Analysis Model for Magic: The Gathering

By: Kai Cardona, Shannon Conway, Charles Cusac, and Taylor Olinde

Expanded Use Case Diagram 1

Create a deck:

Actor: User	System: Website
1. Logged in user clicks "Create New Deck"	2. Site creates a blank deck, redirects them to a deck edit page for that deck.
3. User inputs individual values, such as a card, the deck description, the deck name, etc. onto the deck.	4. System updates the draft every second with user's inputs.
5. User saves the deck draft.	6. Deck is added to the database. (If not saved it remains a draft and is deleted after a week).
7. User can access and re-edit deck.	8. System updates the deck every second with user's inputs. (It's a saved deck so it does not need saving.)

Expanded Use Case Diagram 2

Add card to collection:

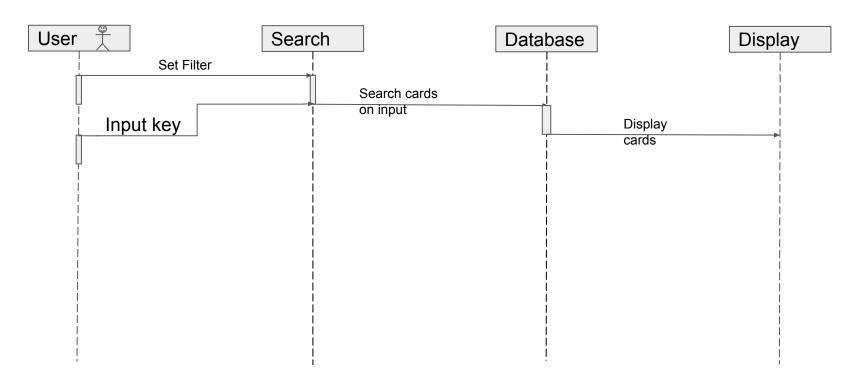
Actor: User	System: Website
1. Logged in user clicks "Add to collection"	2. Site directs user to database search page
3. User types in keywords to find card(s) they wish to add to their	4. Site displays the database updated to be those cards which correspond to search terms.
5. User clicks "Add card to collection" button by card	6. Site updates User's collection to include that card.
7. User can access that card in their collection, and edit parameters like multiplicity, condition, etc.	8. Site updates User's collection with their card's parameters.

Expanded Use Case Diagram 3

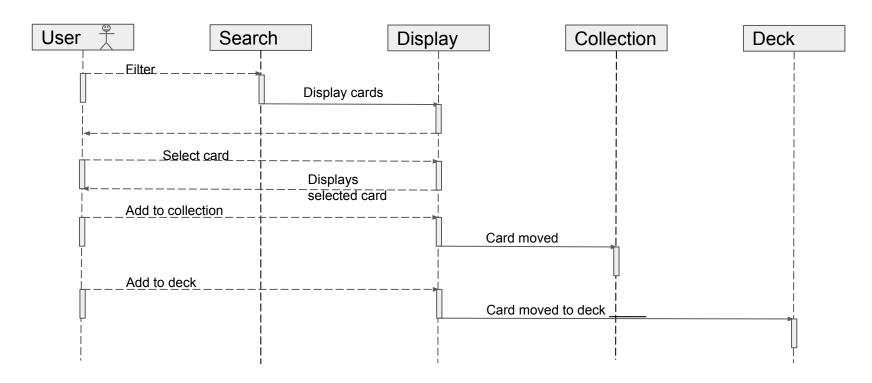
Add a friend:

Add a mend.	
Actors: User 1, User 2	System: Website
1. Logged in user clicks "Add a friend"	2. Site opens a tab that prompts User 1 to type in a friend's user ID to add them.
3. User 1 types in their User 2's ID, clicks "Add Friend" button.	4. Site sends User 2 a notification that they must accept or reject the friend invite.
5. User 2 either accepts or rejects User 1's invite.	6. If User 2 accepts, site updates the friends list of both users to include each other. Site sends User 1 a notification of User 2's answer.

Sequence Diagram 1



Sequence Diagram 2



Class Diagram 1

User 1

userID:String decks:List collection:List friendsList:List

login()
addFriend()
acceptFriend()
addToCollection()
requestDeck()
saveDeck()

Server

usersDatabase deckDatabase collectionDatabase cardDatabase

createDeck()
enterCollectionInput()
sendRequest()
sendRequestResult()

User 2

userID:String decks:List collection:List friendsList:List

login()
addFriend()
acceptFriend()
addToCollection()
requestDeck()
saveDeck()

Architecture Diagram 1

N-Tier Architecture

Presentation

Web-browser based GUI (HTML, CSS)

Client Access

Features for user access (Web services)

Business / Logic Layer

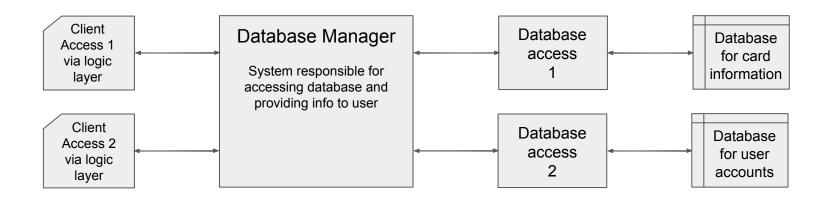
Application logic, code for user features, and access control (Java)

Data Storage Layer

Databases for storing card and user account information (SQL, mySQL)

Architecture Diagram 2

Object-Persistence Framework



Stick Man

