ANDROID APPLICATION DEVELOPMENT

END SEMESTER LAB EXAM



Done By:

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**Activity\_main.xml:**

<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"  
 android:background="@color/background\_color">>  
  
 <EditText  
 android:id="@+id/loginName"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Name" />  
  
 <EditText  
 android:id="@+id/loginEmail"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Gmail" />  
  
 <EditText  
 android:id="@+id/loginPassword"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Password"  
 android:inputType="textPassword" />  
  
 <EditText  
 android:id="@+id/loginPhoneNumber"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Phone Number" />  
  
  
  
 <Button  
 android:id="@+id/loginButton"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Login" />  
  
 <Button  
 android:id="@+id/registerLink"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Go to Register" />  
</LinearLayout>

**MainActivity.java:**

package com.example.myapplication;  
  
import android.content.Intent;  
import android.content.SharedPreferences;  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity extends AppCompatActivity {  
 EditText loginEmail, loginPassword;  
 Button loginButton, registerLink;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 loginEmail = findViewById(R.id.*loginEmail*);  
 loginPassword = findViewById(R.id.*loginPassword*);  
 loginButton = findViewById(R.id.*loginButton*);  
 registerLink = findViewById(R.id.*registerLink*);  
  
 SharedPreferences prefs = getSharedPreferences("UserPrefs", *MODE\_PRIVATE*);  
 if (prefs.getBoolean("isLoggedIn", false)) {  
 navigateToWelcome(prefs.getString("Email", ""));  
 }  
  
 loginButton.setOnClickListener(v -> {  
 String email = loginEmail.getText().toString();  
 String password = loginPassword.getText().toString();  
  
 String registeredEmail = prefs.getString("Email", "");  
 String registeredPassword = prefs.getString("Password", "");  
  
 if (email.equals(registeredEmail) && password.equals(registeredPassword)) {  
 SharedPreferences.Editor editor = prefs.edit();  
 editor.putBoolean("isLoggedIn", true);  
 editor.apply();  
 navigateToWelcome(email);  
 } else {  
 Toast.*makeText*(this, "Invalid Credentials", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
  
 registerLink.setOnClickListener(v -> {  
 Intent intent = new Intent(MainActivity.this, RegistrationActivity.class);  
 startActivity(intent);  
 });  
 }  
  
 private void navigateToWelcome(String email) {  
 Intent intent = new Intent(MainActivity.this, WelcomeActivity.class);  
 intent.putExtra("Email", email);  
 startActivity(intent);  
 finish();  
 }  
}

**activity\_registration.xml:**

<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"  
 android:background="@color/background\_color">  
  
 <EditText  
 android:id="@+id/nikhil"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Name" />  
  
 <EditText  
 android:id="@+id/email"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Gmail" />  
  
 <EditText  
 android:id="@+id/password"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Password"  
 android:inputType="textPassword" />  
  
 <EditText  
 android:id="@+id/PhoneNumber"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Phone Number" />  
  
 <Button  
 android:id="@+id/registerButton"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Register" />  
</LinearLayout>

**RegistrationActivity.java:**

package com.example.myapplication;  
  
import android.content.Intent;  
import android.content.SharedPreferences;  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.EditText;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class RegistrationActivity extends AppCompatActivity {  
 EditText email, password;  
 Button registerButton;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_registration*);  
  
 email = findViewById(R.id.*email*);  
 password = findViewById(R.id.*password*);  
 registerButton = findViewById(R.id.*registerButton*);  
  
 registerButton.setOnClickListener(v -> {  
 String userEmail = email.getText().toString();  
 String userPassword = password.getText().toString();  
  
 SharedPreferences prefs = getSharedPreferences("UserPrefs", *MODE\_PRIVATE*);  
 SharedPreferences.Editor editor = prefs.edit();  
 editor.putString("Email", userEmail);  
 editor.putString("Password", userPassword);  
 editor.apply();  
  
 Intent intent = new Intent(RegistrationActivity.this, MainActivity.class);  
 startActivity(intent);  
 finish();  
 });  
 }  
}

**activity\_welcome.xml:**

<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"  
 android:background="@color/background\_color">  
  
 <TextView  
 android:id="@+id/welcomeMessage"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Welcome" />  
  
 <Button  
 android:id="@+id/logoutButton"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Logout" />  
</LinearLayout>

**WelcomeActivity.java:**

package com.example.myapplication;  
  
import android.content.Intent;  
import android.content.SharedPreferences;  
import android.os.Bundle;  
import android.widget.Button;  
import android.widget.TextView;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class WelcomeActivity extends AppCompatActivity {  
 TextView welcomeMessage;  
 Button logoutButton;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_welcome*);  
  
 welcomeMessage = findViewById(R.id.*welcomeMessage*);  
 logoutButton = findViewById(R.id.*logoutButton*);  
  
 String email = getIntent().getStringExtra("Email");  
 welcomeMessage.setText("Welcome back Nikhil@gmail.com, " + email);  
  
 logoutButton.setOnClickListener(v -> {  
 SharedPreferences prefs = getSharedPreferences("UserPrefs", *MODE\_PRIVATE*);  
 SharedPreferences.Editor editor = prefs.edit();  
 editor.putBoolean("isLoggedIn", false);  
 editor.apply();  
  
 Intent intent = new Intent(WelcomeActivity.this, MainActivity.class);  
 startActivity(intent);  
 finish();  
 });  
 }  
}

**gradien\_background\_main.xml:**

<?xml version="1.0" encoding="utf-8"?>  
<shape xmlns:android="http://schemas.android.com/apk/res/android">  
  
  
 <gradient  
 android:angle="270"  
 android:startColor="#FF4081"  
 android:centerColor="#F50057"  
 android:endColor="#3F51B5"  
 android:type="linear" />  
  
</shape>





