**Learning Outcomes**

1. Understanding Local database on Android using SQLite

**SQLite**

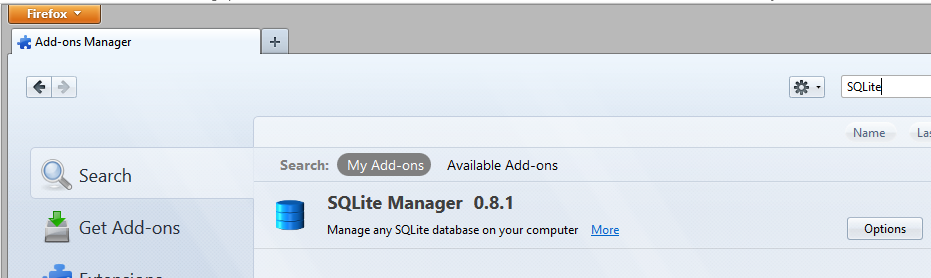
SQLite is a software library that implements a [self-contained](http://www.sqlite.org/selfcontained.html), [serverless](http://www.sqlite.org/serverless.html), [zero configuration](http://www.sqlite.org/zeroconf.html), [transactional](http://www.sqlite.org/transactional.html) SQL database engine.

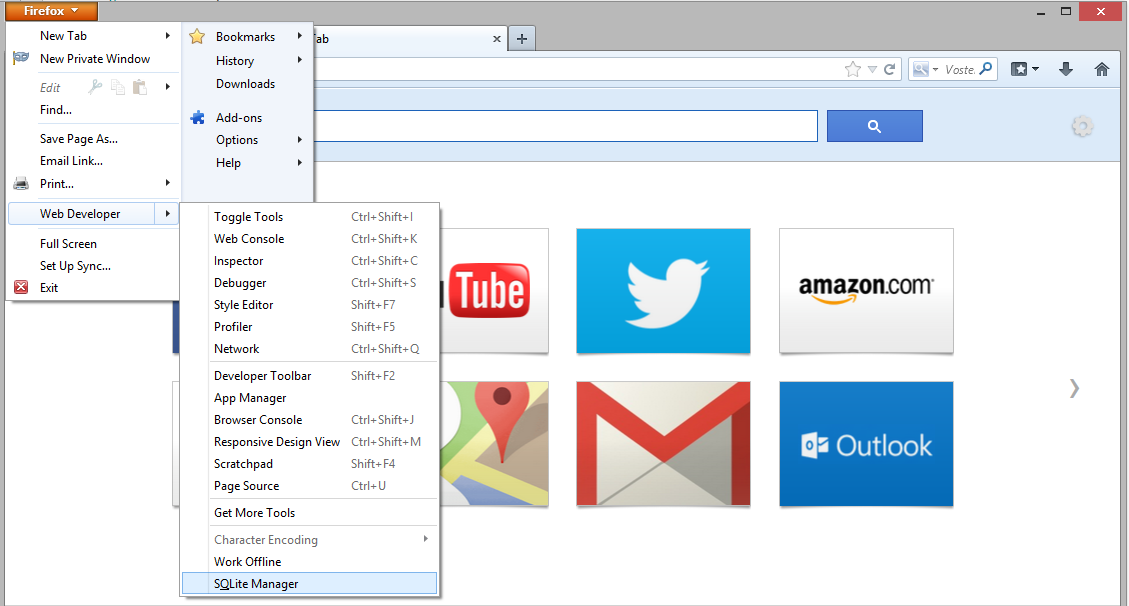
SQLite is the [most widely deployed](http://www.sqlite.org/mostdeployed.html) SQL database engine in the world. The source code for SQLite is in the [public domain](http://www.sqlite.org/copyright.html).

