CAS Information Engineering – Module Scripting; *Severin Trösch*

Assignment 4.4 – REPORT

Packages used:

(full links to PyPI pages + version declaration)

Package Name	Link	Version
pybaseball	https://pypi.org/project/pybaseball/	1.0.8
plotnine	https://pypi.org/project/plotnine/	0.6.0

Maturity perception:

(was it easy to install? did you get started quickly?)

Package Name	Installation	Comments
pybaseball	pip install pybaseball (in anaconda prompt)	Easy to install – no problems.
plotnine	pip install plotnine (in anaconda prompt)	Easy to install – no problems.

Value perception:

(do you think this is a useful module?)

Package Name	Value perception (comment)
pybaseball	The module does what it should do: It provides access to a large set of data from the major league baseball (MLB) – current and historical. For baseball- or sport-stats-aficionados, this is certainly interesting and useful.
plotnine	Very useful module, as it provides an intuitive and easy-to-use way for the application of the "grammar of graphics" (GG) concept. Using GG, multi-layer plots can be coded in a easier way than in the standard Python visualization libraries (i.e. matplotlib).

Important functions:

(The most important or interesting function or constant you used in the module, and why.)

Package Name	Important function(s)	Comments / usage
pybaseball	statcast()	Samples MLB pitching data from statcast system. Interesting variables to analyze pitching quality.
plotnine	• ggplot() • geom_point() • aes() • facet_wrap()	• Function to call the GG-structure • Function to use the point "geom" of the GG • Function to set the "aesthetics" of the GG • Function for subplots for each level of a variable