PennWest California

DeckTechCentral

Weekly Report 10

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For Week 10, we aimed to set up the Profile page. While we do have a Profile page on the application, it is merely a template page. It will need to show the decks that the user has created, which should not be too complicated as the functionality exists in other components. The Front-End will need overall polishing to ensure it provides a responsive user experience. Note that this comes seconds to actual functionality; we need to deliver a functional application by the due date. On the Back-End, we wanted to finish functionality and integrate it with the Front-End. Finally, we wanted to begin preparing for the final presentation. As it will be done in front of ABET Accreditation board members and members of the CS industry, we can't wait until the last minute to begin work on it.

On the Front-End, we have begun integration with the Back-End. Luke was able to integrate card searching provided by the Back-End. Paul tested it and confirmed that it works. Since the application is not deployed, the way to test this is to run the DTC App component in a separate window, then use the search functionality provided by the Front-End interface. There has been progress to integrate the deck creation and retrieval functionality, but it is not fully operational as of now. On the Deck page, a right click menu has been added to a card. This allows the user to add more of one card, set the card as the cover image, and delete the card from the deck. The support for "co-authors" next to the main author has been removed; it was not a goal to have multiple authors for a deck, so we removed it for the sake of time and getting important functionality complete. A deck will only have one author: the person who created the deck.

On the Back-End, Christian worked on implementing an authorization method. The reason we had to do this was due to the removal of OAuth (explained more in setbacks). Our authorization method will work by verifying the username and password, then sending back a

JWT (JSON Web Token). From there, the token will be used, reducing the number of times the actual username and password need to be sent. We have also begun to containerize the API, which will allow running it in containerization tools such as Docker. This will make it easier to deploy the application.

For setbacks, we ran into problems with integration between the Front-End and Back-End. Luckily, these ended up being simple problems to fix, but they were numerous. The worst setback was with OAuth. For context, we wanted to use Google OAuth to handle authentication in DeckTechCentral. Many sites use OAuth for this purpose; users who use the "Continue with Google" button on a page are using OAuth to create an account. As a result, registration is easier for the user, and it allows us to take advantage of the security provided by Google. However, it turns out that to deploy the website, we would need to submit it to Google for review, which would take too long given the time we have. Therefore, we made the difficult decision to cut OAuth from our application. None of us wanted this, but we need a "complete" application we can deploy, so this was the only option. Of course, we can always implement OAuth in a future version of DeckTechCentral.

Next week will be the last week of implementation, as the final source code is due on April 21, 2024. We have already confirmed with the professor that this deadline does not include deployment, just a completed version of the application. During this week, we need to set up the Profile page and authentication. After that, we will do any testing we can, then turn in the application. We received feedback for the rough draft of the User Manual, and it consisted of minor changes. We should easily be able to make these changes and get it reviewed by the PennWest California Writing Center. The last part of the project will be the final presentation. We have already begun a skeleton of a presentation; it will need more detail and visual elements.

More importantly, we will have to discuss who will be doing what for the presentation and

practice our parts ahead of time.