



PLANNING

Online Multiplayer Board Game Platform

W2025

Team Establishment

February 24, 2025

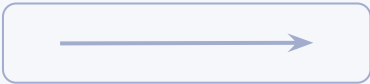
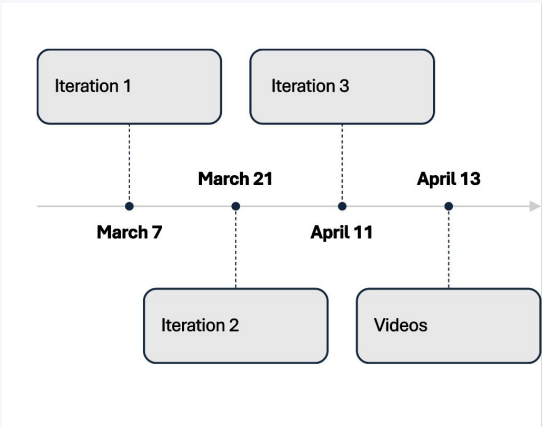
Team	Size
Game Logic	5
GUI	4
Networking	4
Authentication & Profile	4
Leaderboard & Matchmaking	4
Integration	4

In order to best approach each objective, our group is split up into 6 sub-teams. Each sub-team size, is chosen accordingly to the demands of the task at hand. Dividing and conquering is a formidable approach, as it allows to have all hands on deck, ensuring no area remains neglected.

To best complete Iteration 1, each team is assigned specific tasks. Each task is assigned based on workload, and relativity to Iteration deliverables.

Iteration 1 Key Deliverables

- Planning Docs
- Gitlab_Link.txt
- class_diagram.png/svg
- use_case_descriptions.pdf



As mentioned before, each team was assigned specific tasks for completion. The idea behind this, was that once each team was complete with their work, work could be evaluated and brought together. This allows us to eliminate any duplicates at the end, and get a visual on the most important components of the project.

GAME LOGIC TEAM

Games to be implemented:

- Tic Tac Toe
- Connect Four
- Checkers

The Game Logic Team is responsible for establishing the use cases for the stated games above. Their job is to create thorough descriptions, as well as diagrams, to model the games on our platform. This role is vital, as functionality on other teams has dependencies on the way these games work. The Game Logic Team is responsible for completing these use cases, and class diagrams, all by March 2, 2025, to ensure each corresponding team can include relevant logic towards their cases and diagrams.

GUI TEAM

The GUI Team is responsible for developing the visuals for the platform. Their use cases contain: *Welcome page, Loading page (REMOVED), Game Dashboard, Selecting game from the available library, Moving pieces, Joining game, View profiles, Challenge profiles, In-game chat, Display leaderboard, Quit option, Menu Option, Log in, Player selects move, Create Account, Winning page, Losing page, Tie page, Manage Account, Log out, Settings Option.* These are all vital, and fundamental components for the platform. These use cases, use case diagrams, and overall class structure diagram should also be complete by March 2, to give them sufficient time to start working on GUI mock-ups.

NETWORKING TEAM

The Networking Team is responsible for establishing the features that allow users to use online features, and communicate with the online components of each game. Not only do they allow each player to connect to the game, but to other players and friends. They are responsible for devising the follow use cases: *Join Match, Log Game Result, Update Leaderboard Rank, Join Match as a Party, Immersion, Get Games Catalogue, Verify Server Online Status, Reconnect to Game, Send Player Action (in-game, chat), Disconnect Player.* These use cases, use case diagrams, and overall class structure diagram should also be complete by March 2, to give them sufficient time to start working on GUI mock-ups.

AUTHENTICATION & PROFILE TEAM

The Authentication & Profile Team are responsible for account management. Their features are integral for access control. They are responsible for the following use cases: *Settings, Login, Change Username, View Your Stats, Change Password, Change Email, Forgot Password or Username, Logout.* These use cases, use case diagrams, and overall class structure diagram should also be complete by March 2, to give them sufficient time to start working on planning, as well as to have the liberty to communicate with other subsections to expand on the scope of functionality. They continuously work with other groups throughout the whole 2 weeks, and ultimately create the final diagrams.

LEADERBOARD AND MATCHMAKING TEAM

The Leaderboard and Matchmaking Team are responsible for providing a structured ranking system, and an optimized algorithm matchmaking system based on player rankings. They are responsible for the following use cases: *Player joins matchmaking queue, MMR changes after a game completes, Display leaderboard, Filter the leaderboard on specific values, Updating player stats after each game, Player leaves matchmaking queue, Game ends in tie, Player gets promoted a rank, Player gets demoted a rank, Player leaves game mid match, View match history, Handling MMR tie on leaderboard, MMR decay.* These are all vital, and fundamental components for the platform. These use cases, use case diagrams, and overall class structure diagram should also be complete by March 2, to give them sufficient time to start working on GUI mock ups.

INTEGRATION TEAM

Finally, the Integration Team's job is to tie everything together. They are responsible for combining the use case diagrams, and structure diagrams that each team made. They essentially take all of the sub-implementations and devise a plan to incorporate them all together. Essentially they have a very important role, in tying each thing together. They constantly communicate with other teams, and help where the help is needed. This work should be complete by March 6, a few days after the original diagrams are made to provide them with sufficient time to integrate them all in one system. This way, we would have a full 24-hours to submit with no issues.

MOVING FORWARDS

Iteration 1 is crucial in providing us with a solid foundation for moving forward. It allows us to establish clear expectations, and goals moving forward. We aim to fully complete Iteration 1 by March 6, and begin coding by March 7th. This allows us to get a head start on the tasks at hand and allows us to have sufficient time to understand our implementations. Furthermore, it gives us more time to start our Iteration 2 group work and allows us to comfortably finalize our roles in the group. Starting early, and devising a plan to break up into sub-teams for Iteration 2 labour should be done realistically before the Iteration period begins, to ensure we all have a plan and a clear idea on how we will go about things by the time we receive the work from other groups. Getting quality work done for Iteration 2 as soon as possible will be ideal, as it provides us with more time to work on the tasks due at the end of Iteration 3. More time allows us to implement the highest quality system, and will allow us to have more time debugging, and identifying potential issues which stands between us and success.