PennWest California

DeckTechCentral

Weekly Report 8

Christian Messmer, Paul Shriner, Adir Turgeman, Luke Vukovich

Dr. Mohamed

CMSC 4920-001

28 March 2024

This week, we aimed to finish the DeckView component and begin the CreateDeck component on the front-end. These are the last major components of our front-end; after that, work will hopefully consist of minor improvements and polishing. On the back-end, we wanted to complete the "Service" layer and solidify the API endpoints, which will allow communication between the front-end and back-end. Outside of the software solution, we aimed to start a user manual for our application. The user manual will explain our application, including how the project was implemented, how to use the application, and other important aspects. As the user manual will be targeted towards end users, we will need to consider that when writing it (we can't be too technical). A rough draft of the user manual will need to be completed by April 5, 2024, which falls in Week 9 of implementation.

For the front-end, we completed the design of DeckView. The DeckView component has the related information for a deck, including name, description, authors, and cards. We decided to merge the DeckView and CreateDeck components into one component called "Deck", which will have different states depending on if the user is logged in, whether it's their deck, etc. This makes it easier to manage, as the new Deck component will have the same interface, just with elements visible/hidden depending on the state. We currently have an "Edit" button, which makes it possible to change the name and description of the deck. We also have an "Add Card" button, but it is not implemented yet.

For the back-end, Christian has made progress on the Service layer and is close to completion. The group has been discussing changes in the Discord, and he believes it will be completed within a few days. We have also began looking into server hosting. This is important so that people will be able to use our application over the network, rather than only having it self-hosted on a computer. Hosting will take some thought; there are several options with

benefits, drawbacks, and various pricing models. We will need to choose an option that works for us at a low price point (or for no charge). Fortunately, once we have chosen a provider, it should be relatively easy to set up hosting with our application.

While we had no specific setbacks this week, we have begun to realize that we are nearing the deadline for the project. After this week, there are only three weeks of implementation before we need to submit a software solution. One feature that may have to be pared down, or even omitted, is the deck legality functionality. This would tell the user if their deck is legal for a game of Magic: The Gathering (MTG). As MTG has many rules and conditions depending on how it is being played, this makes developing a way to check deck legality very complex. We cannot sacrifice base functionality for a "nice-to-have" feature, so this will be one of the first features to be omitted if needed. If our application did not check for deck legality, then it would be up to the user to determine if their deck is legal or not.

Next week, we want to finish the dynamic "edit" states on the Deck page. We will need to take account for several scenarios, such as if a guest is accessing a deck, a user is accessing their own deck, if a moderator is accessing a deck, etc. On the Profile page, we want to add the user's decks and the decks they liked. This should actually be trivial to add, as the components for displaying decks are already set up. Of course, all changes done to the front-end should be done with consistency and accessibility in mind. Our aim is that if a user can understand how to use one function of our application, then they can understand the whole application. However, this will be secondary to getting the application fully functional. On the back-end, we want to finish the Service layer and begin communication with the front-end. Assuming that everything is written correctly, it should be fairly easy to interface between the front-end and back-end. For example, the front-end currently uses example json files for decks. These can just be swapped

out for calls to json files from the database. Finally, we want to continue the user manual, finishing a rough draft by April 5, 2024.