+" Failed !!";
      else
        res = name.getText().toString()+" successfully updated !!";
      Toast t = Toast.makeText(this, res, Toast.LENGTH_LONG);
      t.show();
      Intent i = new Intent(this,MainActivity.class);
      startActivity(i);
    }
  }
}
```

SearchAdapter.java:

```java
package com.example.madlabminiproject;

import android.content.Intent;
import android.database.Cursor;
import android.os.Bundle;
```

```java
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class SearchActivity extends AppCompatActivity implements View.OnClickListener {
    Button search,back;
    EditText name;
    TextView did,dtype,dname,dqty,iid,iname,itype,iqty;
    String i;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_search);
    name = findViewById(R.id.keyId);
    did = findViewById(R.id.did);
    dname = findViewById(R.id.dname);
    dqty = findViewById(R.id.uid);
    dtype = findViewById(R.id.dtype);
    search = findViewById(R.id.searchitem);
    back=findViewById(R.id.back);
    iid = findViewById(R.id.search_id);
    iname = findViewById(R.id.iname);
    iqty = findViewById(R.id.iqty);
    itype = findViewById(R.id.itype);
    back.setOnClickListener(this);
    }
@Override
public void onClick(View v)
    {
    if (v.equals(search))
    {
    iid.setText("");
    iname.setText("");
    iqty.setText("");
    itype.setText("");
    did.setText("");
    dname.setText("");
    dqty.setText("");
    dtype.setText("");
    Cursor cursor = new
    DBHelper(this).searchItem(name.getText().toString());
    if (cursor.moveToNext())
    {
    int index1= cursor.getColumnIndex("name");
    String rowId = cursor.getString(index1);
    int index2 = cursor.getColumnIndex("contact");
    String rowName = cursor.getString(index2);
    int index3 = cursor.getColumnIndex("bloodgroup");
    String rowQty = cursor.getString(index3);
    iid.setText("Donor Name:");
    iname.setText("Contact :");
    iqty.setText("Blood Group :");
    did.setText(rowId);
    dname.setText(rowName);
    dqty.setText(rowQty);
    }
    }
    if (v.equals(back))
    {
    Intent it = new Intent(this, MainActivity.class);
```

```
    startActivity(it);
    }
    }
```

Items.java:

```java
package com.example.madlabminiproject;

public class Items {
    private String name,contact,bloodgroup;
    public Items(String name,String contact,String bloodgroup)
    {
        this.contact=contact;
        this.bloodgroup=bloodgroup;
        this.name=name;
    }

    public String getContact() {
        return contact;
    }
    public void setContact(String contact) {
        this.contact = contact;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public String getBloodgroup() {
        return bloodgroup;
    }
    public void setBloodgroup(String bloodgroup) {
        this.bloodgroup = bloodgroup;
    }
}
```

ViewActivity.java:

```java
package com.example.madlabminiproject;

import android.os.Bundle;
import android.view.WindowManager;

import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
```

```java
import java.util.ArrayList;

public class ViewActivity extends AppCompatActivity {
    RecyclerView recyclerView;
    DBHelper db;
    RecyclerView.LayoutManager layoutManager;
    ArrayList<Items> itemsList = new ArrayList<>();
    ItemsAdapter itemsAdapter ;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        getWindow().setSoftInputMode(WindowManager.LayoutParams.SOFT_INPUT_STATE_ALWAYS_HIDDEN);
        setContentView(R.layout.activity_view);
        recyclerView=findViewById(R.id.items);
        recyclerView.setHasFixedSize(true);
        db = new DBHelper(this);
        itemsList = db.selectItems();
        layoutManager = new LinearLayoutManager(ViewActivity.this,RecyclerView.VERTICAL,false);
        recyclerView.setLayoutManager(layoutManager);
        itemsAdapter = new ItemsAdapter(this,itemsList,recyclerView);
        recyclerView.setAdapter(itemsAdapter);
    }

}
```

DBHelperActivity.java:

