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**Image converter in Python**

**1). Objective**

* All pictures will be resized to **150 x 150**.
* The final extension of **image1.jpg** and **image5.png** must be compatible with the following browsers: **Chrome, Firefox, Edge, Safari**.
* The final extension of **image3.gif**, **image4.png** and **image2.svg** can be compatible only with **Google Chrome**.
* The final picture’s size must be lower than **70%** of the initial picture’s size.
* The quality of the image must be maintained: **transparency**, **animation** etc.

**2). Requirements for the test**

* At least **Python** 3.5.
* **imgpy** installed: pip install imgpy
* **svgutils** installed: pip install svgutils
* **PIL** installed: pip install Pillow
* Images from the folder ***input\_images*** must not be deleted or renamed.

**3). Performance of the test**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Filename** | **Initial format** | **Final format** | **Input size[kB]** | **Output size[kB]** | **Improvement ratio** |
| **image1** | **JPG** | **JPEG** | **338** | **6.05** | **98.22%** |
| **image2** | **SVG** | **SVG** | **41.9** | **41.8** | **0% [1]** |
| **image3** | **GIF** | **GIF** | **699** | **214** | **69.5%** |
| **image4** | **PNG** | **PNG** | **1133** | **15.8** | **98.61%** |
| **image5** | **PNG** | **PNG** | **1792** | **38.8** | **97.84%** |

***[1] = svgutils library did not improve the output size even if the image has been resized.***