Watermark Script

Documentation

Jeffrey A. Wilson

6/29/2018

Background

I wrote this script while also designing 3D Environments in CryEngine V. Upon completing a level and capturing images from the engine in 4K I would use MS Paint to initially save the image to a directory separate from the CryEngine Build, then use GIMP 2.6 to crop the image to 1920x1080, keeping the 16:9 ratio, and save it into another directory. I would then reload GIMP and the image into a proper canvas size (1920x1080) and apply a watermark template with an alpha channel (transparency layer on the base), then again save that to another directory as a merged .png file. Lastly, I would reopen the watermarked Image in MS Paint to resize the image to 1920x1200 and save it one last time. None of this process was hard, apart from figuring out the pipeline the first time, however it was extremely tedious. Editing **10 images from start to finish** would take me **20 – 30 minutes.** Ultimately, this became my least favorite part of environment creation, and I almost dreaded finishing a level.

Something I loved doing was being hindered by a poor workflow, and I knew that had to change.

Using the Script

The script is built in Python to run from the command line.

It asks for the file paths of the images/templates, if the user would like to resize the base images before watermarking, and if they would like to keep the resized images that aren't watermarked.

Apart from asking the user for the file path and the size of the new images, the rest of the dialogues are in a Yes/No format, making it easy for the user to navigate.

Definitions

Base Images: These are the image(s) to be copied and worked with.

Watermark Template: The image template that will be applied to the Base Images. **THIS TEMPLATE MUSE BE THE SAME SIZE A THE BASE IMAGES AND HAVE AN ALPHA CHANNEL AS THE BASE.**

Total Script Run Time: The amount of time elapsed from when the script becomes automated. (Resizing, Watermarking, or Deleting Images)

PX: Shorthand for pixel(s).

Raw Image (Engine Capture at 4K)

Final Image (1920 x 1200)

Console

```
--- Water Marked Image Generator Script ---
Author: Jeff Wilson

This script can apply a user specified watermark template to other images and save it to a subfolder. The script currently supports .png and .jpg files.

Enter the path to your base images folder: C:\Users\Jeffrey\Desktop\CryEngineRaw

Base Image Directory Found Successfully:  C:\Users\Jeffrey\Desktop\CryEngineRaw

Your base image and watermark template MUST BE THE SAME SIZE, if you choose to add one. Would you like to resize your base images[Y/N]: y
Script will resize images.

Would you like to DELETE the resized images once the script is finished[Y/N]: n

Would you like to add a watermark to your images[Y/N]: y

Enter the path to your watermark template (including file name and extension): C:\Users\Jeffrey\Desktop\CryEngineRaw\Watermark\watermark1920x1200.png
Watermark path SUCCESSFULLY found at: C:\Users\Jeffrey\Desktop\CryEngineRaw\Watermark\watermark1920x1200.png

Enter a directory name for the images. Make sure it is a unique suffix, otherwise already existing files may be written over: EXAMPLE

Watermark template path:  C:\Users\Jeffrey\Desktop\CryEngineRaw\Watermark\watermark1920x1200.png

BASE IMAGE DIRECTORY:  C:\Users\Jeffrey\Desktop\CryEngineRaw
Are you sure you want to add a watermark to your images located in the above base directory[Y/N]: y

Directory created at:  C:\Users\Jeffrey\Desktop\CryEngineRaw/EXAMPLE/resized/  This path will be used for saving.

Enter the new width of the base images(px): 1920
Enter the new height of the base images(px): 1200

Images to be copied and worked with:

C:\Users\Jeffrey\Desktop\CryEngineRaw\fallentree_raw.jpg

Total Images:  1

Continue? [Y/N] y

Images are now being resized. This may take some time...
1 images have been resized to 1920 X 1200 and saved to path:  C:\Users\Jeffrey\Desktop\CryEngineRaw/EXAMPLE/resized/

Directory created at:  C:\Users\Jeffrey\Desktop\CryEngineRaw/EXAMPLE/watermarked/  This path will be used for saving.

Images are now being watermarked. This may take some time...
1 images have been watermarked and saved to path:  C:\Users\Jeffrey\Desktop\CryEngineRaw/EXAMPLE/watermarked/

TOTAL SCRIPT RUN TIME: 0.48799777030944824 seconds

Thank you for using this script!

Process finished with exit code 0
```

