

SNS COLLEGE OF TECHNOLOGY, COIMBATORE –35 (An Autonomous Institution) 16CS306 and Composing Mobile Apps UNIT 3



SharedPreferences

Saving Key-Value Sets

- 1. Get a Handle to a SharedPreferences
- 2. Write to Shared Preferences
- 3. Read from Shared Preferences

<u>Using Shared Preferences</u>

If you have a relatively small collection of key-values that you'd like to save, you should use the SharedPreferences APIs. A SharedPreferences object points to a file containing key-value pairs and provides simple methods to read and write them. Each SharedPreferences file is managed by the framework and can be private or shared.

Get a Handle to a SharedPreferences

create a new shared preference file or access an existing one by calling one of two methods:

- <u>getSharedPreferences()</u> Use this if you need multiple shared preference files identified by name, which you specify with the first parameter. You can call this from any <u>Context</u> in your app.
- <u>getPreferences()</u> Use this from an <u>Activity</u> if you need to use only one shared preference file for the activity. Because this retrieves a default shared preference file that belongs to the activity, you don't need to supply a name.

For example, the following code is executed inside a <u>Fragment</u>. It accesses the shared preferences file that's identified by the resource string R.string.preference_file_key and opens it using the private mode so the file is accessible by only your app.

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When naming your shared preference files, you should use a name that's uniquely identifiable to your app, such as "com.example.myapp.PREFERENCE_FILE_KEY"

Write to Shared Preferences

To write to a shared preferences file, create a <u>SharedPreferences.Editor</u> by calling edit() on your SharedPreferences.

Pass the keys and values you want to write with methods such as putInt() and putString(). Then call commit() to save the changes. For example:

```
SharedPreferences sharedPref =
getActivity().getPreferences(Context.MODE_PRIVATE);
SharedPreferences.Editor editor = sharedPref.edit();
editor.putInt(getString(R.string.saved_high_score),
newHighScore);
editor.commit();
```

Read from Shared Preferences

To retrieve values from a shared preferences file, call methods such as getInt() and getString(), providing the key for the value you want, and optionally a default value to return if the key isn't present. For example:

```
SharedPreferences sharedPref =
getActivity().getPreferences(Context.MODE_PRIVATE);
int defaultValue =
getResources().getInteger(R.string.saved_high_score_default);
long highScore =
sharedPref.getInt(getString(R.string.saved_high_score),
defaultValue);
```

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