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Project Proposal

Predictive Seeding and Outcome for Ultimate Brackets

Abstract: Michigan State University hosts the largest weekly series of competitive tournaments for the video game Super Smash Brothers out of any other college in the world. Every Friday, an average of 100 entrants need to be seeded into the brackets by the tournament organizers manually. This project's goals would be to collect data from previous MSU tournament results and automate the seeding process for future brackets.

Data Sources: The first source will be smash.gg. The brackets are entered in real time during the tournament and match data such as the players, winner, and set count are recorded. The data will be accessed using the GraphQLAPI. The second source will be challonge.com. These brackets are also entered in real time, however the website has no API. Instead a JSON file is provided via a download URL and will need to be parsed. There is no constant way of entering player names so they will be messy and require further processing.

Timeline:

February 11th: Begin work on project

February $11^{th} - 18^{th}$: Obtain API keys for smash.gg and work on challonge parsing

February 18th – March 24th: Finish data collection from smash.gg and challonge

March 24th – April 21st: Finish data analysis and return a text file of participants seeded in order Stretch Goals: Create a preseded bracket in smash.gg and challonge using the collected data, account for frequently played matches, account for teammates or out of state competitors.