

WARGAME PROGRESS REPORT

Week 3: February 14th - February 20th

Reid Coates | Client Coordination and Backend Development Lead

Jack Kelley | Organization Lead and Frontend Development

Alexander Hassan | Testing Lead and Frontend Development

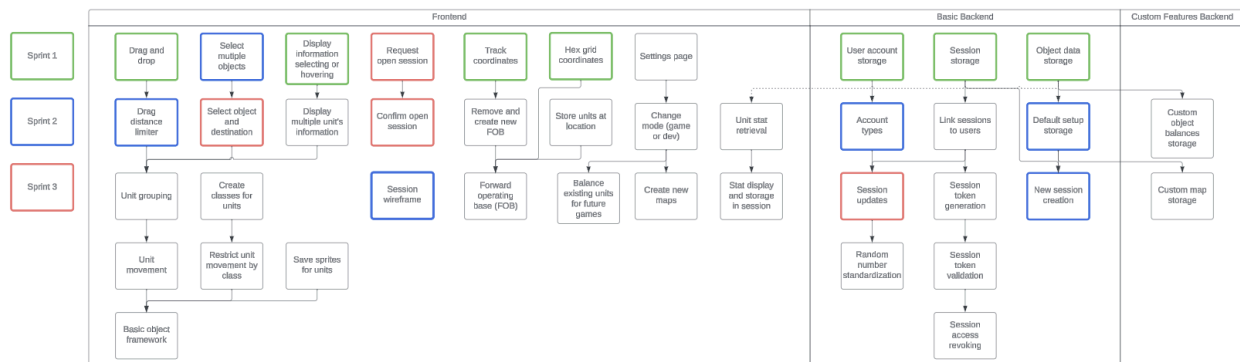
Luke Muilenburg | Frontend Development Lead

Group 23 | sddec24-23 | EE/CPRE/SE 491

Client: Reid Coates (AFROTC and Major Stephanie Jones)

Advisor: Ahmed Shakil

WEEKLY PROGRESSION



Initial Wireframing - Jack Kelley

- Created initial wireframes for the game board, user account screens, and game selection screens to present to the client and confirm design details. Primarily focused on functionality and not design at the moment so we can clarify that the project is headed the right direction functionally and continue to develop core components of the game. Included below are 2 of the main wireframes: the game board with card display expanded (Figure 1), and the game selection screen (Figure 2).
- Public link to view all wireframes | [Wargaming Simulator Wireframing](#)



Figure 1 - Game board wireframe, with card display expanded



Figure 2 - Game selection (user logged in) screen

Ability to show range overlay on multiple units on game board - **Alexander Hassan**

- Developed the beginning stages of a user's ability to click on multiple units on the game board and show each unit's respective movement range, overlaid with a circular grid of hex sprites. These range values are built into some arbitrary data structures that can be replaced with the real assets of the game. This feature will eventually evolve into the user's ability to click a tile in an asset's move range and move the selected asset to said tile.

Additional Pop- Up window functionality & Assets - **Luke Muilenburg**

- I improved the functionality of pop-ups this week by getting text to display in the window. Next, I need to get the images of the provided cards for the physical game to show up. Additionally, Variables need to be sent to and from this window to communicate the stats of the armaments an aircraft is equipped with.
- I made the token art asset for the F-15E as a test to see how it looked. I still need to do some work on these, but graphics are a low priority at the moment.

Proof of Concept Documentation - **Reid Coates**

- Documented proof of concepts for backend and frontend http requests, storage, and springboot app.
- Uploaded one page documents to google drive for team review.
- Used greenshot to clearly outline discussion points.

GitLab Runner for CI/CD - **Reid Coates**

- Installed gitlab runner and configured it to operate in coordination with the Gitlab yml scripts.
- Created folders and set up file access levels for outside users and alternate runners for future development.

Alternate VM Accounts - **Reid Coates**

- Set up a developer alternate account for VM in order to provide secure, easy access to the backend VM. Updated permission levels and locked other accounts out of code files.

PENDING ISSUES

Game board scaling

- Our original intent was to provide the ability to scale the size of the game board grid to better fit whatever map the user may choose to upload, but the capabilities of GameMaker Studio have made developing a hexagonal grid more complicated than we originally thought. We need to decide how we want to go about implementing the scaling or if we want to scrap the idea altogether.

INDIVIDUAL CONTRIBUTIONS

Team Member	Contribution	Weekly Hours	Total Hours
Alexander Hassan	Worked on the user's ability to show the range of multiple sprites and committed progress to a proof of concept branch, which will not be merged into the main branch, on our team's gitlab.	5	18
Jack Kelley	Initial wireframing for the game board, as well as some ideas for how to display available resources and total resources to users	6	20
Reid Coates	Created and installed gitlab runner. Documented proof of concepts.	7	19
Luke Muilenburg	Continued to work on functionality of pop ups in Game Maker. I have struggled with this more than I expected to, so it is taking a bit longer than I initially planned. Began work on graphics assets for tokens that represent each unit. I used the provided documents for the existing tabletop game as a style guide.	3	15

	This is pretty low priority for the moment, so I will be switching off this task for the foreseeable future.		
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NEXT WEEK

Task	Members	Completion Date
Develop data structure and naming standards for frontend to cleanup code and create consistency.	Alexander	2/27/2024
Add a border to the game board and create a resource display to show the user available and destroyed resources within the game.	Jack	2/27/2024
Increase functionality of pop ups by making sure that variables can be edited in them and then communicated and saved.	Luke	2/27/2024
Consult client about wireframes, seek input and clarifications before beginning major development of those screens	Reid	2/27/2024
Deploy and run all proof of concepts on VM using gitlab runner and the yml script.	Reid	2/29/2024
Provide frontend with the http request code and assist in coordinating its integration to the front end.	Reid	2/29/2024
Modularize the database connection in the springboot app on the VM.	Reid	2/29/2024