

The Plan

Iteration 1

Leaderboard and matchmaking system:

The system will be divided into 4 key components:

- General Stats (wins/loses/ties, games played...) and Game-Specific stats (mmr logic and specific game analysis)
- Matchmaking system (mmr based, player starts the queue and another player closest to their skill level will be paired with them, unless they played before and had bad experience with one another)
- Ranking system (stored as enums for each rank)
- Leaderboard system (CSV-based database, could be used for representing ranks of all players and stats those that are in the same game)

| Week | Task |
|--------|---|
| Week 1 | Define use cases, finalize system structure |
| Week 2 | Complete class diagrams and finalize data models |
| Week 3 | Implement core classes (GeneralStats and GameStats) |
| Week 4 | Implement MatchmakingSystem and LeaderboardManager |
| Week 5 | Conduct unit tests |
| Week 6 | Final debugging & documentation |

Networking system:

-The main idea for networking is to connect players to the game servers, that is to the multiplayer platform

| Week | Task |
|-------------|--|
| Week 1 | Define use cases |
| Week 2 | Class diagram |
| Week 3 | Design styles for methods, functions and classes |
| Week 4 | Reevaluate structure of network classes |
| Week 5 | Finalize classes and their implementation |
| Week 6 | JUnit testing |