```java
package com.example.madlabminiproject;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import java.util.ArrayList;

public class DBHelper extends SQLiteOpenHelper {
    private static final String dbname = "dbitems";
    ArrayList<Items> itemsArrayList = new ArrayList<Items>();

    public DBHelper(Context context) {
        super(context, dbname, null, 1);
    }


    @Override
    public void onCreate(SQLiteDatabase db) {
        String qry = "create table items ( name text primary key,contact text,bloodgroup text)";
        db.execSQL(qry);
    }

    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        String qry = "drop table if exists items";
        db.execSQL(qry);
        onCreate(db);
    }
    public long addItem(String name,String contact,String bloodgroup)
    {
```

```java
        SQLiteDatabase db=this.getWritableDatabase();
        ContentValues cv = new ContentValues();
        cv.put("name",name);
        cv.put("contact",contact);
        cv.put("bloodgroup",bloodgroup);
        long res = db.insert("items",null,cv);
        return res;
    }
    public ArrayList<Items> selectItems()
    {
        SQLiteDatabase db=this.getWritableDatabase();
        String[] columns = {"name","contact","bloodgroup"};
        Cursor cursor = db.query("items",columns,null,null,null,null,null);
        while(cursor.moveToNext())
        {
            int index1=cursor.getColumnIndex("name");
            String rowName = cursor.getString(index1);
            int index2=cursor.getColumnIndex("contact");
            String rowContact = cursor.getString(index2);
            int index3=cursor.getColumnIndex("bloodgroup");
            String rowBloodgroup = cursor.getString(index3);
            Items rowItem = new Items(rowName,rowContact,rowBloodgroup);
            itemsArrayList.add(rowItem);

        }
        return itemsArrayList;
    }


    public Cursor searchItem(String name) {
        SQLiteDatabase db = this.getWritableDatabase();
        String[] columns = new String[]{"name", "contact", "bloodgroup"};
        Cursor cursor = db.rawQuery("select * from items where name=?", new String[]{name});
        return cursor;
    }

    public long updateItem(String uname, String ucontact, String ubloodgroup) {
        SQLiteDatabase db=this.getWritableDatabase();
        ContentValues cv = new ContentValues();
        cv.put("name",uname);
        cv.put("contact",ucontact);
        cv.put("bloodgroup",ubloodgroup);
//String sargs[] = new String[]{String.valueOf(id)};
        long res = db.update("items",cv,"name = ?",new String[]{uname});
        return res;
    }

    public long deleteItem(String name) {
        SQLiteDatabase db=this.getWritableDatabase();
        long res = db.delete("items","name=?",new
                String[]{String.valueOf(name)});
        return res;

    }
}
```

DeleteActivity.java:

```java
package com.example.madlabminiproject;

import android.content.Intent;
```

```java
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class DeleteActivity extends AppCompatActivity implements View.OnClickListener
{
    Button delete;
    EditText id;
    String i;

    @Override
    protected void onCreate(Bundle savedInstanceState)
    {


        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_delete);
        id=findViewById(R.id.uid);
        delete=findViewById(R.id.deleteitem);
    }
    @Override
    public void onClick(View v)
    {
        if(v.equals(delete))
        {
            String res;
            i=id.getText().toString();
            long r = new DBHelper(this).deleteItem(i);
            if(r==-1)
            {
                res="Deletion of "+i+" failed, maybe because item "+id+" doesnt exist";
            }
            else
            {
                res = i+" successfuly deleted";
            }
            Toast t = Toast.makeText(this, res, Toast.LENGTH_LONG);
            t.show();
            Intent i = new Intent(this,MainActivity.class);
            startActivity(i);
        }
    }
}
```

LoginActivity.java:

```java
package com.example.madlabminiproject;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;
```