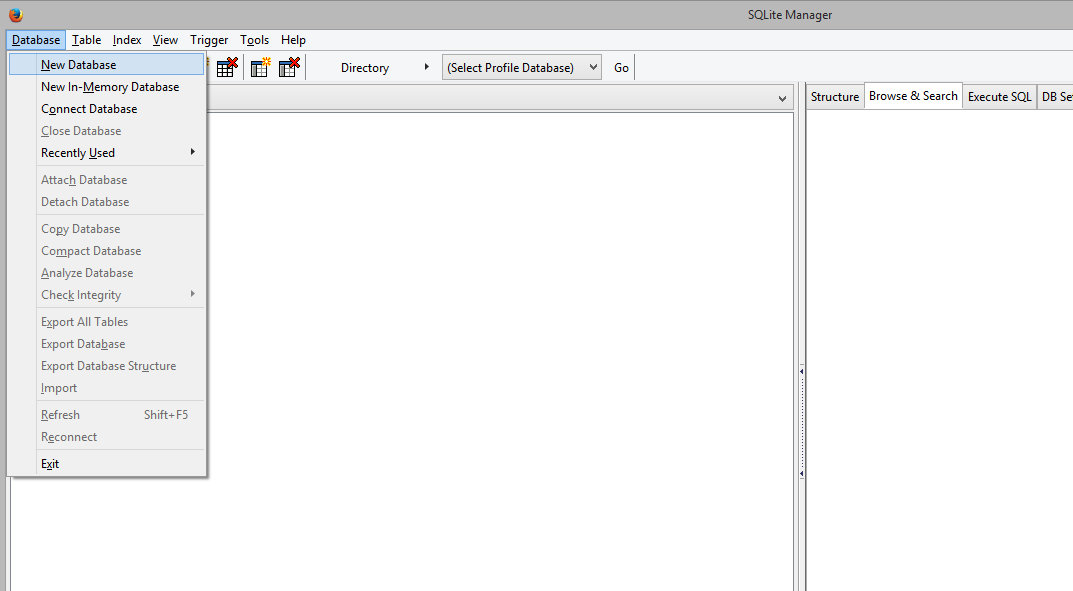
**Creating a Local database using SQLite Manager**

