

Android Preferences Example

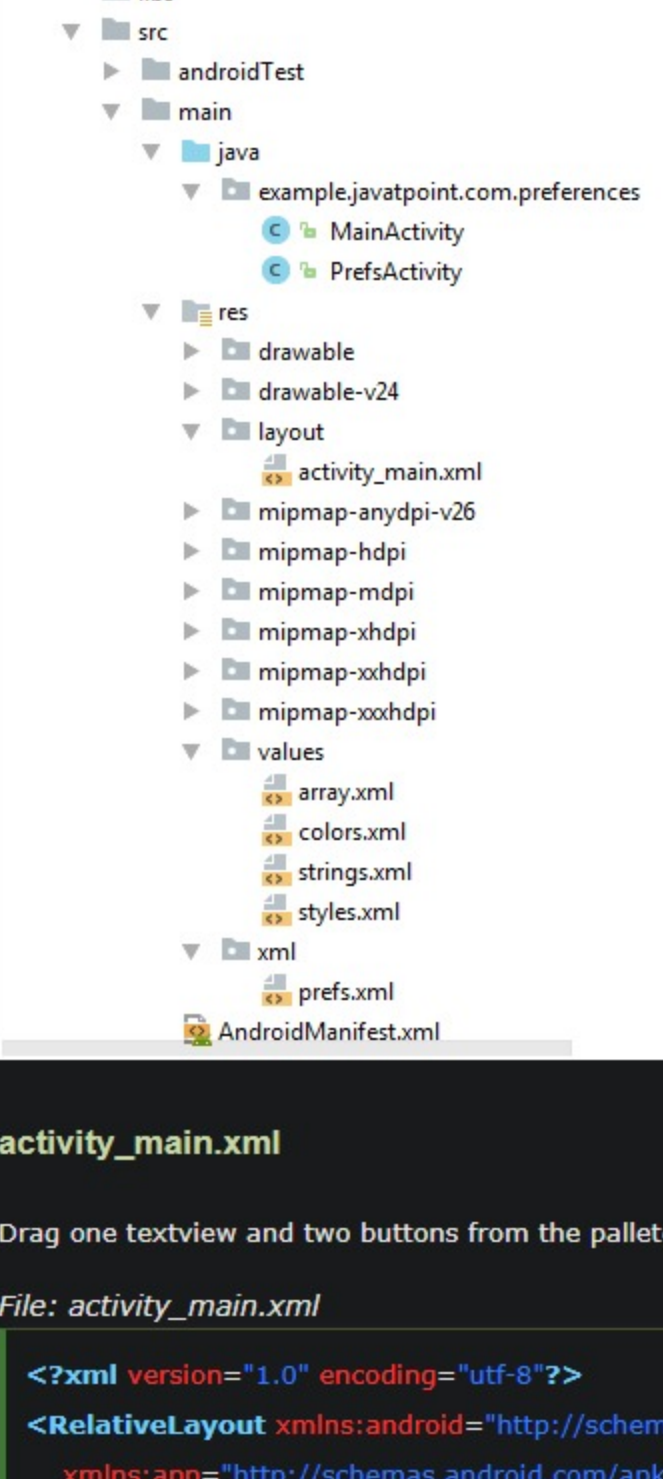
Android shared preference is used to store and retrieve primitive information. In android, string, integer, long, number etc. are considered as primitive data type.

Android Shared preferences are used to store data in key and value pair so that we can retrieve the value on the basis of key.

It is widely used to get information from user such as in settings.

Android Preferences Example

Let's see a simple example of android shared preference.



activity_main.xml

Drag one textview and two buttons from the palette.

File: activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="example.javatpoint.com.preferences.MainActivity">

    <TextView
        android:id="@+id/txtPrefs"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerVertical="true"
        android:text="Data:" />

    <Button
        android:id="@+id/storeinformation"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/showinformation"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="18dp"
        android:text="Store Information" />

    <Button
        android:id="@+id/showinformation"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="17dp"
        android:text="Show Information" />

</RelativeLayout>
```

array.xml

It is created inside res/values directory.

File: array.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string-array name="listOptions">
        <item>English</item>
        <item>Hindi</item>
        <item>Other</item>
    </string-array>

    <string-array name="listValues">
        <item>English Language</item>
        <item>Hindi Language</item>
        <item>Other Language</item>
    </string-array>
</resources>
```

prefs.xml

It is created inside res/xml directory.

File: prefs.xml

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

    <PreferenceCategory
        android:summary="Username and password information"
        android:title="Login information" >
        <EditTextPreference
            android:key="username"
            android:summary="Please enter your login username"
            android:title="Username" />
        <EditTextPreference
            android:key="password"
            android:summary="Enter your password"
            android:title="Password" />
    </PreferenceCategory>

    <PreferenceCategory
        android:summary="Username and password information"
        android:title="Settings" >
        <CheckBoxPreference
            android:key="checkBox"
            android:summary="On/Off"
            android:title="Keep me logged in" />

        <ListPreference
            android:entries="@array/listOptions"
            android:entryValues="@array/listValues"
            android:key="listpref"
            android:summary="List preference example"
            android:title="List preference" />
    </PreferenceCategory>
</PreferenceScreen>
```

Main Activity Class

File: MainActivity.java

```
package example.javatpoint.com.preferences;

import android.content.Intent;
import android.content.SharedPreferences;
import android.preference.PreferenceManager;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    TextView textView;

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

        Button storeinformation = (Button) findViewById(R.id.storeinformation);
        Button showinformation = (Button) findViewById(R.id.showinformation);
        textView = (TextView) findViewById(R.id.txtPrefs);

        View.OnClickListener listener = new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                switch (v.getId()) {
                    case R.id.storeinformation:
                        Intent intent = new Intent(MainActivity.this,PrefsActivity.class);
                        startActivity(intent);
                        break;
                    case R.id.showinformation:
                        displaySharedPreferences();
                        break;
                    default:
                        break;
                }
            }
        };
        storeinformation.setOnClickListener(listener);
        showinformation.setOnClickListener(listener);
    }

    private void displaySharedPreferences() {
        SharedPreferences prefs = PreferenceManager.getDefaultSharedPreferences(MainActivity.this);

        String username = prefs.getString("username", "Default NickName");
        String passw = prefs.getString("password", "Default Password");
        boolean checkBox = prefs.getBoolean("checkBox", false);
        String listPrefs = prefs.getString("listpref", "Default list prefs");

        StringBuilder builder = new StringBuilder();
        builder.append("Username: " + username + "\n");
        builder.append("Password: " + passw + "\n");
        builder.append("Keep me logged in: " + String.valueOf(checkBox) + "\n");
        builder.append("List preference: " + listPrefs);
        textView.setText(builder.toString());
    }
}
```

PrefsActivity class

File: PrefsActivity.java

```
package example.javatpoint.com.preferences;

import android.os.Bundle;
import android.preference.PreferenceActivity;

public class PrefsActivity extends PreferenceActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        addPreferencesFromResource(R.xml.prefs);
    }
}
```

AndroidManifest.xml

File: AndroidManifest.xml

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

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

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".PrefsActivity"
            android:theme="@android:style/Theme.Black.NoTitleBar" >
        </activity>
    </application>

</manifest>
```

Output:

