

Use Case Descriptions:

1. User clicks back button
2. Start game
3. View other person's profile
4. Manage your profile
5. View leaderboard
6. View game history
7. Playing chess
8. Playing connect 4
9. Playing tic tac toe

1. USE CASE: USER CLICKS BACK BUTTON

Primary Actor: Player

Goal in Context: Allowing the player to go back to the previous screen

Preconditions: Player is currently viewing a screen other than the initial starting screen

Trigger: Clicking on the back button on the corner of the screen

Scenario:

- Player wants to go back to the previous screen
 - Player clicks on the back button which is located somewhere on the corner of the screen
 - Player is taken back to the previous screen.

Postcondition: Player is now in the previous screen

Exceptions: Player is at a screen which does not have a previous screen, such as the initial starting screen

Priority: High (allows player to go back)

When Available: Second Iteration

Frequency of Use: High

Channel to Actor: Players' interaction with the back button on screen

Secondary Actors: N/A

Channel to Secondary Actors: N/A

Open Issues: N/A

2. USE CASE: START GAME

Primary Actor: Player

Goal in Context: Allows the player to get into the game and play

Preconditions: Player is currently on the main screen for any of the three games

Trigger: Player clicks on the start game or play game button

Scenario:

- Player clicks on the start game button present on screen
- Player is redirected to a screen where it shows “CONNECTING...” (If necessary)
- Player is then matched against another player and the game will start playing

Postcondition: The game has started, and the players are playing

Exceptions: The player could not be connected to someone else due to some issue

Priority: High (Player needs to have an option to play)

When Available: Second Iteration

Frequency of Use: Multiple times

Channel to Actor: Players’ interaction with the play button on the screen

Secondary Actors: N/A

Channel to Secondary Actors: N/A

Open Issues: N/A

3. USE CASE: USER PLAYING CONNECT 4

Primary Actor: Player

Goal in Context: Letting the player play connect 4

Precondition: The game is successfully connected with another player to play against

Trigger: Player clicks on the play button in the connect 4 game screen

Scenario:

- Player is connected with another player against them.
- First turn randomly given to any of the 2 players
- Player can move across the board to see where he can place his coin
- Player clicks on an empty slot and the piece moves to the bottom of that column.
- After a turn the next player gets his turn and it continues until 4 pieces of a color are aligned (horizontal, vertical or diagonal) or there is a draw.

Postcondition:

- One of the players wins the match and gets a winning screen.
- The player who lost gets the losing screen
- If draw, both players will get a draw screen.
- Both players will then be taken to the home screen of the game.

Exception: Player selects to re-challenge the opponent and the match is then played again.

Priority: High

Frequency of Use: High

Channel to Actor: Players' interaction with the play/re-challenge button

4. USE CASE: USER PLAYING TIC TAC TOE

Primary Actor: Player

Goal in Context: Letting the player play tic tac toe

Precondition: The game is successfully connected with another player to play against

Trigger: Player clicks on the play button in the tic tac toe game screen

Scenario:

- Player is connected with another player against them.
- X and O are given randomly to the players.
- Player with X goes first and clicks on the grid to place their mark.
- Next player gets the turn and places their mark
- Repeats until 3 of the same mark is aligned (horizontal, vertical or diagonal) or there is a draw.

Postcondition:

- One of the players wins the match and gets a winning screen.
- The player who lost gets the losing screen
- If draw, both players will get a draw screen.
- Both players will be then taken to the home screen of the game.

Exception: Player selects to re-challenge the opponent and the match is then played again.

Priority: High

Frequency of Use: High

Channel to Actor: Players' interaction with the play/re-challenge button.

5. USE CASE: USER PLAYING CHESS

Primary Actor: Player

Goal in Context: Letting the player play chess

Precondition: The game is successfully connected with another play to play against

Trigger: Player clicks on the play button in the chess game screen

Scenario:

- Player is connected with another player against them
- Black and white side randomly given to a player.
 - Player with the white pieces moves first.
 - The player with black pieces gets the next turn and the cycle repeats.
 - The game ends when a checkmate has occurred, or a draw has occurred.

Postconditions:

- One of the players wins the match and gets a winning screen.
- The player who lost gets the losing screen
- If draw, both players will get a draw screen.
- Both players will then be taken to the home screen of the game.

Exception: Player selects to re-challenge the opponent and the match is played again.

Priority: High

Frequency of Use: High

Channel to Actor: Players' interaction with the play/re-challenge button.