

Design Document - JMapDesk

Short description of each Package

MapGenerator:

.../gen:

<i>Container.java</i>	Put, Get Layers
<i>Layer.java</i>	Obejct Layer
<i>LayerPanel.java</i>	Panel which shows Layers
<i>MapFile.java</i>	Predefined Mapfile
<i>MapGen.java</i>	Main Class.
<i>MapGen_GUI.java</i>	GUI.
<i>WMSDialog.java</i>	Dialog to enter a WMS.

JMapDesk:

.../junit:

<i>LayerTest.java</i>	JUnit Tests.
<i>MapFileTest.java</i>	
<i>MapPointTest.java</i>	

.../logic:

<i>Map.java</i>	All needed things for generate a map.
<i>MapTile.java</i>	Get all needed information before calling shp2img

.../mapfile:

<i>MapFile.java</i>	Parse Mapfile.
<i>MapFileLayer.java</i>	Mapfile Object.
<i>TagList.java</i>	Little map parse helper

.../ui:

<i>ErrorBox.java</i>	Shows shp2img errors in a dialog.
<i>GUI_Components.java</i>	Some GUI things like buttons etc.
<i>ImageToClipboard.java</i>	Put an image into Clipboard.
<i>JMapDesk.java</i>	Main Class.
<i>JMapDesk_GUI.java</i>	GUI.
<i>SplashScreen.java</i>	Splash while starting.
<i>ViewComponent.java</i>	Showing map in this window.

.../util:

<i>MapPoint.java</i>	MapPoint Object.
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.../wrapper:

<i>InvalidBinaryException.java</i>	Throws a warning.
<i>MapLoader.java</i>	Using shp2img to generate a map.
<i>StreamGobbler.java</i>	Check if "shp2img" is still intact.

Detailed description of the interesting Classes

MapGenerator:

.../gen/MapGen.java

- extract_layer: filter needed data from ogrinfo.
- calc_extent: extent needs to recalculate if more than one shape is opened. To get the whole image the smallest x, y and the largest width and height.

JMapDesk:

.../logic/MapTile.java

- load: get all data needed for shp2img

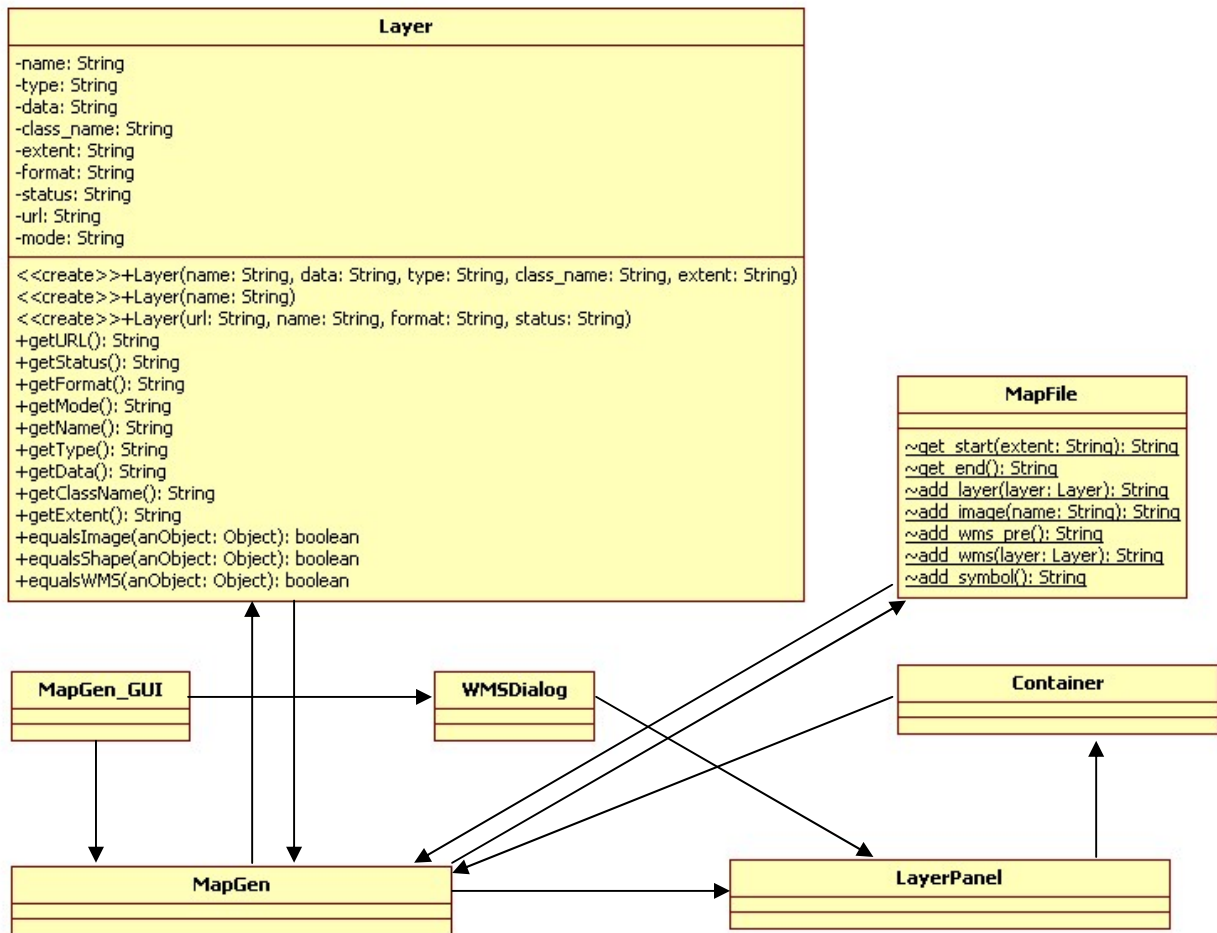
.../mapfile/MapFile.java

- readMapfile: parse mapfile line by line and retrieve needed values for further use.

.../ui/JMapDesk.java

- check_mapfile: use shp2img with “-debug 1” flag and show any warning in the errorbox.
- askForBinaryFile: if shp2img is not set in jmapdesk.cfg it will ask to point the path.
- loadMapfile: used parsed data to generate a map and update the gui.
- *Innerclass SelectArea*
 - Show generate map as background.
 - Override paintComponent to draw a rectangle on mousepressed and put the selected area to clipboard (not fully working at the moment!).
- ViewComponent: this window shows the generated map.
- loadMap:
 - shp2img flags:
 - m specify the mapfile
 - i image format
 - o output path
 - l just using those layers to generate a map
 - e define extent
 - s change mapsize
 - systemCall: use runtime to execute shp2img

MapGenerator Overview:



JMapDesk Overview:

