ShinyApp notes

file name: data\_table

App script: download\_dataset.Rmd

Website: https://kayiripperger.shinyapps.io/download\_dataset/

Purpose:

1) The users can define the desired p-value and padj value and subset the dataset according to the experiment for download.

2) second page contain database with the all the GO term descriptions.

backend documents:

* full\_data\_withGO.csv
* GO\_description.csv

scripts that generate the backend documents:

* fetch\_GO\_descriptions.R
* join\_data\_with\_GO.R

file name: interactive\_graph

App script: Gene\_expression\_app.Rmd

Website: https://kayiripperger.shinyapps.io/Gene\_expression\_app/

Purpose:

1) to explore expression pattern in each brain area by gene

2) the normalized counts and the p-value of each experimental comparisons are shown

Backend documents:

* full\_data.csv
* LHb\_count\_ready\_for\_plot.csv
* NAc\_count\_ready\_for\_plot.csv
* SCN\_count\_ready\_for\_plot.csv
* VTA\_count\_ready\_for\_plot.csv

Scripts that generate the backend documents:

* generate\_count\_data\_for\_plot.R
* generate\_full\_data.R
* utput\_tidy\_count\_data\_for\_plot.R

file name: interactive\_volcano\_plot

App script: volcano\_plot.Rmd

Website: https://kayiripperger.shinyapps.io/volcano\_plot/

Purpose: explore the genes on the volcano plot by selecting a brain region and an experimental comparison

Backend documents:

* full\_table.csv

Scripts that generate the backend documents:

* joining\_full\_table.R