Checkers Game Use Case

Actors:

- **Player 1**: The first player, usually assigned the darker pieces.
- **Player 2**: The second player, usually assigned the lighter pieces.
- **System**: The game system, which may include AI if playing against a computer.

Preconditions:

- A checkerboard is set up with all pieces in their initial positions.
- Each player has an account (if playing online) or is physically present to play.

Triggers:

- A player initiates a new game, either locally or online.

Main Flow:

1. The system initializes the game board with pieces placed in their correct starting positions.
2. **Player 1** makes the first move.
3. **Player 2** responds with their move.
4. Players continue alternating turns, following the official Checkers rules:
   - Regular pieces move diagonally forward.
   - If a jump is available, it must be taken.
   - A piece reaching the opposite end of the board is promoted to a **king**, gaining the ability to move both forward and backward.
5. The system validates moves, preventing illegal actions and highlighting valid moves if applicable.
6. The game continues until one player captures all opposing pieces or blocks all available moves.
7. The system declares a winner and may provide options for a rematch.

Alternative Flows:

- **Invalid Move**: If a player attempts an illegal move, the system alerts them and prevents the move from being executed.
- **Resignation**: A player may resign at any time, granting victory to the opponent.
- **Draw**: If neither player can make a legal move, the game ends in a draw.

Postconditions:

- The game result is recorded if applicable.
- Players are returned to the main menu or given the option to start a new game.

Extensions:

- If playing against an AI, the system generates moves for the AI opponent.
- If playing online, the system manages network synchronization and turn-taking.
- If playing with a timer, the system enforces time limits for each move.

Assumptions:

- Players have a basic understanding of Checkers rules.
- The game interface functions correctly and without technical issues.