

CS6320 Project Proposal

Andrew Gerungan – awg190000

Overall Goal: The plan is to create a helper chatbot that helps evaluate and construct decks for the One Piece Card Game. This chatbot will help to guide users towards more optimized card ratios, providing both usage statistics, categorization of cards, and draw chances on a given turn. It will also be able to present to the user the overall meta for a given format, showing both presence and win rate. This program will also serve as a base / test run for alternative chatbots that I would like to develop for other games.

Scope: A small-scale application that allows users to input either just a leader (one base card) card or their entire deck to be evaluated. Input will be based on formatting used in a 3rd party application called OPTCG Sim. The application will then begin a dialogue where it will recommend other cards or different ratios for cards, providing reasoning for either. Users will also be able to ask for an overall meta report for a given format.

Team Members: 1 (me)

Tasks:

1. Need to develop the ability to scrape data from tournament reporting sites such as onepiecetopdecks.com and onepiece.limitlesstcg.com – also need to ensure that duplicates across the data sources are not logged as that would skew the data
2. Need to be able to categorize cards into what they accomplish in a deck – ideally will be categorizing itself based off tournament winning deck patterns and power / cost but may need to be inputted manually if time constraints

3. Need to be able to take in user input and analyze the differences between the user's deck list and other deck lists for the same type of deck in order to give recommendations on both card ratios and other cards – will be based on the categorization done in the previous step.
4. If time permits, make the application presentable and visually appealing

Data Sources:

Deck Listings:

-<https://onepiecetopdecks.com/>

-<https://onepiece.limitlesstcg.com/> <= probably going to use this one the most

-<https://egmanevents.com/>

Rulings:

-<https://en.onepiece-cardgame.com/rules/>

Updates:

Relevant Vocabulary:

-Curve (seeing / playing something on “curve”): Earliest time to use a certain card –ideal since playing cards on curve is generally the most efficient use of your resources

-Brick: a card that essentially does nothing at a certain time – most relevant when having a card in hand that has no defensive value and is not efficient to use in the current situation: said card is a “brick”

More NLP input/output & multi-step dialog:

-Explanation of Rules: will be implemented and will also function as a multi-step dialog - users will be able to have a full dialog for the explanation of the basic rules of the game and also request comprehensive rules for specific cards, in which the chatbot will search

through the current comprehensive ruleset and present relevant results

-Asking for Move/Strategy suggestions: outside of the scope of the project atm since it would require data on every move in a given game, which currently does not have any current dataset or way of collecting said data. Implementing a framework for collecting said data would be beyond the timeframe of the project