

Name: Lakshmana Kumar Mettu

Class ID:11

Introduction:

- This ICP is to introduce android elements and building simple android applications.

Programming elements and Tools required:

- Android Studio
- Basic Android Emulator

Objective:

- In this assignment the main objective is to create android login application.
- It has two activities.
 - i. Main Activity.java
 - ii. Home Activity.java
- Coming to the main activity It has two fields to enter username and password for login to homepage.
- The code snippet for main activity is given below.



```

public class MainActivity extends AppCompatActivity {

    Button b1;
    EditText E1,E2;

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

        b1 = (Button) findViewById(R.id.button);
        E1 = (EditText) findViewById(R.id.editText6);
        E2 = (EditText) findViewById(R.id.editText7);

        b1.setOnClickListener((v) -> {
            if(E1.getText().toString().equals("lmknd@mail.edu") &&
                E2.getText().toString().equals("lakshman")) {
                Toast.makeText(getApplicationContext(),
                    text: "Redirecting...", Toast.LENGTH_SHORT).show();
                redirectToHomePage();
            }else{
                Toast.makeText(getApplicationContext(), text: "Wrong Credentials", Toast.LENGTH_SHORT).show();
            }
        });
    }
}

```

```

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.menu_main, menu);
    return true;
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    // Handle action bar item clicks here. The action bar will
    // automatically handle clicks on the Home/Up button, so long
    // as you specify a parent activity in AndroidManifest.xml.
    int id = item.getItemId();

    //noinspection SimplifiableIfStatement
    if (id == R.id.action_settings) {
        return true;
    }

    return super.onOptionsItemSelected(item);
}

```

- Here Relative layout is used in order to relate all the parameters that are used in this application.
- Now when user enters their credentials It will re-direct to home page.
- If they enter wrong username or password it shows wrong credentials.
- Corresponding code snippet for home page is shown below.



```

import android.os.Bundle;
import android.support.design.widget.FloatingActionButton;
import android.support.design.widget.Snackbar;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.widget.Toolbar;
import android.view.View;

public class HomeActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);
        Toolbar toolbar = findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);

        FloatingActionButton fab = findViewById(R.id.fab);
        fab.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Snackbar.make(view, "Replace with your own action", Snackbar.LENGTH_LONG)
                    .setAction("Action", null).show();
            }
        });
    }
}

