Androidmainfest.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Akash05"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

Activity_Main.XML

```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"
    android:background="@color/your_color_here">

    <EditText
        android:id="@+id/usernameEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Username"
        android:background="#81B5CC"
        android:textColor="@color/your_text_color_here" />

    <EditText
        android:id="@+id/passwordEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Password"
```

```xml
        android:inputType="textPassword"
        android:background="#6EB5D5"
        android:textColor="@color/your_text_color_here" />

    <Button
        android:id="@+id/registerButton"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Register"
        android:background="#18141D"
        android:textColor="@color/your_button_text_color_here" />

    <Button
        android:id="@+id/verifyButton"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Verify"
        android:background="@color/your_text_color_here"
        android:textColor="@color/your_button_text_color_here" />

    <TextView
        android:id="@+id/resultTextView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:paddingTop="16dp"
        android:textSize="18sp"
        android:text=""
        android:textColor="@color/your_text_color_here" />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Done by Akash"
        android:textSize="14sp"
        android:textAlignment="center"
        android:layout_marginTop="16dp"
        android:layout_gravity="bottom" />

</LinearLayout>
```

Mainactivity.Java

```java
package com.example.akash05;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import
    androidx.appcompat.app.AppCompatActivity;
import java.util.HashMap;
public class MainActivity extends
    AppCompatActivity {
  private EditText usernameEditText;
  private EditText passwordEditText;
  private Button registerButton;
```

```java
private Button verifyButton;
private TextView resultTextView;
// A simple in-memory store for usernames and passwords
private HashMap<String, String>
    userStore = new HashMap<>();
@Override
protected void onCreate(Bundle
                savedInstanceState) {
    super.onCreate(savedInstanceState);

    setContentView(R.layout.activity_main);
    usernameEditText =
        findViewById(R.id.usernameEditText);
    passwordEditText =
        findViewById(R.id.passwordEditText);
    registerButton =
        findViewById(R.id.registerButton);
    verifyButton =
        findViewById(R.id.verifyButton);
    resultTextView =
        findViewById(R.id.resultTextView);
    // Register Button Click Listener
    registerButton.setOnClickListener(new
                        View.OnClickListener() {
                            @Override
                            public void onClick(View v) {
                                registerUser();
                            }
                        });
    // Verify Button Click Listener
    verifyButton.setOnClickListener(new
                        View.OnClickListener() {
                            @Override
                            public void onClick(View v) {
                                verifyUser();
                            }
                        });
}
private void registerUser() {
    String username =
        usernameEditText.getText().toString();
    String password =
        passwordEditText.getText().toString();
    if (username.isEmpty() ||
        password.isEmpty()) {
        resultTextView.setText("Please enter both username and password.");

            resultTextView.setTextColor(getResources()
                .getColor(android.R.color.holo_red_dark));
    } else if (username.length() < 6) {
        resultTextView.setText("Username must be at least 6 characters long.");

        resultTextView.setTextColor(getResources()
            .getColor(android.R.color.holo_red_dark));
    } else if
    (!containsSpecialCharacter(password)) {
        resultTextView.setText("Password must contain at least one special character.");

            resultTextView.setTextColor(getResources()
                .getColor(android.R.color.holo_red_dark));
    } else if
    (userStore.containsKey(username)) {
        resultTextView.setText("Username already exists.");

            resultTextView.setTextColor(getResources()
```

```java
                    .getColor(android.R.color.holo_red_dark));
        } else {
            userStore.put(username, password);
            resultTextView.setText("User registered successfully.");

                resultTextView.setTextColor(getResources()
                        .getColor(android.R.color.holo_green_dark)
                );
        }
    }
    private void verifyUser() {
        String username =
                usernameEditText.getText().toString();
        String password =
                passwordEditText.getText().toString();
        if (userStore.containsKey(username)) {
            if
            (userStore.get(username).equals(password))
            {
                resultTextView.setText("Login successful.");

                    resultTextView.setTextColor(getResources()
                            .getColor(android.R.color.holo_green_dark)
                    );
            } else {
                resultTextView.setText("Incorrect password.");

                    resultTextView.setTextColor(getResources()
                            .getColor(android.R.color.holo_red_dark));
            }
        } else {
            resultTextView.setText("User does not exist.");

                resultTextView.setTextColor(getResources()
                        .getColor(android.R.color.holo_red_dark));
        }
    }
    private boolean
containsSpecialCharacter(String str) {
        // Check if the password contains at least one special character
        return str.matches(".*[!@#$%^&*()\\- _=+{};:,<.>].*");
}}
```

AKASH055

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Register

Verify

User registered successfully.

Done by Akash

8:10

AKASH055

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Register

Verify

Login successful.

Done by Akash