Using the Support Library

The Android Support Library (/tools/extras/support-library.html) provides a JAR file with an API library that allows you to use some of the more recent Android APIs in your app while running on earlier versions of Android. For instance, the Support Library provides a version of the Fragment (/reference/android/app/Fragment.html) APIs that you can use on Android 1.6 (API level 4) and higher.

This lesson shows how to set up your app to use the Support Library in order to use fragments to build a dynamic app UI.

Set Up Your Project with the Support Library

To set up your project:

1. Download the Android Support package using the SDK Manager.
2. Create a `libs` directory at the top level of your Android project.
3. Locate the JAR file for the library you want to use and copy it into the `libs/` directory.

   For example, the library that supports API level 4 and up is located at `<sdk>/extras/android/support/v4/android-support-v4.jar`.
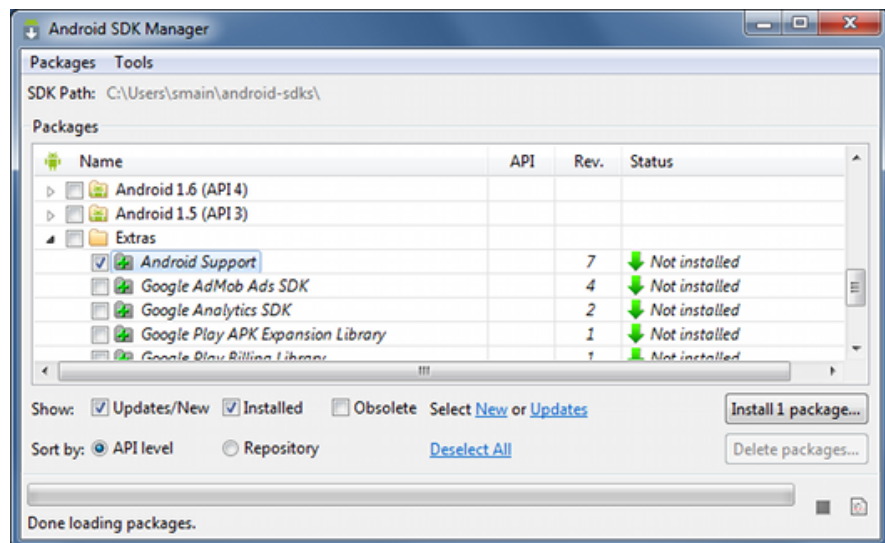

Figure 1. The Android SDK Manager with the Android Support package selected.

4. Update your manifest file to set the minimum API level to `4` and the target API level to the latest release:

```
<uses-sdk android:minSdkVersion="4" android:targetSdkVersion="15" />
```

Import the Support Library APIs

The Support Library includes a variety of APIs that were either added in recent versions of Android or don't exist in the platform at all and merely provide additional support to you when developing specific application features.

You can find all the API reference documentation for the Support Library in the platform docs at `android.support.v4.*` (/reference/android/support/v4/app/package-summary.html).

> **Warning:** To be sure that you don't accidentally use new APIs on an older system version, be certain that you import the Fragment (/reference/android/support/v4/app/Fragment.html) class and related APIs from the `android.support.v4.app` (/reference/android/support/v4/app/package-summary.html) package:

```
import android.support.v4.app.Fragment;
import android.support.v4.app.FragmentManager;
```

```
...
```

When creating an activity that hosts fragments while using the Support Library, you must also extend the FragmentActivity (/reference/android/support/v4/app/FragmentActivity.html) class instead of the traditional Activity (/reference/android/app/Activity.html) class. You'll see sample code for the fragment and activity in the next lesson.