***Pymage***

**Description**

Pymage is an image software tool that provides the most common tasks to manipulate different image formats. Provides different operations such as rotating and resizing, or one of the most useful, the detection of duplicated images using different rules.

**User Stories**

**User Story A**

As a user I should be able to list all the image files

**Acceptance criteria**

* If a directory was not specified the program should list the image files of the home or user directory.
* It should be possible list the images from an specific directory.
* The list of the files should consider also the images within other directories.

**User Story B**

As a user I should be able to rotate or resize an image

**Acceptance criteria**

* The image should be able to change of size using the new dimensions as an input in pixels (width and height).
* The image should be possible to rotate using an input(angles).

**User Story C**

As a user I should be able to specify a path where the tool will look for the images that are equal.

**Acceptance criteria**

* The search of equal images should perform inside initial root path specified and also inside all the subdirectories contained.
* The result of the search should display the images that are equal showing the absolute path of each one

**User Story D**

As a user I should be able to specify which rule(s) I want to apply to search duplicated images

**Acceptance criteria**

* There must be possible to search duplicates using the file name.
* There must be possible to search duplicates using the file size.
* There must be possible to search duplicates using the root mean squared analysis.

**User Story E**

As a user I should be able to see the details of an image file

**Acceptance criteria**

* The details displayed for image should be the next: file Name, directory, owner, file size and file type.

**User Story F**

As a user I should be able to export an image file from one format to another

**Acceptance criteria**

* The application will provide support the conversion from one image format to another.

**User Story G**

As a user I should be able to perform all the operations using a graphical user interface.

**Acceptance criteria**

* There should be a user interface that allows perform the search of duplicated images and the results.
* There should be a UI to show the properties of an image file.
* There should be a UI to rotate and resize an image.

**User Story H**

As an administrator I should be able to review the log files for any possible error during the actions of the application.

**Acceptance criteria**

* The log should contain information about the error raised.
* The log should display the stacktrace of the exception.
* The log should record the messages chronologically.

**User Story I**

The list of files should support different types of view, detail and thumbsnail

**User Story J**

The display of information should include a thumbnail of the image