*Ape Was Here*

SSBU: High Level Tournament Analytics

(A Product by Infernape)

This tool provides the player with a high-level analysis of their tournament performance. By filling out the spreadsheet template and running the code attached in this package, a player can view KPIs and specific character matchup data from their past online and offline tournaments (most if not all of this can be found on <https://smashdata.gg/> and typing in your previous player tags). The folder has a spreadsheet of my data as an example.

**General Information**

* **Tournament** → Index stating the number of the tournament entered
* **Placement** → Your placement in the tournament
* **Participants** → The number of participants in the tournament
* **DQ\_Wins** → The number of sets you win via DQ
* **Winning\_Sets** → The number of sets you win in a tournament
* **Losing\_Sets** → The number of sets you lose in a tournament
* **Games\_Won** → The number of games you win in a tournament
* **Games\_Lost** → The number of games you lose in a tournament
* **Game\_3+** → The number of sets you play in a tournament that go to game 3 or higher
* **Sweeps** → The number of sets you play in a tournament that are either 2-0 or 3-0 (either in your favor or against you)
* **Chars\_Won** → This is the list of characters you beat in a tournament, None if you didn't beat anyone \*
* **Chars\_Lost**  → This is the list of characters you lost to in a tournament, None if you beat everyone \*

\***Criteria for wins and Losses:** If you beat someone game 1 and they switch characters to win the set, the character you beat goes into the beaten column. If you win game 1, they don't switch, and they win the set, then that goes into the loss column. Otherwise, everything else is pretty straightforward.

**KPIs**

Key Performance Indicators (KPIs) are the main metrics that are used to determine overall tournament performance. They are:

* **Placement\_Pct** → Placement Percentage is the percentage of the participants in a tournament than which you did better
* **Set\_Win\_Pct** → Set Win Percentage is the percentage of sets you won in a tournament
  + Winning\_Sets/(Winning\_Sets + Losing\_Sets)
* **Game\_Win\_Pct** → Game Win Percentage is the percentage of games you won in a tournament
  + Games\_Won/(Games\_Won + Games\_Lost)
* **Set\_Win\_Rat** → Set Win Ratio is the ratio between the number of sets won and sets lost (ex. A set\_win\_rat of 1 implies that you went 2-2 at a tournament)
  + Winning\_Sets/Losing\_Sets
* **Game\_Win\_Rat** → Game Win Ratio is the ratio between the number of games won and games lost
  + Games\_Won/Games\_Lost
* Placement\_Pct, Set\_Win\_Pct, and Game\_Win\_Pct are all displayed in the form of a line graph.

**Character Matchups**

* The characters you beat and lost to are able to be visualized by running the attached code in the folder. These visualize every character you played against your win percentages against those characters.
* For offline tournaments you just need to remember what characters your opponent played.
* This streamlines the process of figuring out which characters you do well against and which ones need more attention in terms of matchup experience.

**Next Steps**

Right now, the tournament data has to be input manually into a spreadsheet with the column names above as a template. I’m not sure if there is a way to automate the data collection, but I’ll keep looking into that. I hope this makes the improvement process easier!

**Housekeeping**

* To analyze your data, make sure you have the most recent version of Python downloaded, and an application that provides you with an IDE to run the code.
* When you download everything, be sure to keep the Python file and the spreadsheet all in the same folder.
* Within the quotation marks on the read\_excel call, put the name of your spreadsheet. This is whatever you save the Excel spreadsheet as, but make sure to keep it in .xlsx format.
* For recording the characters used against you, be sure to
* To track an individual stat, you can just remove the apostrophes around lines 110-116. To make sure that it doesn’t get displayed, put 3 apostrophes before line 111 and 3 more after line 115.