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D.2.2. Use Case
Github link: https://github.com/mjc367/Group_7
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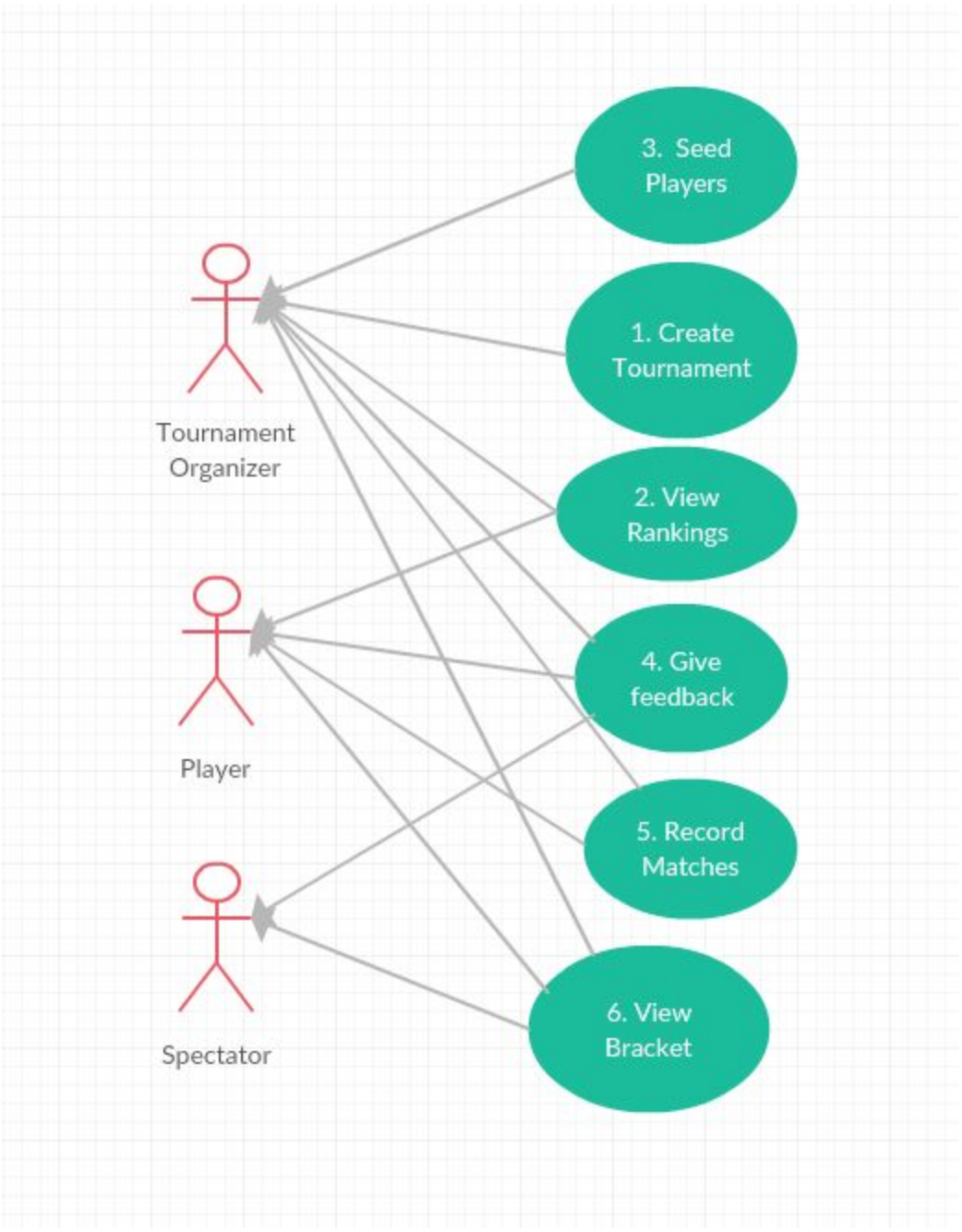
This is the Use Case Diagram for The Tournament Software. As you can see, the actors who would use this software are the Tournament Organizers, Players, and Spectators. The Tournament Organizers hold most of the power as they are the ones using the software. However, players are able to record their own matches and view the current rankings of players. Spectators have the least amount of power, only able to send feedback regarding the software and viewing brackets.



D.2.2.
Use-Case: The Tournament Software
By: Matt

1 Brief Description

Tournament Organizers and players will use this software to create tournaments, log results, and develop a ranking system among those who enter.

2 Actor Brief Descriptions

2.1 **Tournament Organizer -** uses the software to create and efficiently run tournaments.

3 Preconditions

Preconditions include having a database to write to, everyone writing in the same language, and everyone's code working together.

4 Basic Flow of Events

1. The use case begins when the Tournament Organizer starts the software.
2. They create a tournament of X amount of players
3. The software seeds the players first with data stored
4. The software then seeds the rest of the players randomly since there is no data
5. The use case ends and the tournament is started

5 Alternative Flows

5.1 Checking rankings

If in step 2 of the basic flow the Tournament Organizer checks the rankings then

1. The software loads up the data based on its recorded results
2. The use case resumes at step 2

6 Subflows

6.1 Inputting data to record a match

1. After a match, the player records the result
2. The software records the result in a database
3. The Tournament bracket is updated

7 Key Scenarios

7.1 A foreign player attends and needs to be seeded

1. A tournament of X amount of players is started
2. The Tournament Organizer seeds the foreign player at a certain number
3. The software seeds the remaining players first with data stored
4. The software then seeds the rest of the players randomly since there is no data
5. The use case ends and the tournament is started

8 Post-conditions

8.1 The Post-condition is that all the data will be stored for future access and retrieval.

9 Special Requirements

1. Sort by game
2. Show character(s) played in a set
3. Improved match details
4. Links to match videos (if any)
5. Create custom tournaments with custom rules.