Testing

All tests consist of resizing the base images, and watermarking them with a template.
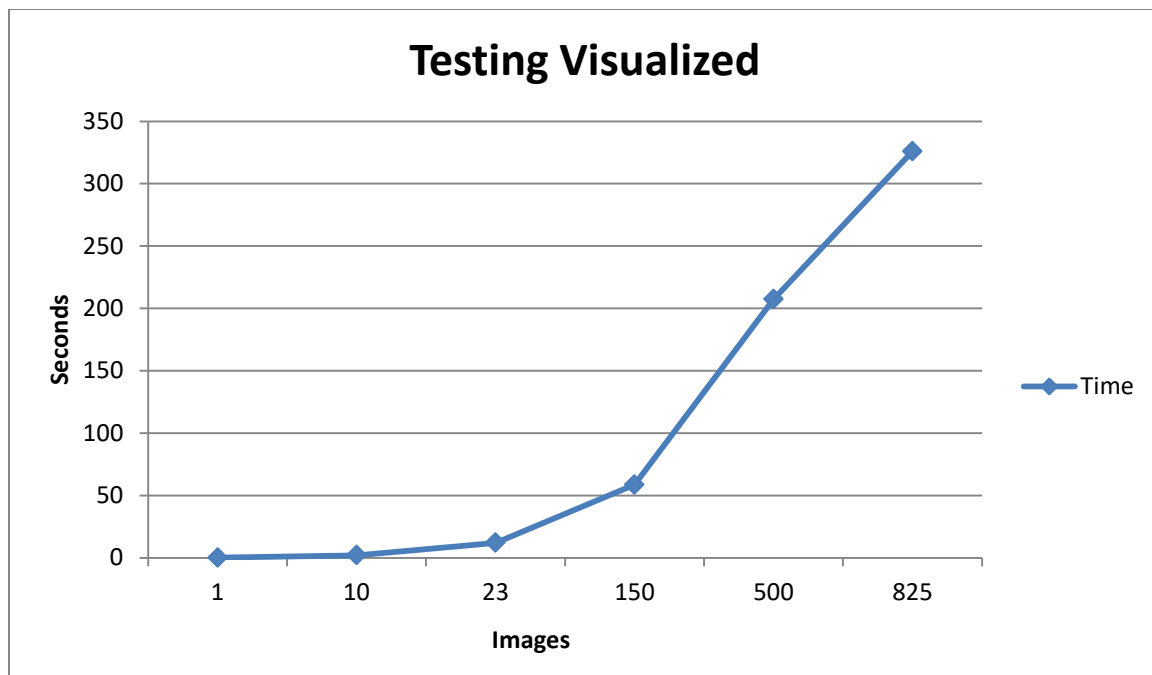
Single Image - 0.487 Seconds

Light Test (10 Images) – 2.039 Seconds

Medium Test (23 Images) – 11.962 Seconds

Heavy Test (825 Images) – 325.912 Seconds

Captures of the consoles for the above tests can be found at:
https://github.com/MythicalMeerkat/Watermark/tree/master/tests

Contact

Email: Jeffrey.a.wilson.developer@gmail.com

GitHub: https://github.com/MythicalMeerkat

Website/Portfolio: https://projectilestudios.weebly.com/

Acknowledgements

JetBrains

- For creating and providing the open source python editor, PyCharm.

Python.org

- For creating an easily accessible method for scripting.

GitHub

- For hosting the files that make up this project.

Crytek

- For creating, maintaining, and allowing an open source use of CryEngine V and the CryEngine logo as a watermark.

Additional Info

Source files for the project can be found at: https://github.com/MythicalMeerkat/Watermark

For any problems, suggestions, or inquiries please E-Mail me. I am always open to feedback and improving the product.

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