# Description

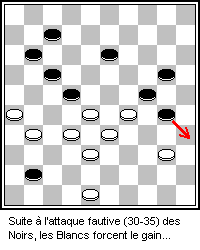
Checkers is played by two opponents, on opposite sides of the gameboard. One player has the dark pieces; the other has the light pieces. Players alternate turns. A player may not move an opponent's piece. A move consists of moving a piece diagonally to an adjacent unoccupied square. If the adjacent square contains an opponent's piece, and the square immediately beyond it is vacant, the piece may be captured (and removed from the game) by jumping over it.

Only the dark squares of the checkered board are used. A piece may move only diagonally into an unoccupied square. The player without pieces remaining, or who cannot move due to being blocked, loses the game.

Uncrowned pieces (*men*) move one step diagonally forwards, and capture an opponent's piece by moving two consecutive steps in the same line, jumping over the piece on the first step. Multiple enemy pieces can be captured in a single turn provided this is done by successive jumps made by a single piece; the jumps do not need to be in the same line and may "zigzag" (change diagonal direction).

When a man reaches the farthest row forward, it becomes a *king*, and is marked by placing an additional piece on top of the first man, and acquires the ability to move backwards.

# Screenshot

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# Milestones

1. Draw the checkerboard -- done
2. Set up the pieces on the board -- done
3. Allow a player to select a piece on the board by clicking -- done
4. Allow a player to de-select a piece on the board by clicking -- done
5. Allow a player to click a location to move the selected piece -- done
6. Alternate turn. Limit player to moving own pieces -- done
7. Limit the moves to adjacent diagonals -- done
8. Limit the moves to forward -- done
9. Limit the moves to empty squares -- done
10. Allow jumps -- done
11. Remove jumped pieces -- done
12. Allow multiple jumps -- done
13. King pieces when they get into back row (allow backward moves) -- done

# Use Cases

|  |  |  |
| --- | --- | --- |
| **Program State** | **Event** | **Program Reaction** |
| Game started |  | Two players, each with 3 rows of 4 pieces lined up on the black squares of own side. It is red’s turn. |
| No piece is selected | Player selects own piece | That piece becomes selected |
|  | Player selects empty square | Nothing happens |
|  | Player selects opponents piece | Nothing happens |
| A piece is selected | Player selects the piece again | The piece is no longer selected |
|  | Player selects a location for a valid move | The piece is moved to that new location and it is now the other players turn |
| A piece has just been jumped |  | The jumped piece is removed from the board |

# Class Diagram

