



COMP-SCI 5590 - 0002 Special Topics

Mobile App Development

ICE 8: DEVELOPING SIMPLE LOGIN APPLICATIONS FOR ANDROID

INTRODUCTION

Android is a mobile platform/OS that uses a modified version of the Linux kernel. It was initially developed by Android Inc., a firm later purchased by Google. It allows developers to write managed code in the Java language, controlling the device via Google-developed Java libraries. Today, we will learn how to create, build, run and debug a program in Android.

ICE 8

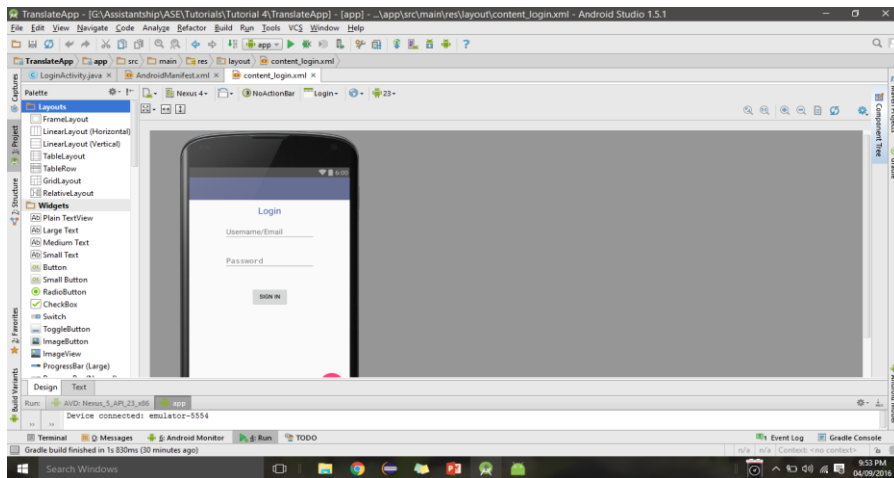
- **Create a normal login application**

Steps to follow:

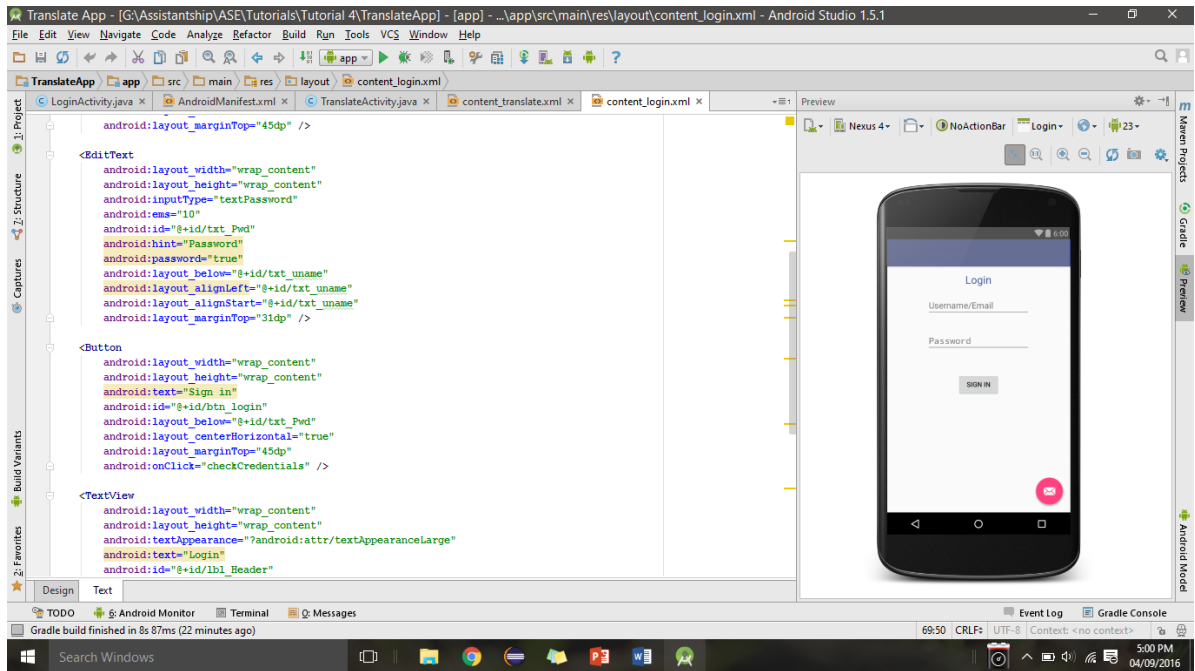
- 1) Creating a new Android application
- 2) Selecting the SDK and type of device to deploy the application
Device Type: Phone and Tablet
API: Latest one
- 3) Select blank activity
- 4) Do not forget to add internet permission in AndroidManifest.xml file to enable internet access in device/emulator (this will help you for social login in future assignment)

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="tutorial.cs5551.com.translateapp">
    <uses-permission android:name="android.permission.INTERNET"/>
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="Translate App"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity
            android:name=".LoginActivity"
```

- 5) Controls layout



6) Activity.xml



7) Code for login

Get Credentials

```

    }
    public void checkCredentials(View v)
    {
        EditText usernameCtrl = (EditText) findViewById(R.id.txt_uname);
        EditText passwordCtrl = (EditText) findViewById(R.id.txt_Pwd);
        TextView errorText = (TextView) findViewById(R.id.lbl_Error);
        String userName = usernameCtrl.getText().toString();
        String password = passwordCtrl.getText().toString();

        boolean validationFlag = false;
        //Verify if the username and password are not empty.
        if(!userName.isEmpty() && !password.isEmpty()) {
            if(userName.equals("Admin") && password.equals("Admin")) {
                validationFlag = true;
            }
        }

        if(!validationFlag)
        {
            errorText.setVisibility(View.VISIBLE);
        }
        else
        {
            //This code redirects the from login page to the home page.

```

Navigate to Home Page

```

public void reDirectToHomePage(View v)
{
    Intent redirect = new Intent(SignUpActivity.this, HomeActivity.class);
    startActivity(redirect);
}

```

- 8) Walkthrough for social login: Follow steps on this forum (**for LAB assignment**)

<https://developers.facebook.com/docs/facebook-login/android>

@Override

```

protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    FacebookSdk.sdkInitialize(getApplicationContext());
    setContentView(R.layout.login_layout);
    LoginUsingLoginButton();
    LoginUsingFacebookButton();
}

```

```
/*Code to login using Facebook */
private void LoginUsingFacebookButton() {
    callbackManager = CallbackManager.Factory.create();
    FacebookCallback<LoginResult> callback = new FacebookCallback<LoginResult>() {
        @Override
        public void onSuccess(LoginResult loginResult) {
            redirectToSearchPage();
        }

        @Override
        public void onCancel() {

        }

        @Override
        public void onError(FacebookException error) {
        }
    };

    LoginButton loginButton = (LoginButton) findViewById(R.id.facebookButton);
    loginButton.setReadPermissions(Arrays.asList("public_profile"));

    loginButton.registerCallback(callbackManager, callback);
}
```