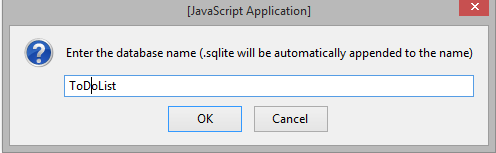
**SQLite Manager**

Search for the SQLite Manager plug-in in the Add-Ons in Mozilla Firefox



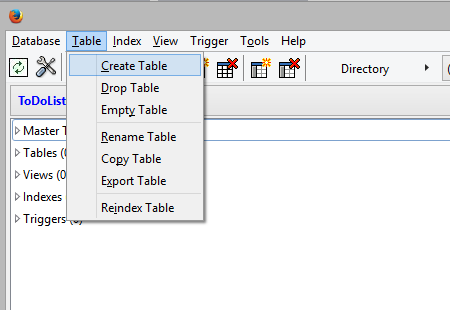




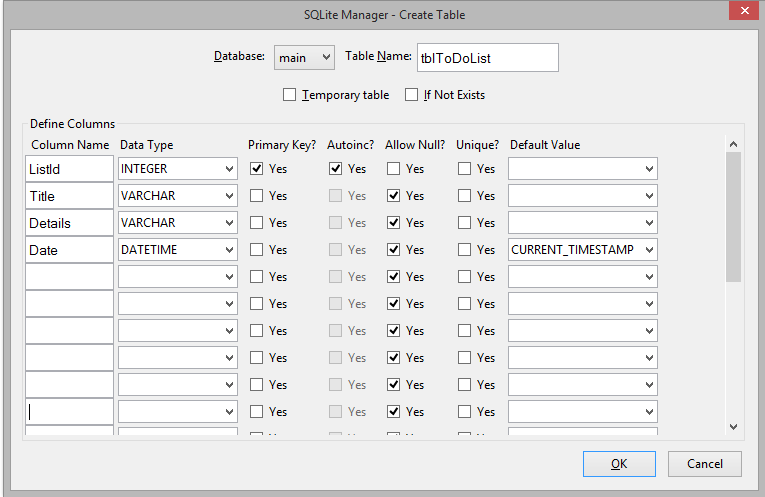


**Create a table as shown below.**

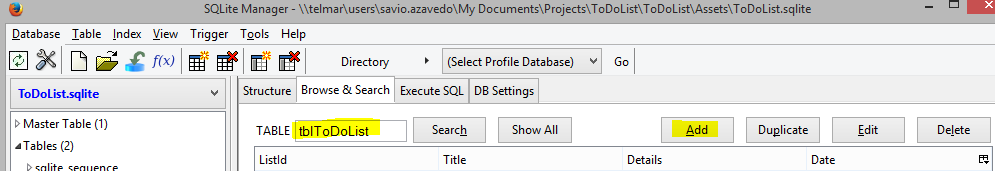
**Add a record**

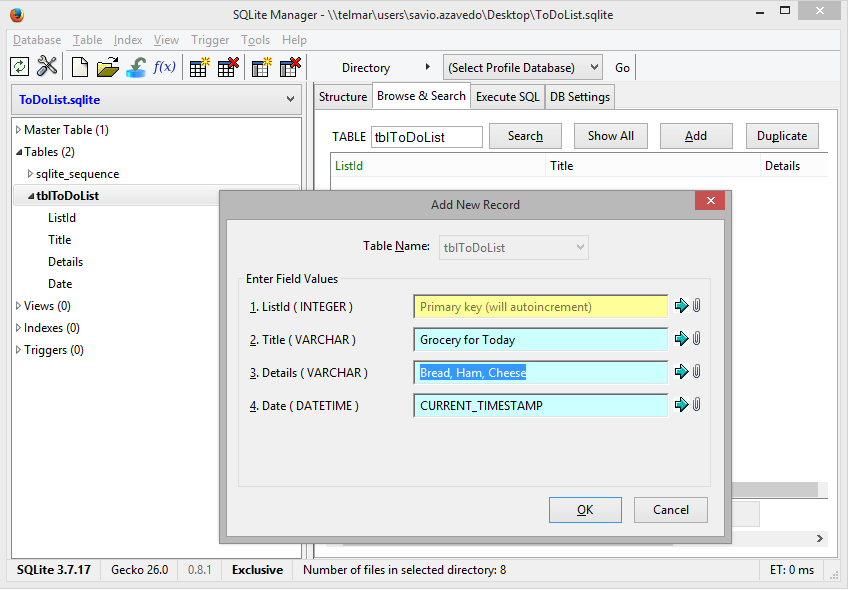


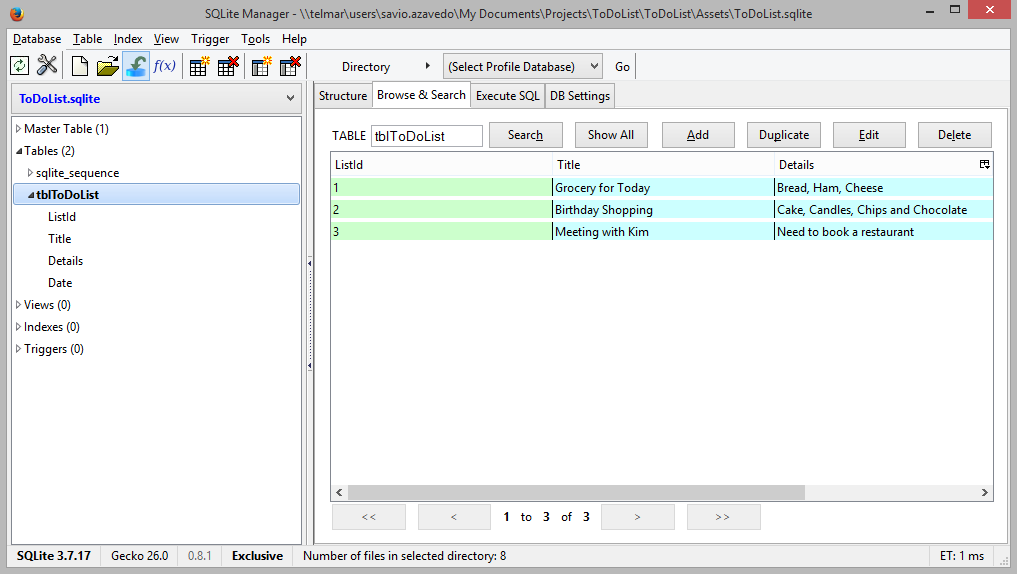
**Name the table tblToDoList**



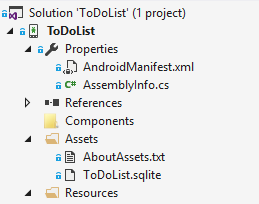
To add a record click on the Add button.