```

- And move on to manifestfile.xml where I have given permission to access to internet and it uses all the declared parameters. Code snippet for this one is given below.

```

<uses-permission android:name="android.permission.INTERNET" />

<application
    android:allowBackup="true"
    android:icon="@mipmap/ic_launcher"
    android:label="Manual Login Application"
    android:roundIcon="@mipmap/ic_launcher_round"
    android:supportRtl="true"
    android:theme="@style/AppTheme">
    <activity
        android:name=".HomeActivity"
        android:label="HomeActivity"
        android:theme="@style/AppTheme.NoActionBar"></activity>
    <activity
        android:name=".MainActivity"
        android:label="Manual Login Application"
        android:theme="@style/AppTheme.NoActionBar">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

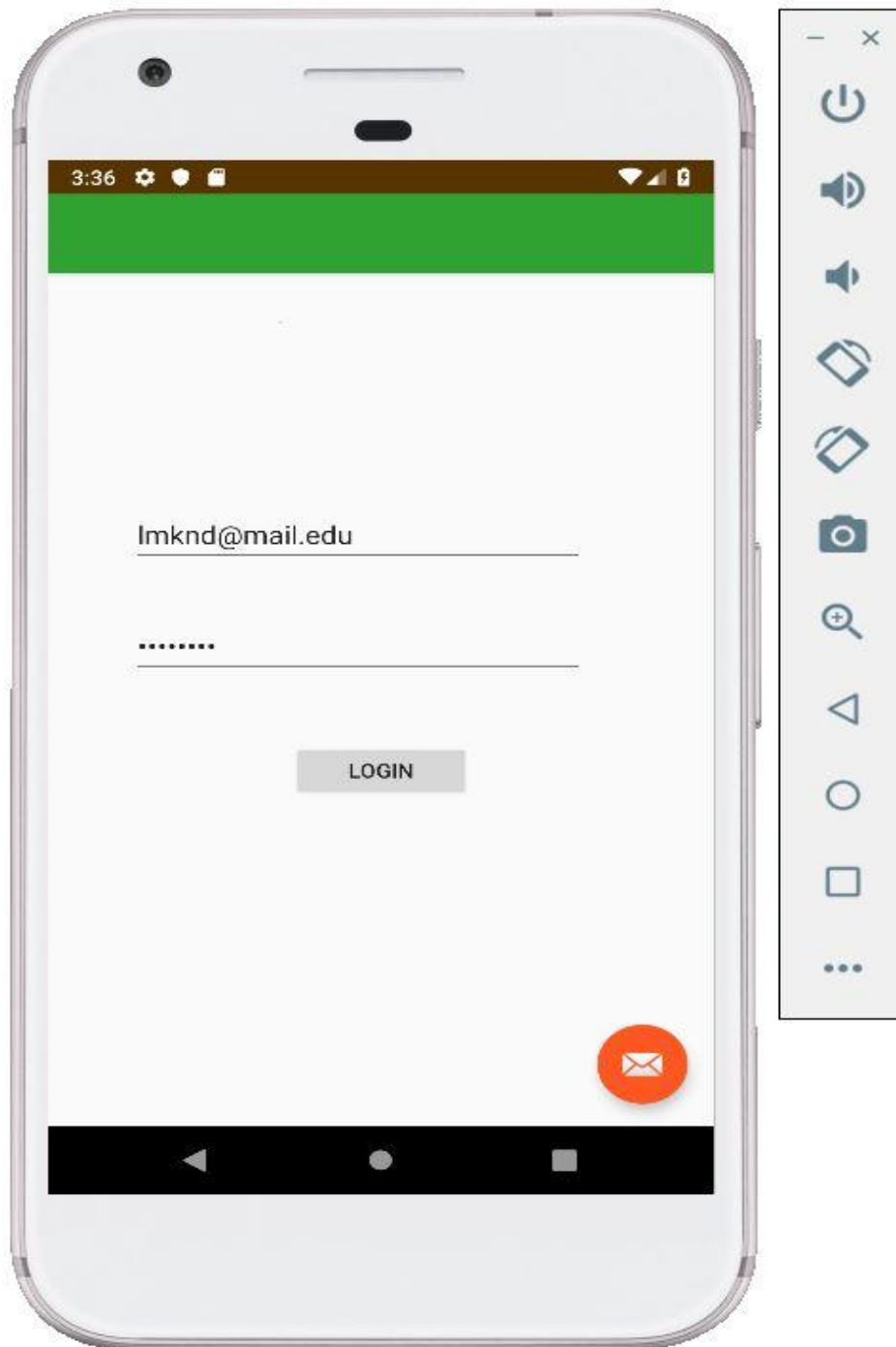
            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
</application>

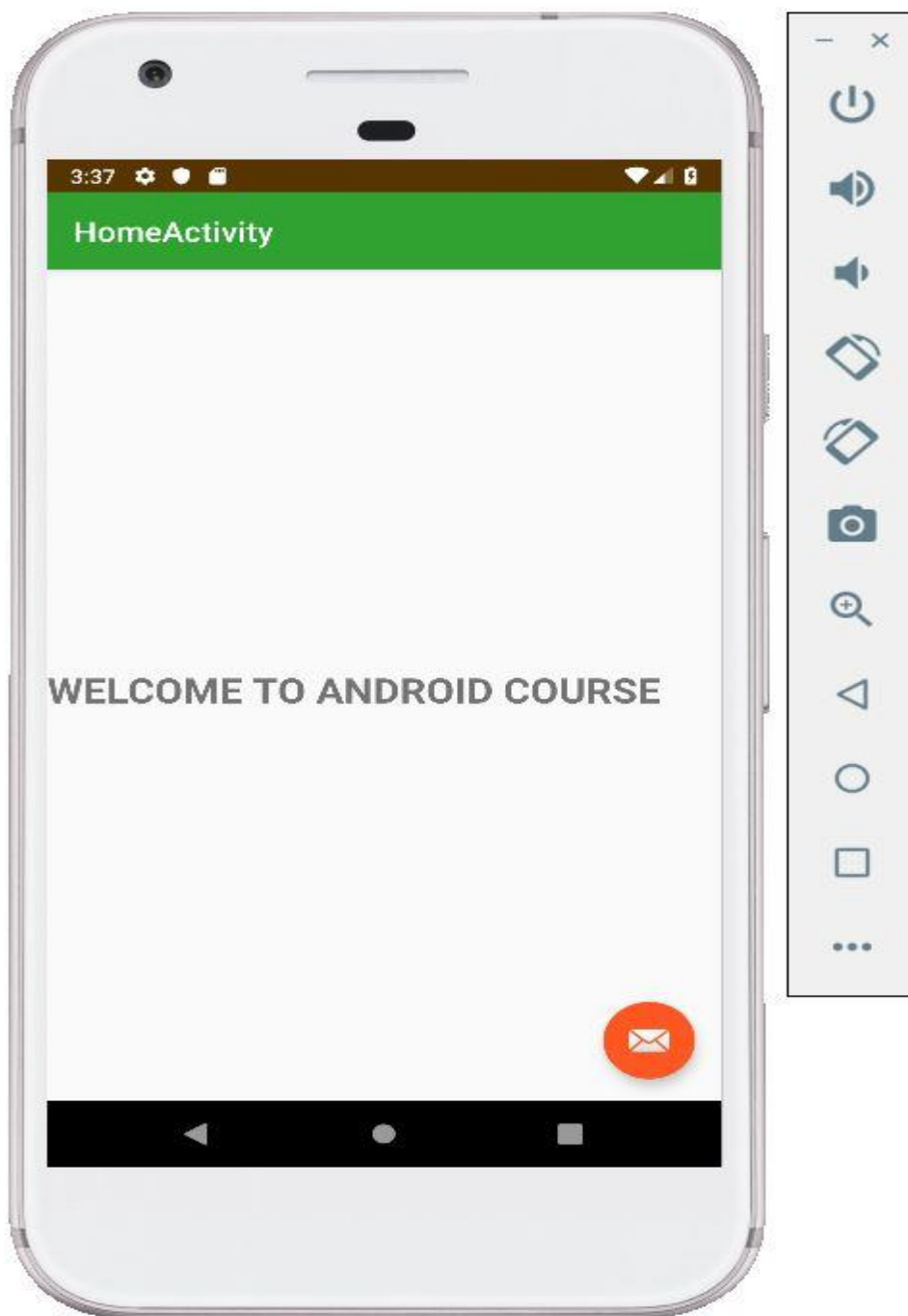
</manifest>

```



- Finally, I was created an emulator and run the file successfully and also tested in my android mobile.
- Output Snippets for login application are shown here.





Conclusion:

- Hence learnt how to create simple android login application._