```java
public class LoginActivity extends AppCompatActivity {
    EditText LoginUsn;
    EditText LoginPwd;
    Button Login;
    String user, pass;
    int count=0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);
        LoginUsn=findViewById(R.id.username);
        LoginPwd=findViewById(R.id.password);
        user="user1";
        pass="user123";
        Login=findViewById(R.id.login);
        Login.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String user1=LoginUsn.getText().toString();
                String pass1=LoginPwd.getText().toString();
                if(user.equals(user1)&&pass.equals(pass1)){
                    Toast.makeText(v.getContext(),"Login Successful",Toast.LENGTH_SHORT).show();
                    Intent it = new Intent(v.getContext(),MainActivity.class);
                    startActivity(it);
                }
                else {
                    Toast.makeText(LoginActivity.this, "Login Failed", Toast.LENGTH_SHORT).show();
                }
            }


        });
    }
}
```

CHAPTER   4

Screen Shots

Screenshots:
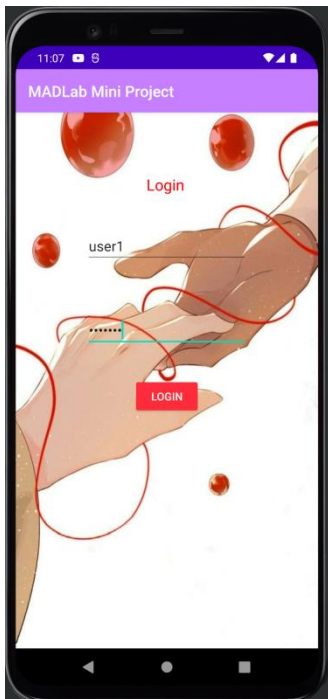
Figure 4.1:Login Page
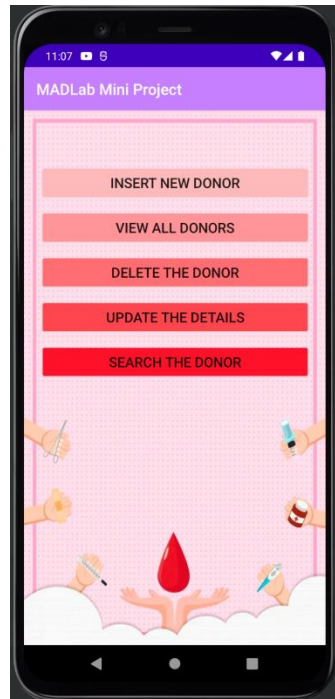
Figure 4.2:Home Page
