



Jogos Matemáticos

M3 presentation

Objectives/Goals



Development of chosen games engine



Web App/Mobile App



Play games remotely



Rank players based on their individual skill level at each game



Play/ Train without the need to find another person to play against



Easily set up and manage tournaments involving large groups of players

Task List

Backend:

1. Implementation of the API:
 - i. Implementation of the necessary endpoints (70%)
 - ii. Integration of an ORM (100%)
2. Implementation of online games support (100%)
3. Implementation of authentication and authorization (70%)

Frontend:

1. Web application (65%)
2. Mobile application (15%)
3. Desktop application (65%)

Task List

Game Engines:

1. Development of 1 fully functional game (100%)
2. Development of the different games (33%)
3. Development of the 4 game modes (100%)

AI:

1. Development of an AI for each game (40%)
2. Development of different difficulties for an AI (100%)

Functional Requirements

1. Play games with a friend in the same device (100%)
2. Play games with a friend in distinct devices (100%)
3. Play games against AI Bot (100%)
4. Allow change AI Bot difficulty (100%)
5. Play games against random people (with or without identical rank) (100%)
6. Allow communication via chat with pre-defined sentences (0%)
7. Create/Manage personal account (50%)
8. Manage friendships with other players. Invite them to play. (70%)



Functional Requirements

- 9. Create/Participate in public or private tournaments (10%)
- 10. Invite/Kick players from tournaments (0%)
- 11. Administrate tournaments (Change configurations). (0%)
- 12. Access previous games registers and statistics (50%)
- 13. Change/Customize avatar (50%)
- 14. Upgrade account privileges (30%)
- 15. Report/Ban users (20%)
- 16. Watch full statistics in admins side regarding all games/users (10%)



Feature Demonstration

Video link: <https://www.youtube.com/watch?v=dO-VdgmLvRY>