

# CS 483 Project Proposal

Noah Scarbrough, Samuel Dunn

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## 1 Data Set

Our data set for this project will be the cards used in trading card game, Magic: The Gathering. The card text will be treated as a document. With nearly 20,000 unique cards in existence, there is a wealth of data available. If this proves to be too large to process within the scope of this assignment we will trim our scraping to be the subset of cards that are legal in the modern format. Along with the document, each tuple will additionally contain other attributes for the card, such as its mana cost and rarity. This data will be scraped from the official database site for the game.

## 2 Feature: Advanced Search

Our first feature will be an advanced search engine. The user will have the option of using the standard search or the advanced search. The standard search will simply return the cards most relevant to the keyword query across all components of the card. Advanced search will be more intricate and designed to assist with deck building. The advanced search will allow the user to hone in on matching particular aspects of a card. The elements that advanced search will include the user to restrict searches over include the card's color identity, converted mana cost, type, supported formats and so forth.

## 3 Feature: Related Cards

Another feature we plan to include is a display of relevant cards. When a card is chosen from the results, it will open a page that contains not only information about the card, but also give a list of links for related cards. Related cards will be determined by mining information from popular deckbuilding sites, such as tappedout.net, for cards commonly used in conjunction to the card the user has selected. If unable to glean precise information from mining, we may fall back to suggesting cards with similar features, mana cost, set legality, and so forth.