

Q2 PROJECT TIMELINE

Previous: We already have the full card list (27000 cards), containing card names, body text, and other features. (Theo)

Week 1: Set up

- a. **Evelyn:** Scrape deck list data from EDH.com, make greedy baseline decks(using the 99 most common cards for each commander)
 - i. Split commanders into validation set (n=40) and testing set (n=200)
- b. **Linus:** make word2vec baseline decks (using the 99 most textually similar cards for each commander)
- c. **Theo:** write script to evaluate playability using ChatGPT (set up process to call to the OpenAI API), write first attempt prompt

Week 2: Building

- a. **Evelyn:** Write script for synergy metric (average synergy over all pairs in a deck (4950 pairs), average synergy between other cards and commander (99 pairs))
- b. **Linus:** Train first attempt base embedding for cards (body text word2vec+manual features) and select candidate pools (n=500) for each commander.
- c. **Theo:** prompt engineering for playability metric (subjective evaluation, using existing decks from the internet)

Week 3: Evaluating+iterating

- a. **Linus, Evelyn:** Check synergy metrics of candidate pools for validation commanders. Do more feature selection/hyperparameter tuning to get new base embeddings and candidate pools
- b. **Theo:** Write script + first attempt prompt for re-ranking candidate pools with ChatGPT

Week 4: Making improvements

- a. **Evelyn:** Assemble full pipeline to connect scripts: embeddings → candidate pools → reranking → final deck
- b. **Linus:** Set up automatic evaluation pipeline: final deck → synergy, playability metrics
- c. **Theo:** Evaluate reranking prompt (on validation set candidate pools), do prompt engineering

Week 5: Final evaluation

- a. **Evelyn:** Build demo interface (javascript to look up the decks for a commander and display deck metrics)
- b. **Linus:** evaluate all decks (word2vec baseline, greedy baseline, our final decks) for each commander in our test set
- c. **Theo:** Get final decks (using pipeline from week 4)

Week 6: Deliverables

- a. **Everyone:** Write final report, make presentation poster