Individual Weekly Report for Jasper Yeung

A Virtual Tabletop for Game Masters to Create Immersive Experience

August 9, 2025

# Accomplishments

* Fixed bug for multi-token selection where a small Token occupying ¼ of a space in a multi-selection would cause snapping to offset to an incorrect coordinate.
* Presented the progress of the project in showcase three to gather advice on testing and show a demonstration of the progress made so far in the project.
* Changed how token names are grouped with tokens so that they are not accounted in grid snapping but still follow moving tokens.
* Implemented ability for users to change token sizes which scale according to the grid set or based on a default ratio of the battle map’s size.
* Implemented handling of token sizes and moving names when a grid is not set.
* Researched ways in which to embed images from a shared link from cloud storage services like OneDrive and Google Drive.

# Weekly Activities

| Activity / Task / Work | Hours | Status |
| --- | --- | --- |
| Battle Map and Token Implementation | 17 | In progress |
| Meeting | 2.5 | Complete |
| Showcase Slides | 0.5 | Complete |
| Weekly Status Report | 1.5 | Complete |
| **Weekly Total** | **21.5** |  |
| Previous Weekly Cumulative Total (Carry Over) | **125.5** |
| **Current Cumulative Total** | **147** |

# Plans for Next Week

| Activity / Task / Work | Est Hours |
| --- | --- |
| Unit and Functional Testing | 4 |
| Code Cleanup | 2 |
| Battle Map and Token Implementation | 2.5 |
| Expert Meeting and Code Review | 1.5 |
| Weekly Status Report | 1.5 |
| Meeting | 2.5 |
| Capstone Portfolio Draft | 6 |

# Response to Feedback

**Hyunjin:** Because your project seems to be a primarily front-end project, you may not have to focus much on unit testing but more on functional tests.

Thank you for the feedback. I also agree with this assessment since most of the implementation of the project is through components which are difficult to test individually without relying on other components. However, I do have some classes implemented which will have unit tests conducted. But I agree that functional testing would be more beneficial for this project.

**Professor Dawn-Marie Oliver:** Are you planning for this project to work with larping?

That is a great question! While this project has been conceived for TTRPG games first and foremost like D&D and Pathfinder, other non-tabletop roleplaying games are also able to make use of functions provided by the project. For larping and other non-rules heavy roleplaying games, the Roleplaying Scene functionality would be able to be used to create immersive experiences. While roleplaying scenes have not been implemented yet, the features take inspiration from visual novels where full character art would be displayed with added visual effects and sounds able to be added.

# Other Reflections

The work this week has definitely contributed to the overall goal of the project. However, this week’s development was not as fast as I might have hoped. The work done over this week is a continuation of more context menu and token features implemented since last week. Most of the functions able to be completed without TTRPG implementation have been implemented and informally tested. The only token function able to be implemented currently left is changing a token’s image based on a user’s image link from a cloud storage service.

The most time-consuming problem during development was figuring out how to create the menus with Chakra UI. Chakra UI does have extensive, utilizable, and useful prebuilt UI components. However, because my project is a non-standard website where many different interactions can occur such as delete keys and context menus, some components would not function as needed whether functionally or while being displayed. This has caused much time spent finding workarounds and looking at documentation and other sources.

An example of this would be creating a sidebar. Chakra UI has a component called a Drawer which previously was called a Modal. Drawers were the perfect component to create my sidebar menu visually. However, functionally, the drawer component did not allow interactions outside of the drawer component to be pressed which was necessary for the project. For the project, the user must be able to have the sidebar open while still being able to interact with the battle map or roleplaying scene. Even the parameters that were documented to allow interaction did not work. As such, I now must use a similar component, the Action Bar, which requires more display logic to be modified but allows outside interaction.

One thing I would have redone differently this week was my research into connecting to cloud storage services. At first, I believed that I needed to connect to API’s to access image files. As such, I spent much time researching and learning how to connect to the Google Drive API. However, I should have noticed that the functionality of the API was not what I needed for the project. The API is primarily used for uploading and downloading files but what I needed was simply to access an image from a URL. In the end, when I was stuck, I found the key phrase of “embedding images from Google Drive” and found that there is a special URL format that has the raw image able to work with Fabric.js’s FabricImage object. I should have better assessed what I needed in functionality and narrowed down my searching keywords better which could have saved much more time.

# Comments, Issues, Notes, Anything Else?

N/A

# Evidence of Work

**Token Size Function**

The ability for GMs to set token sizes was implemented. Token sizes can be changed through accessing the context menu when selecting one or more tokens. The token sizes change according to a set grid size or a default ratio to the battle map image’s size.

A screenshot of a computer

AI-generated content may be incorrect.

**Grid Snapping with Multiple Tokens**

The ability for GMs to drag tokens and snap them to a variable grid was previously implemented for both single and multi-token selection. However, some issues were found when snapping multiple tokens where the presence of a small ¼ space occupying token would cause issues in snapping. This has been fixed to allow for ½ space snaps for multi-token selections with a small token on the outside edge causing a non-integer width or height.

**A screenshot of a video game

AI-generated content may be incorrect.**