

# SharedPreferences Example

Design layout as:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".PrefActivity"
    android:orientation="vertical">
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/etMessage" />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/tvMessage" />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Write Preferences"
        android:id="@+id/btnWrite"/>

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Read Preferences"
        android:id="@+id/btnRead"/>

</LinearLayout>
```

Create Activity as:

```
public class PrefActivity extends AppCompatActivity {

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

        TextView tvMessage = findViewById(R.id.tvMessage);
        EditText etMessage = findViewById(R.id.etMessage);

        Button btnSet = findViewById(R.id.btnWrite);
        Button btnGet = findViewById(R.id.btnRead);
        btnSet.setOnClickListener(new View.OnClickListener() {
            @Override
```

```

        public void onClick(View v) {

            SharedPreferences sp = getSharedPreferences("my-pref",
MODE_PRIVATE);

            SharedPreferences.Editor ed = sp.edit();
            ed.putString("name", etMessage.getText().toString());
            ed.putBoolean("status", true);
            ed.commit();
            etMessage.setText("");
            Toast.makeText(getApplicationContext(), "SharedPreferences
Set: " + etMessage.getText().toString(), Toast.LENGTH_LONG).show();

        }
    });
    btnGet.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            SharedPreferences sp = getSharedPreferences("my-pref",
MODE_PRIVATE);

            tvMessage.setText(sp.getString("name", "Not Found"));
            Toast.makeText(getApplicationContext(), "Read Shared Pref: "
+ sp.getString("name", "Not Found"), Toast.LENGTH_LONG).show();
        }
    });
}
}

```

Set this activity as launcher:

```

<activity
    android:name=".PrefActivity"
    android:exported="true">
    <intent-filter>
        <action android:name="android.intent.action.MAIN" />

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

```

## Writing and Reading from/to a file

Design layout as:

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:id="@+id/main"

```

```

        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        tools:context=".RWActivity">

        <EditText
            android:id="@+id/etMessage"
            android:layout_width="match_parent"
            android:layout_height="wrap_content" />

        <TextView
            android:id="@+id/tvMessage"
            android:layout_width="match_parent"
            android:layout_height="wrap_content" />

        <Button
            android:id="@+id/btnWrite"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Write To a file" />

        <Button
            android:id="@+id/btnRead"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Read From a file" />

    </LinearLayout>

```

Design Activity as:

```

public class RWActivity extends AppCompatActivity {

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

        TextView tvMessage = findViewById(R.id.tvMessage);
        EditText etMessage = findViewById(R.id.etMessage);

        Button btnSet = findViewById(R.id.btnWrite);
        Button btnGet = findViewById(R.id.btnRead);
        btnSet.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                try {
                    OutputStream outputStream = openFileOutput("myfile.txt",
MODE_APPEND);
                    outputStream.write(etMessage.getText().toString().getBytes());
                }
            }
        });
    }
}

```

```

        outputStream.close();
        Toast.makeText(getApplicationContext(), "The Data
inserted is Successful", Toast.LENGTH_LONG).show();
    } catch (Exception e) {
        Toast.makeText(getApplicationContext(), "Sorry: " +
e.getMessage(), Toast.LENGTH_LONG).show();
    }
}

});
btnGet.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        try {
            FileInputStream fileInputStream =
openFileInput("myfile.txt");
            DataInputStream dataInputStream = new
DataInputStream(fileInputStream);
            StringBuffer sb = new StringBuffer();
            int c;
            while ((c = dataInputStream.read()) != -1) {
                sb.append((char) c);
            }
            Toast.makeText(getApplicationContext(), "The data read
from file is success", Toast.LENGTH_LONG).show();
            tvMessage.setText(sb.toString());
        } catch (Exception e) {
            Toast.makeText(getApplicationContext(), "Sorry: " +
e.getMessage(), Toast.LENGTH_LONG).show();
        }
    }
});
}
}

```

Set this activity as launcher:

```

<activity
    android:name=".RWActivity "
    android:exported="true">
    <intent-filter>
        <action android:name="android.intent.action.MAIN" />

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

```