



# PLANNING

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Online Multiplayer Board Game Platform

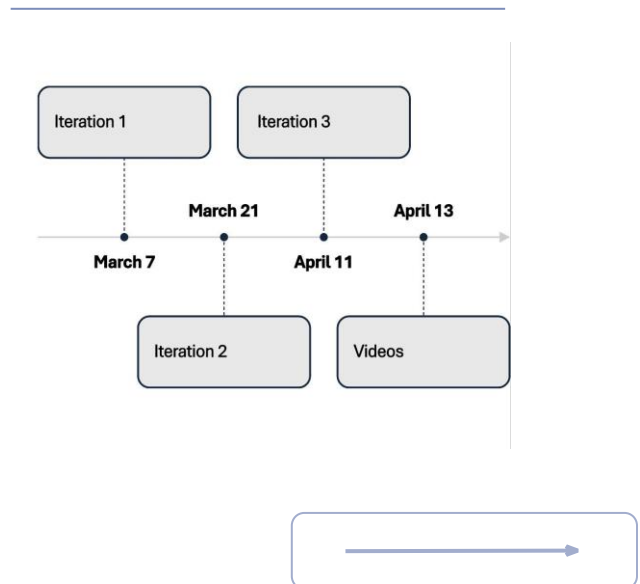
W2025

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.

## 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.

Short summary of the plans:

Week	Task
Week 1	Plans for Use cases, class structure diagrams and code planning. Ideas. Use cases and structure diagrams complete. Design of pseudocodes, review
Week 2	Acquire some new ideas, class implementations, attempt making codes for the platform...
Week 3	Make contracts, make new teams for review, Submit the reviews.
Week 4	Putting the codes to action, implementing designs. Finding the best solutions.
Week 5	Goal to have working codes that make ideas into reality. JUnit testing...
Week 6	Finalization of the project, and documentation, video demos... Submission of the final product

## GAME LOGIC TEAM

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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 especially important, as functionality on other teams has dependencies on the way these games work. The Game Logic Team is responsible for completing the use cases, a class diagrams, all by March 2, 2025, to ensure each corresponding team can include relevant logic towards their cases and diagrams.

## GUI TEAM

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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 March 2, to give them sufficient time to start working on GUI mock ups.

## NETWORKING TEAM

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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 March 2, to give them sufficient time to start working on planning, as well as to have the liberty to communicate with other sub-sections to expand on the scope of functionality.

## AUTHENTICATION & PROFILE TEAM

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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 March 2, to give them sufficient time to start working on planning, as well as to have the liberty to communicate with other sub-sections to expand on the scope of functionality.

## LEADERBOARD AND MATCHMAKING TEAM

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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 March 2, to give them sufficient time to start working on GUI mock ups.

## INTEGRATION TEAM

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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 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.