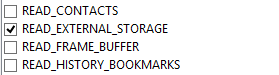


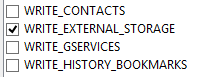


Add ToDoList.sqlite to your assets folder



**Permissions required**

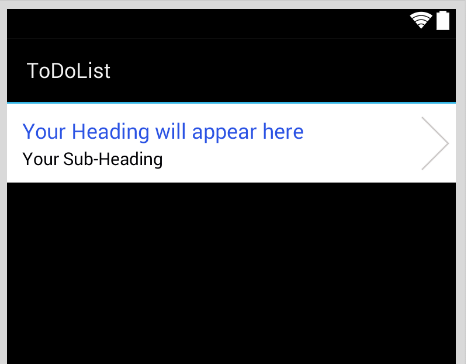




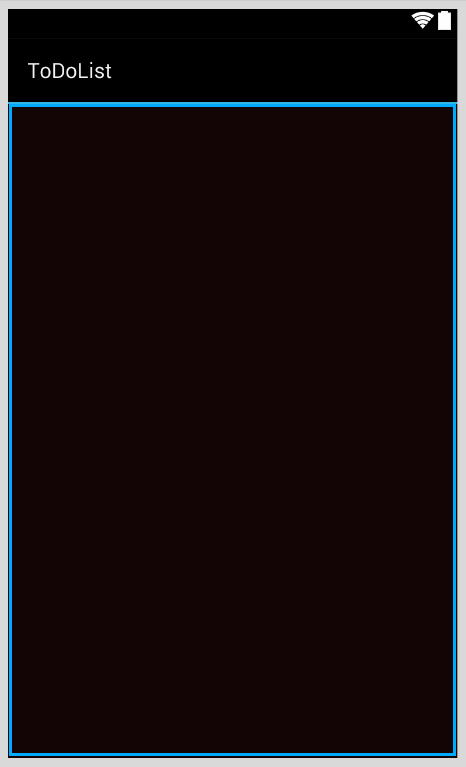
**Create Two layout files Main.axml and Custom\_Row.axml**

**Designing Custom\_Row.xml**

<?xml version="1.0" encoding="utf-8"?>  
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:layout\_width="fill\_parent"  
    android:layout\_height="wrap\_content"  
    android:orientation="vertical"  
    android:padding="5dip"  
    android:background="#ffffffff">  
<!-- SQLite row id / hidden by default -->  
    <TextView  
        android:id="@+id/sqlite\_id"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:visibility="gone" />  
<!-- web site title -->  
    <TextView  
        android:id="@+id/title"  
        android:layout\_width="fill\_parent"  
        android:layout\_height="wrap\_content"  
        android:paddingTop="8dip"  
        android:paddingLeft="8dip"  
        android:paddingBottom="4dip"  
        android:textSize="18dip"  
        android:text="Your Heading will appear here"  
        android:textColor="#ff2b53e4" />  
<!-- web site url -->  
    <TextView  
        android:id="@+id/link"  
        android:layout\_height="wrap\_content"  
        android:layout\_width="wrap\_content"  
        android:paddingLeft="8dip"  
        android:paddingBottom="6dip"  
        android:textSize="15dip"  
        android:text="Your Sub-Heading"  
        android:textColor="#ff000003"  
        android:layout\_below="@id/title" />  
<!-- Right end Arrow -->  
    <ImageView  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:src="@drawable/arrow"  
        android:layout\_alignParentRight="true"  
        android:layout\_centerVertical="true" />  
</RelativeLayout>