D.2.2.
Use-Case: The Tournament Software
By: Nicolai

1 Brief Description

This software will facilitate the creation of tournaments, logging of round results, and develop a ranking system for players.

2 Actor Brief Descriptions

2.1 Tournament Organizer - uses the software to create and efficiently run tournaments.

2.2 Player - interacts with the software to provide results of matches.

2.2 Spectator - interacts with the software to see bracket information.

3 Preconditions

Preconditions include having a database to write to, and reports being submitted in the same language.

4 Basic Flow of Events

1. The use case begins when the Tournament Organizer starts the software.
2. They create a tournament of X amount of players
3. The software seeds players that exist within the database
4. The software then seeds the rest of the players randomly since there is no data in the database
5. The use case ends and the tournament is started

5 Alternative Flows

5.1 Checking rankings

If in step 2 of the basic flow the Tournament Organizer checks the rankings then

1. The software loads up the data on players within its database.
2. The use case resumes at step 2

6 Subflows

6.1 Inputting data to record a match

1. When a tournament match ends, the players record their match results into the software
2. The database accepts the results and enters players who were not present within itself before the match
3. Calculations are performed based on entered results
4. The rankings are adjusted based on the players involved in the match input
5. The Tournament bracket is updated

7 Key Scenarios

7.1 A foreign player attends and needs to be seeded

1. A tournament is to be started with players who are not seeded in the database but are known elsewhere
2. The Tournament Organizer can manually set the seeding of said players based on external figures
3. The software seeds the remaining players in relation to the external players seeding
4. The use case ends and the tournament is started

8 Post-conditions

8.1 The Post-condition is that all the data on players and their matches will be stored within the database for future access.

9 Special Requirements

1. Sort by game
2. Show character(s) played in a set
3. Improved match details

4. Links to match videos (if any)

D.2.2.

Use-Case: Tournament Rankings Software

By: Kris

1 Brief Description

Our Tournament Rankings Software will be developed for Tournament Organizers of a fighting game community to easily, readily and accurately enter results from their events. With this the software provides the community and its users with an objective and user-friendly basis for competitive rankings

2 Actor Brief Descriptions

2.1 Tournament Organizer – This actor uses the software for entering logs of the results of their tournaments. They also uses it to provide the rankings of the players.

3 Preconditions

Preconditions include creating a database to read/write to. Organizing team into one language, and modular design to allow for team members code to work together.

4 Basic Flow of Events

1. The use case is when the tournament organizer or player user executes the software
2. Tournament Organizers create a tournament of variable size
3. Seeding of “known” players (players in database) first
4. Seeding of “unknown” players, as we have no data on them this will be pseudo-random
5. Results of Tournament are entered
6. Rankings updated / generated

5 Alternative Flows

5.1 Checking rankings

If in step 2 of the basic flow the Tournament Organizer checks the rankings then

1. The software uploads / modifies data based on the tourney results
2. Use case resumes at step 2

6 Subflows

6.1 Inputting data to record a match

1. After match, the player records the results
2. Software uses this new data to update existing data on players, ranking accordingly
3. Tournament brackets are updated to reflect results

7 Key Scenarios

7.1 A foreign player attends and needs to be seeded

1. A tournament is started
2. The Tournament organizer manually seeds the foreign player at a number
3. The rest of known/unknown players are seeded as usual
4. Use case ends and tournament begins

8 Post-conditions

8.1 The Post-condition is that all the data will be stored in the database for future access and retrieval.

9 Special Requirements

1. Sorting the database by game

2. In game detail, show characters / fighters chosen

3. Improved game details, match set details, ranking delta, statistics

4. Links to match videos (if any)

5. Create custom tournaments with custom rules.

D.2.2.
Use-Case: Tournament Rankings Software
By: Sam

1 Brief Description

This software will allow for the TOs of a scene to more easily and accurate enter results for their community's players. This will provide the community with an objective and easy-to-use basis for ranking their players fairly.

2 Actor Brief Descriptions

2.1 **Tournament Organizer -** referred to as the TO. He uses the software to log the results of players. He also uses it to provide the rankings of the players.

3 Preconditions

Preconditions include having a database to write to, code working together in the same language.

4 Basic Flow of Events

1. The TO begins a tournament and enters the players participating into the software
2. The software then presents the TO with a seeding arrangement
3. Players not present in the database will be seeded randomly, and entered.
4. The tournament concludes
5. The TO enters the results into the software and the rankings are adjusted accordingly

5 Alternative Flows

5.1 Checking rankings

If in step 2 of the basic flow the Tournament Organizer checks the rankings then

1. The software present the database to the TO with results and rankings clearly available
2. The tournament resumes as usual

6 Subflows

6.1 Inputting data to record a match

1. When a tournament match ends, the results are recorded
2. The Database accepts the results and performs calculations based on them
3. The rankings are adjusted based on the players involved in the match input
4. Players not currently in the database are entered when their match is input

7 Key Scenarios

7.1 A foreign player attends and needs to be seeded

1. A tournament with an arbitrary amount of players begins, with a foriegn players being present
2. The TO can manually adjust the seeding of players if they are not within the database but are known elsewhere
3. The rest of the players are seeded accordingly in relation to the adjusted player's seeding
4. They are entered in the database when a match involving them is input.
5. Players with matches against them are calculated with values input by the TO's

8 Post-conditions

8.1 The Post-condition is that all the data will be stored in the database for future access and retrieval.

9 Special Requirements

1. Differentiate results by game
2. Show character(s) played in a set by which player
3. Improved match details, such as length, game count, player’s rankings, etc.
4. Links to match videos (if any)
5. Create custom tournaments with custom rules.