

#### App Brief:

The application “Planet” allows users to learn about the glyphs that represent them in both Astronomical and Astrological documents. All of the data is loaded from resources in the xml files and the drawable directory.

#### Use Case:

This example is just an example of an application that can be used to learn, present information in a visual manner.

This program can be backed by a database using an AysncAdapter and a cursor to traverse databases updated from a remote server.

#### Operation:

The application Planet works by extending MainActivity from AppCompatActivity. Aterwards the resources are loaded for preparing the display, icons and tool-bars to display the user. Strings are loaded from the xml string-array into a String array.

Then a grid-view is prepared to display the glyph images as an array of tiles. An adapter in android allows access to data items, and making sub-views for each item in the dataset. The GridView has a listener that is detects clicks on the tiles displayed in the GridView.

Further on a toastview, a popup display triggered by the listener has its layout is loaded and constructed from the xml, prepared to be displayed to the user. The ImageView has an image dynamically loaded from an array of the image resources defined in solar\_system.xml, as well as the text from the same file.

The new toast is prepared from the context of the application, that is similar to “this”. According to Google it is an abstract class that allows access to application resources. The window is then composed over the top of the previews one with setContentView that allows customview to be specified and set from a layout xml file.

```
+ ImageAdap... extends BaseAdapter
- fields
- mContext: Context
+ mThumbIds: Integer[]
- constructors
+ ImageAdapter (c: Context)
- methods
+ getCount(): int
+ getItem(position: int): Object
+ getItemId(position: int): long
+ getView(position: int, convertView: View, parent: ViewGroup): View
```

```
+ MainActivity extends AppCompatActivity
- fields
- constructors
- methods
# onCreate(savedInstanceState: Bundle): void
```