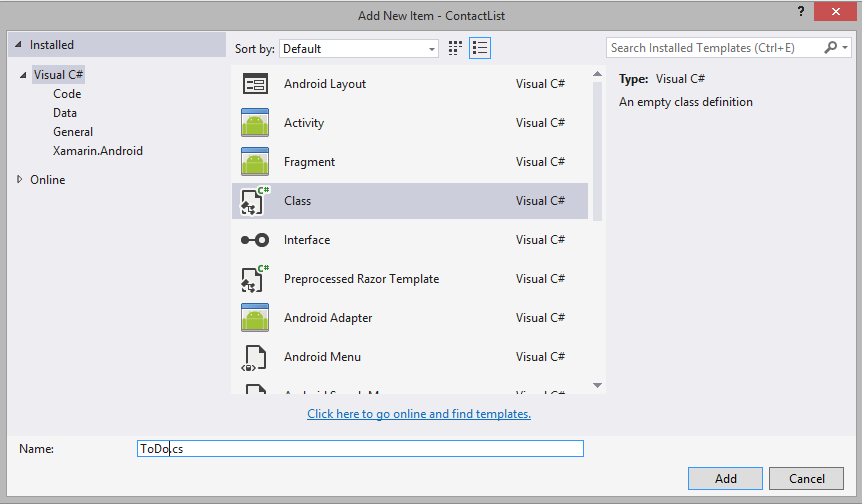
**Main.axml**



ListView

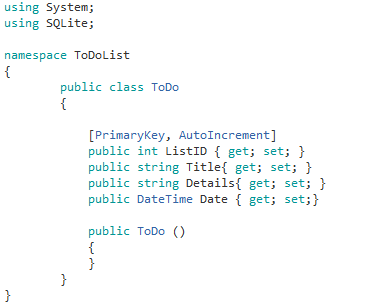
Width and Height set to fill\_parent

**Add a new class**

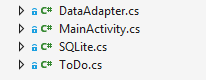


**ToDo.cs**

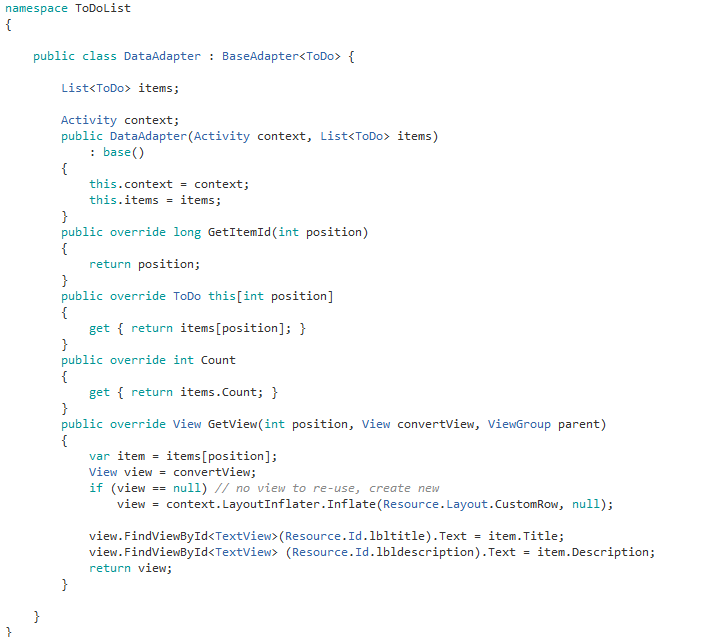
Create a new class name itToDo



Add the Files **DataAdapter.cs** and **Sqlite.cs**



**DataAdapter.cs (Copy Paste)**



**Create a new class file DatabaseManager.cs**

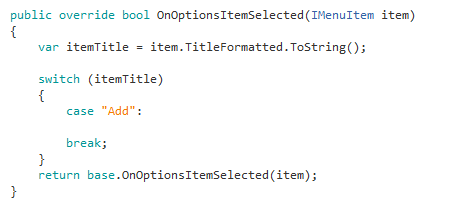
**DatabaseManager.cs**



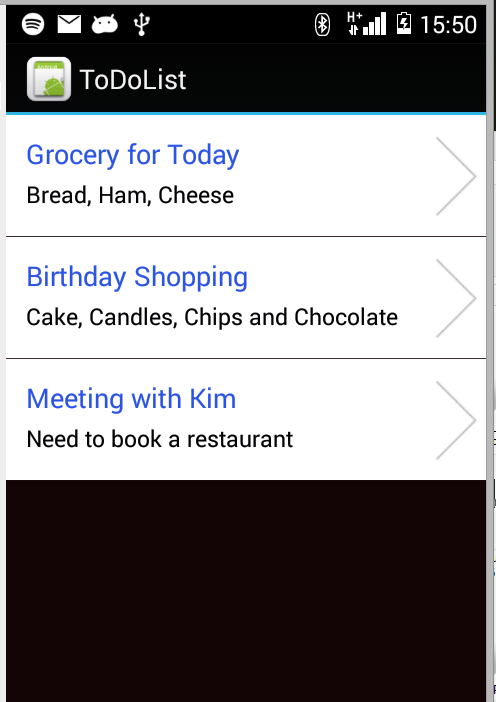
**MainActivity.cs**







**Run the code to find the following added.**



**Exercise**

On the click event of the list view open up another activity and show the details of the To-Do-List