For the term project I made a webpage that would allow the user to create and share different decklists for the game Magic the Gathering. Magic the Gathering is a trading card game that has a lot of individual cards that will be put together into decks from the players of the game, this site would allow for the creation of the deck to be published and shared for others to copy the decklist to their own decks. This was to be down with a drag and drop function that allows the player to look up cards and add them to the deck by dragging them over the box that represented the decks. The they could commit the deck to the database and it would show up to other places on the site when people looked them up. \

The implementation I used was a four tier application using html, php, javascript, and mysql for the database implementation. One part of the implementation is the users ability to login and stay logged in using php and the session store variable that php can pass through the users navigation of the website (something that may have been broken within pausch). After the use is logged in they can navite to the create deck part of the site so they can see what decks they have made and has the ability to make more decks and submit them to the database. The cards part of the site will allow a user to just look up different cards with the different fields selected to give ideas of cards but not when they are making a deck but rather just want a reference. To get this implementation to work I created a web scrapper to scrap the ScryFall api to get the cards information. I did this with php and mysql with javascript and html as well. These can be found in pausch with the different files all named ScryFallScrapper.ext with different extensions.

The schema for the database was to have three tables. These tables are the DeckUsers, Decks, and Cards. The DeckUsers has the attributes email, username, passwords, and id. The attributes that are most important out of those are the username and password so the user can login to the website and stayed login. The Decks table has the deckname, creators name, key card, and deck list as attributes. The key card is a card that can identify part of the deck for other users to see what that will be without having to see the entire list. The decklist attribute is the card names within the deck itself so it can get all the cards within it. Finally the Cards table has attributes to describe each card and what type of play style the cards are allowed to be played in. The most important of these attributes would be the card name and image that comes from ScryFall.com so it can be pulled and displayed on my website.
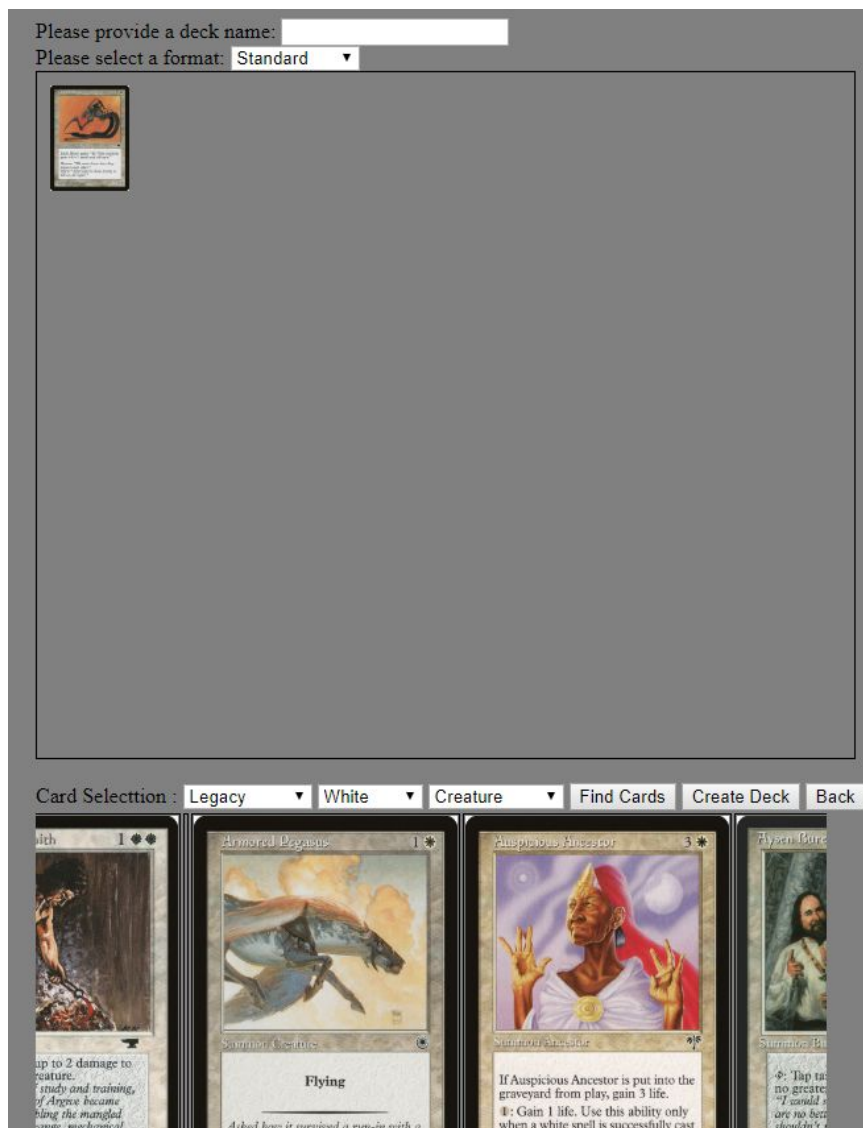
The drag and drop feature will allow the user to add cards to a deck list dynamically through the click of the mouse instead of typing in cards names. The look of this was to have what cards are in the deck are a little smaller than the ones at the bottom of the page that are to be selected from. This will look like this:

The scrapper will give back the information about the cards and the picture of the card that comes form the ScryFall.com api. The scrapper will display the information of each card when it is used like this:

Scryfall Scrapper
https://api.scryfall.com/cards/multiverse/1

Ankh of Mishra	{2}	Artifact		not_legal	legal	legal	not_legal
not_legal	legal	not_legal	legal	not_legal	legal	not_legal	not_legal
legal	undefined	rare	Limited Edition Alpha	undefined	https://img.scryfall.com/cards	Submit	

 Some of the problems I ran into was trying to post a form from the php page to reload the page. This was needed to be done after a card was dropped over the deck but it would not read the forum with the submit after the dropped card was placed. This means that the Find Card button has to be pressed to see what new cards are being added to the deck list after the first card of the same name. Another problem is that the session store variable was not working for part of last week before this project was due, which this not working makes most of my project not work since the user needs to be logged in inorder to proceed with most of the site' functionality. I also learned that having a layout of html is difficult to maintain when the output of php is echoed to the screen.

 Some future work I can do is add a more indepth way to show decks with pictures taken from the database and display them more than just the name of the card.