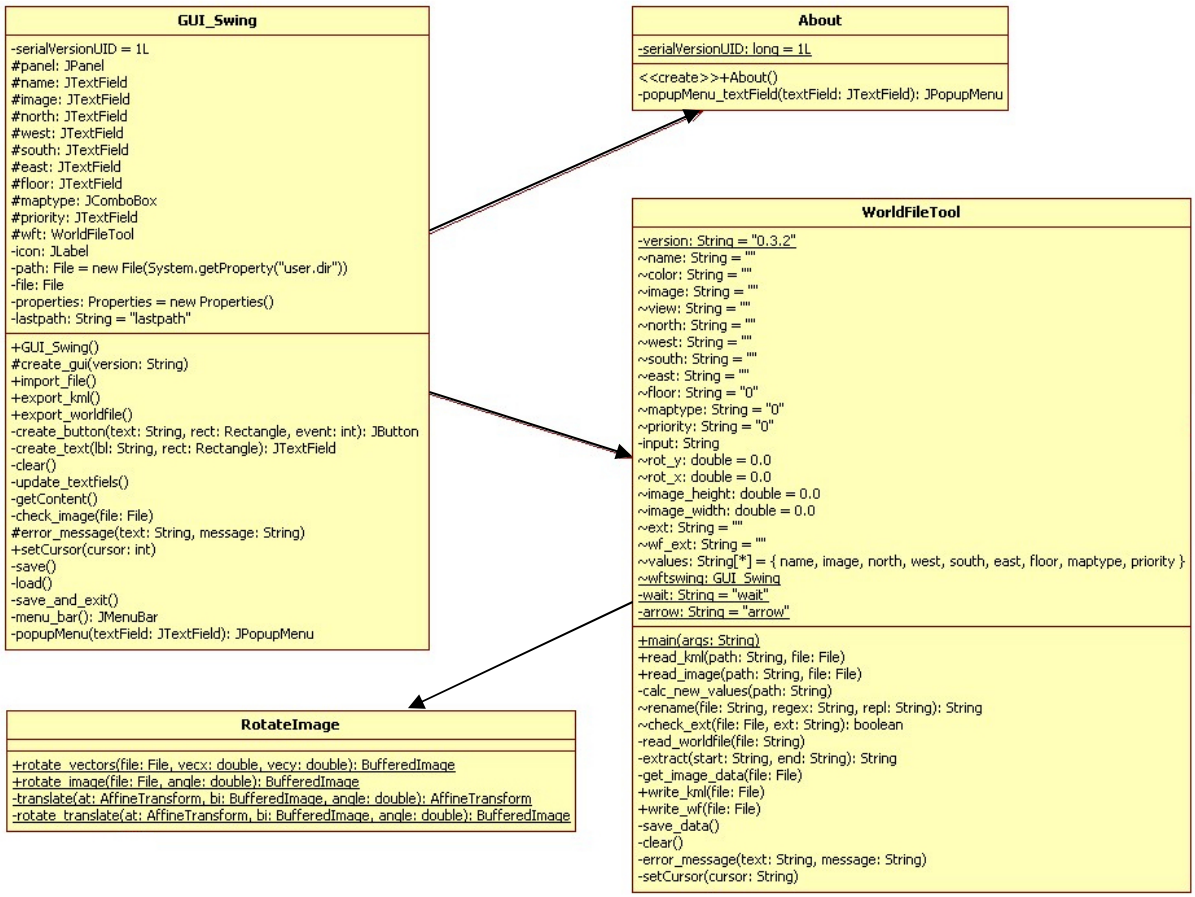
# Design Document - WorldFileTool




### Short description of each Class

| | |
|---|---|
| *About.java* | About Window |
| *GUI_Swing.java* | FrontEnd Swing |
| *RotateImage.java* | Rotate Image |
| *WorldFileTool.java* | Main Class |
| *WorldFileToolTest.java* | JUnit Test Class |

**Detailed description of the interesting Classes**

*RotateImage.java*

- rotate_vectors:
  - vecx, vecy vector with x, y coordinates

  The vectors will be converted with some simple math into an angle which is used to rotate an image.

- rotate_image: Using an angle to rotate an image.

- translate: Rotating increases the image size, so some part of it will be out of bound, therefore a translation is needed to put the whole image into a visible position.

- rotate_translate: Rotate the image and call translate.

*WorldFileTool.java*

- main: creates and show the GUI.

- read_kml: read a kml and extract the needed parts.

- calc_new_values: rotating an image increases the image size, thus the coordinates needs to be recalculated.

- read_worldfile: parse a worldfile and check if the coordinates are in the geographic coordinate system.

- write_kml: writes a kml and add some new data

- write_wf: writes a worldfile with the new data.