Installing and setting up Brainpainter

https://github.com/mrazvan22/brain-coloring

Installation without Docker

Ubuntu to run makefile

Git bash to install modules - pip3 install module

- panda
- numpy
- scipy
- PIL

Make sure global python is the same version as blender python 3.5

- Copy installed files into blender python

Modify makefile to include path to blender.exe

Processing data

R code to format data to match DK template, grey out regions in a threshold near 0(set value to 3), scale values to fit color scale

Configuration

In config.py

- Change input and output file paths
- Change names of DK subcortical regions on the right of colon to match data
- Grey out (-1) values that are not in data

Generating Right/Left

In BlendHelper.py

- Flip images if right is in the file name using PIL module

Trimming duplicate subcortical outputs

In BlenderHelper.py

- Delete subcortical thck and grayvol files

Adding negative/positive color scales

In fileFormatChecker

- Comment out negative value warning

In config.py

- Add negative color scale with cold colors
- Modify color scales, putting white last

In BlendHelper.py

- In getInterpColor function, if negative abn level, convert abn level to positive value and compute rgb_color with negative color scale

Update method calls by adding negative color scale parameter

Generating 3 sets of plots

In makefile

Call blendCreateSnapshot.py 3 times

In config.py

Change IMG_TYPE every time the script is called using a text file

Merging images into final product

In makefile

Call new imageMerge.py

In R

Generate color scales using colorRampPalette

In imageMerge.py

Use PIL to process and merge images and draw text

Merge images horizontally then vertically with space for captions

Add captions

Add color scale