Pillow library

PIL is the Python Imaging Library which provides the python interpreter with image editing capabilities. The Image module provides a class with the same name which is used to represent a PIL image. The image module inside pillow package contains some important inbuilt functions like, load images or create new images, etc.

Syntax: PIL.Image.open(fp, mode='r')

Parameters:
fp – A filename (string), Path object or a file object.
Image.mode
It is used to get the pixel format used by the image. Typical values are "1", "L", "RGB" or "CMYK".

Returns type: An image object.
Image.size : It returns the tuple consist of height & weight of the image.

Merging Images

Pillow package allows you to paste an image onto another one. The merge() function accepts a mode and a tuple of images as parameters, and combines them into a single image.

Syntax

Image.merge(mode, bands)

Blur an Image

The **ImageFilter class** in the Pillow library provides several standard image filters. Image filters can be applied to an image by calling the **filter() method** of Image object with required filter type as defined in the ImageFilter class.

- Simple blur
- Box blur
- Gaussian blur

Cropping an Image

The crop() function of the image class in Pillow requires the portion to be cropped as rectangle. The rectangle portion to be cropped from an image is specified as a four-element tuple and returns the rectangle portion of the image that has been cropped as an image Object.

Flip and Rotate Images

Image module of the pillow library allows us to flip an image very easily.

commonly used methods supported by 'transpose()' are −

- **Image.FLIP_LEFT_RIGHT** − For flipping the image horizontally

- **Image.FLIP_TOP_BOTTOM** − For flipping the image vertically

- **Image.ROTATE_90** − For rotating the image by specifying degree

Adding Filters to an Image

The ImageFilter module contains definitions for a pre-defined set of filters, which we used

with Image.filter() method. These filters are used to change the looks and feel of the image.

Filters

The current version of pillow library provides below mentioned set of predefined image enhancement filters.
- BLUR
- CONTOUR
- DETAIL
- EDGE_ENHANCE
- EDGE_ENHANCE_MORE

ImageDraw

The 'ImageDraw' module provides simple 2D graphics support for Image Object.