

Ex.No : 12

Date :

MINI PROJECTMOBILE APPLICATION THAT CREATES BLOOD BANK

OBJECTIVE:

To develop an Android Application that creates Blood Bank

PROCEDURE

Step 1: Create an android project using android studio.

Step 2: Design

Open the actual Project folder (app) in Android Studio IDE.

Click res directory -> layout -> activity_main.xml -> Design.

Insert the GUI components to Design view in activity_main.xml.

Enter the id for each component.

Step 3: Open AndroidManifest.xml and add the code to provide access permission.

Step 4: Open res/values/styles.xml and add the code.

Step 5: Open Java -> MainActivity.java and add the code.

Step 6: Run the project and the output will be displayed in Emulator.

PROGRAM:

Activity main.xml :

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">
```

```
<TextView
```

```
    android:id="@+id/titleText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Blood Bank"
    android:textSize="24sp"
    android:layout_gravity="center"
    android:layout_marginBottom="20dp"/>
```

```
<TextView
```

```
    android:id="@+id/bloodInfo"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Available Blood Types:\nA+, B+, O+, AB+"
    android:textSize="18sp"
    android:layout_marginBottom="20dp"/>
```

<Button

```
android:id="@+id/donateButton"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Donate Blood"
android:layout_gravity="center"
android:layout_marginBottom="16dp"/>
```

<Button

```
android:id="@+id/requestButton"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Request Blood"
android:layout_gravity="center"
android:layout_marginBottom="16dp"/>
```

</LinearLayout>

Main Activity.java :

```
import package com.example.bloodbankapp;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    private Button donateButton, requestButton;
    private TextView bloodInfo;
    private String availableBloodTypes = "A+, B+, O+, AB+";

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        donateButton = findViewById(R.id.donateButton);
        requestButton = findViewById(R.id.requestButton);
        bloodInfo = findViewById(R.id.bloodInfo);
        donateButton.setOnClickListener(new View.OnClickListener() {
            public void onClick(View v) {
                donateBlood();
            }
        });

        requestButton.setOnClickListener(new View.OnClickListener() {
            public void onClick(View v) {
                requestBlood();
            }
        });
    }

    private void donateBlood() {
        }
    }
```

```

    });

    requestButton.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        requestBlood();
    }
    });
}

});
}

private void donateBlood() {

    }

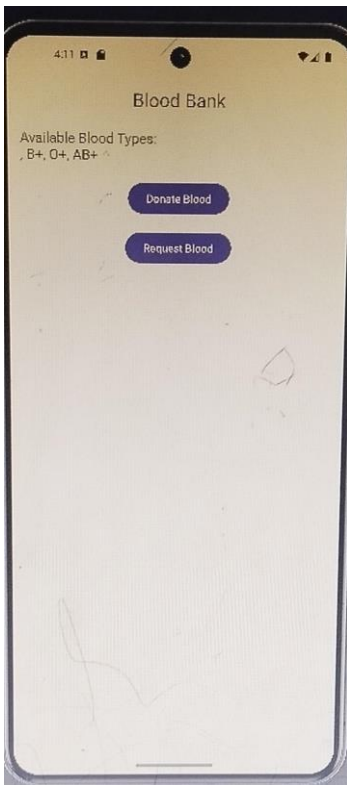
});

requestButton.setOnClickListener(new View.OnClickListener() {
public void onClick(View v) {
    requestBlood();
}
});
}
    private void donateBlood() {
if (bloodTypes.length > 0) {
    availableBloodTypes = availableBloodTypes.replace(bloodTypes[0], "").trim();
    bloodInfo.setText("Available Blood Types:\n" + availableBloodTypes);
    Toast.makeText(MainActivity.this, "Thank you for donating blood!",
Toast.LENGTH_SHORT).show();
} else {
    Toast.makeText(MainActivity.this, "No blood types available to donate.",
Toast.LENGTH_SHORT).show();
}
}
    private void requestBlood() {

if (!availableBloodTypes.isEmpty()) {
    Toast.makeText(MainActivity.this, "Blood requested successfully!", Toast.LENGTH_SHORT).show();
} else {
    Toast.makeText(MainActivity.this, "No blood available for request.",
Toast.LENGTH_SHORT).show();
}
}
}
}

```

OUTPUT :



CONCLUSION:

Thus a android application were created and tested successfully.