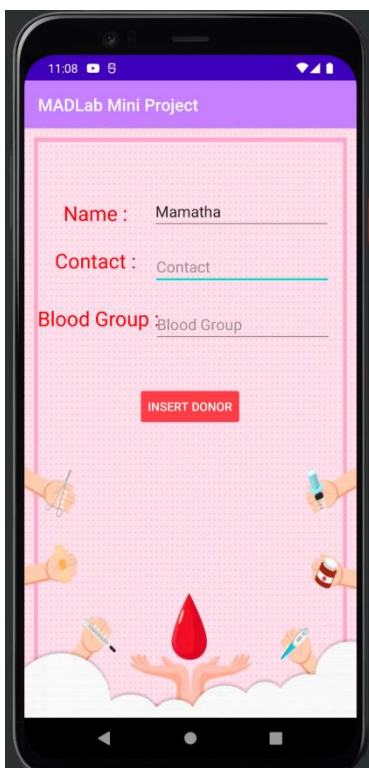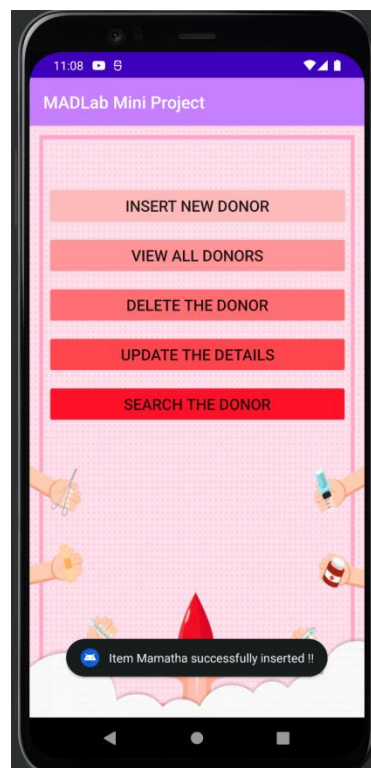

Figure 4.3: Insertion page

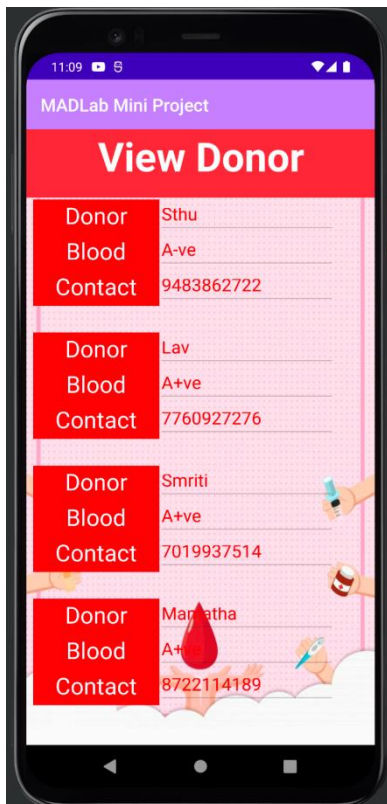
Figure 4.4: Successful Insertion

Figure 4.5: View Page
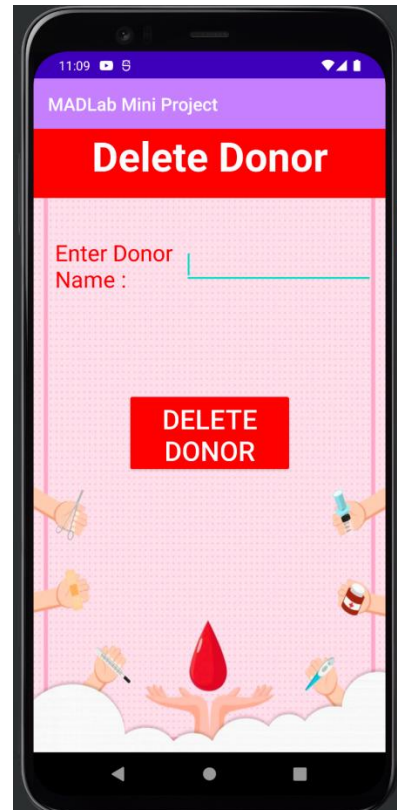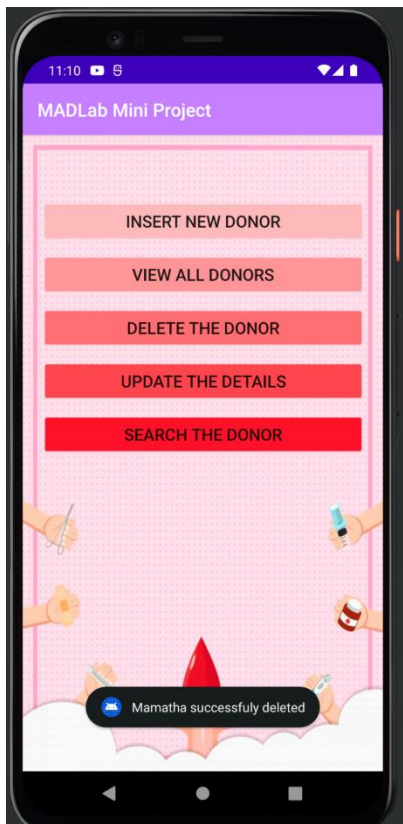

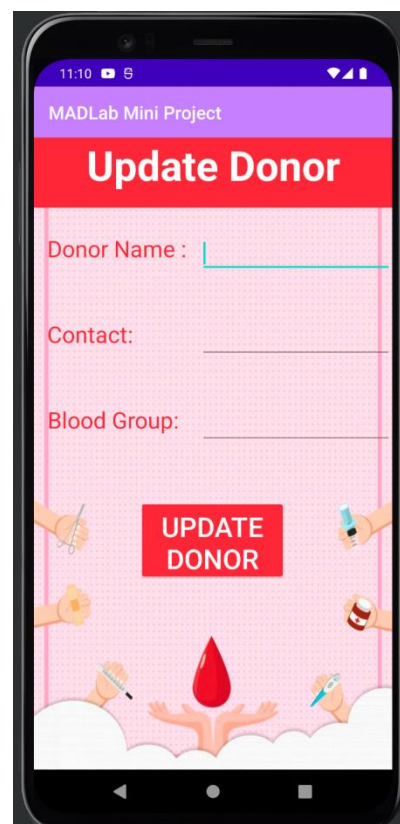**Figure 4.6: Delete Page**

Figure 4.7: Successful Deletion
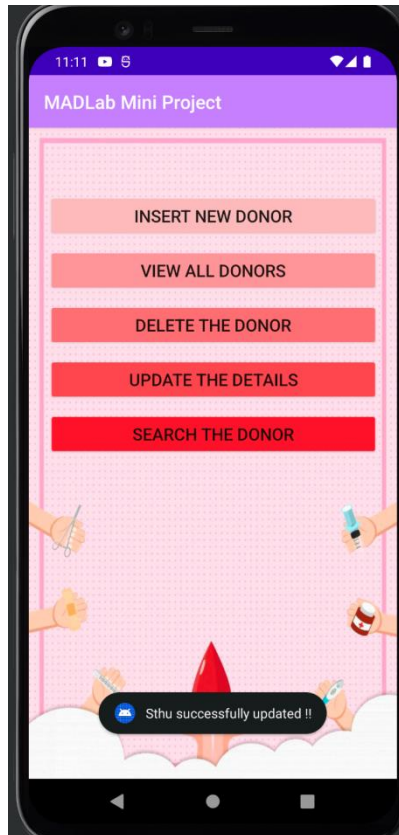

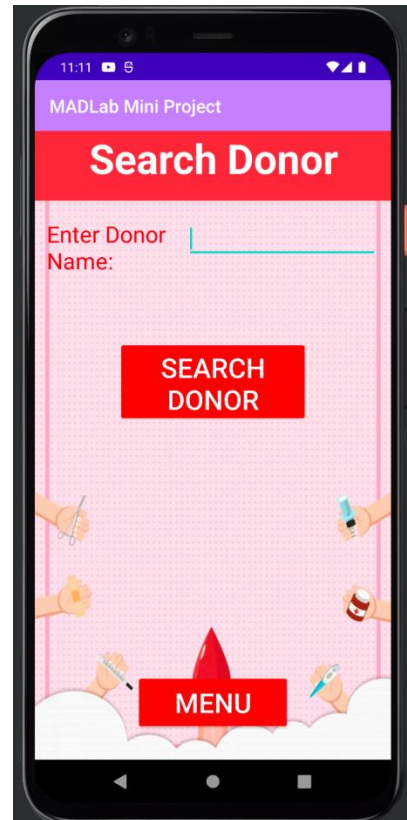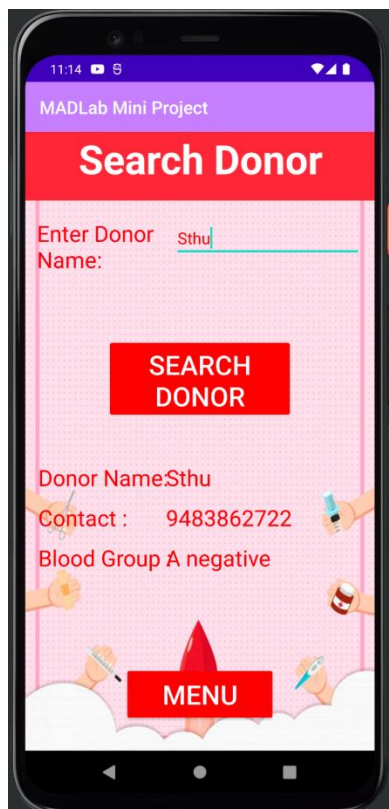**Figure 4.8: Update Page**

Figure 4.9: Successful Updation

Figure 4.10: Search Page

Figure 4.11: Successful Searching