

Use Case Description - CHECKER

Use Case: Start a New Game

Iteration: 1

Primary Actor: Player

Goal in Context: The player initiates a new game session and invites another player or selects an AI opponent.

Preconditions: The player must be logged in and have access to the game selection interface.

Trigger: The player selects "Start New Game" from the main menu.

Scenario:

1. The player selects a board game from the available list.
2. The system displays matchmaking options (invite a friend, random matchmaking, or AI opponent).
3. The player selects an opponent.
4. The system initializes the game board and displays it to both players.
5. The game begins with the first player's turn.

Postconditions: The game session is successfully created, and players are connected.

Exceptions:

1. If matchmaking fails, the system notifies the player and offers retry options.

Priority: High

When Available: Immediately after login

Frequency of Use: High

Channel to Actor: Game interface (GUI)

Secondary Actors: Opponent player or AI

Channel to Secondary Actors: Multiplayer server

Open Issues: None

Use Case: Make a Move

Iteration: 1

Primary Actor: Player

Goal in Context: The player performs a move during their turn in the game.

Preconditions: The game must be active, and it must be the player's turn.

Trigger: The player selects a piece and moves it to a valid location.

Scenario:

1. The system highlights possible moves for the selected piece.
2. The player chooses a valid move.
3. The system validates the move and updates the game board.
4. The system records the move in the game history.

Postconditions: The move is registered, and the turn shifts to the opponent.

Exceptions:

1. If the move is illegal, the system notifies the player and prevents it.

Priority: High

When Available: During a game session

Frequency of Use: High

Channel to Actor: Game interface

Secondary Actors: Opponent player or AI

Channel to Secondary Actors: Multiplayer server

Open Issues: None

Use Case: Capture an Opponent's Piece

Iteration: 1

Primary Actor: Player

Goal in Context: The player captures an opponent's piece according to the game rules.

Preconditions: The player must make a legal move that results in capturing an opponent's piece.

Trigger: The player selects a piece and moves it to a position occupied by an opponent's piece.

Scenario:

1. The player selects a piece and moves it onto an opponent's piece.
2. The system verifies if the move is valid.
3. If valid, the opponent's piece is removed from the board.
4. The system updates the game board and records the action.

Postconditions: The opponent's piece is removed, and the game continues.

Exceptions:

1. If the move is illegal, the system prevents the action.

Priority: High

When Available: During a game session

Frequency of Use: Medium

Channel to Actor: Game interface

Secondary Actors: Opponent player or AI

Channel to Secondary Actors: Multiplayer server

Open Issues: None

Use Case: King a Piece

Iteration: 1

Primary Actor: Player

Goal in Context: The player moves a piece to the opponent's back row, promoting it to a "King".

Preconditions: The game must support piece promotion.

Trigger: The player moves a piece to the last row on the opponent's side.

Scenario:

1. The player moves a piece to the last row.
2. The system checks if the game supports promotions.
3. If valid, the piece is upgraded to a "King" with new movement capabilities.
4. The system records the promotion event.

Postconditions: The piece is promoted, and gameplay continues.

Exceptions:

1. If the move is invalid, the system prevents it.

Priority: Medium

When Available: During gameplay

Frequency of Use: Low

Channel to Actor: Game interface

Secondary Actors: Opponent player or AI

Channel to Secondary Actors: Multiplayer server

Open Issues: None