PennWest California

DeckTechCentral

Weekly Report 4

Christian Messmer, Paul Shriner, Adir Turgeman, Luke Vukovich

Dr. Mohamed

CMSC 4920-001

22 February 2024

Our goals for this week were to continue working on the front-end of our application and begin parts of the back-end, which was made possible by the completed API Specifications. For the front-end, we aimed to set up a visual representation of a deck, as well as a proper landing page. For the back-end, we wanted to begin the database. Throughout all of this, we wanted to ensure effective group collaboration through meetings, both in-person and virtual.

There were not many changes on the front-end this week. This is because we are getting to the point where we need to begin setting up communication and integration with the back-end. Luke did refactor the CardModal component and handle “two-faced” cards in Magic: The Gathering (MTG). The CardModal component in our application handles displaying information about a card. We currently have this working in the search page. If a user searches a card, they can click on it in order to view more information, such as the card’s stats. We aim to use this same interface when viewing cards in a deck, so it was important to refactor it so it will be more reusable. Regarding “two-faced” cards, these are cards in MTG where they have a different card on both sides of the card. Currently, our interface will display these as two separatee cards. However, Christian noted that this is not an optimal way to display these cards as they are not actually “separate”, which could cause confusion in a game. We do not consider this a setback though; this can be iterated on at a later time. Paul and Adir reviewed the code and also gave their input.

Christian began looking into MongoDB and installed it on his computer. MongoDB is what we will use to create the database in DeckTechCentral. Due to the work done on the API Specifications, it should be possible to automate a good portion of the database creation process. As a group, we also looked into how to implement OAuth into the back-end. Security is a critical

component of our application; we need to make sure someone can't attack our application, such as by spoofing a user to obtain their private deck lists.

The setbacks were minimal this week; no major problems occurred. We did run into some minor issues and we deviated somewhat from our original goals. When Christian was installing MongoDB on his computer, it took longer than expected due to needing to setup the environment. For implementing OAuth, we discovered that it is more complex than we thought, so more research will be needed. In terms of our original goals, we did not set up a representation of a deck nor a proper landing page. However, what we did is still progress, and will help towards those goals.

For next week, we will implement MongoDB into our application. While we may not all need to install it on our computers, we should all become familiar with the process. We will also work on the back-end, including integrating OAuth and implementing support for a few possible requests. This will be important in order to ensure the front-end can communicate with the back-end and receive messages. It's true that the API Specifications will enable adding features to the front-end without a finished back-end, but we still want to test out some functionality to see what kinds of problems we can expect. For the front-end, we want to realize a goal from this week that we missed: creating a component to visualize a deck. Deck creation is a main feature of DeckTeckCentral, so we should aim to implement it sooner rather than later. The group will also look at smaller changes that can be done to the front-end. One of Paul's ideas was to have the card interface show a mana icon rather than a single letter. Changes like these will make our interface much more appealing to the user. Lastly, just as we've done before, we plan on having meetings in the next week to work on the project.