shinyMatrixViewer 2021-07-06

# What it does

1. Reads standard input (sample table, feature table, any number of additional sheets)
2. Selects one sheet as data matrix (this means you can visualize ‘Area’, ‘Height’, but also ‘Rt’, and any other matrix)
3. Performs some basic preprocessing (TIC normalisation, imputation, log-transformation, pareto-scaling …)
4. Displays heatmap using heatmap.2 with many interactive controls
5. PCA ggplot, clickable

The switch from ggplot to heatmap.2 is necessary for large matrices.

# What additional features are planned?

1. Interactive heatmap using plotly library (allowing clicking, zooming etc., but fast; unlike ggplot)
2. Plotly 3D pca plot

# Where does it fit in?

1. Visualization tool for large matrices
2. Can make use of Sample and Feature information to some degree
3. For QC
4. For final plots

I am hoping to kill two birds with one stone. Firstly, QC plots (e.g. delta RT, peakDataPoints) which do not need to be all saved. Secondly, after more processing (linear model, merging of ion species and optionally lipid groups) the final plots. The common input format makes this possible.