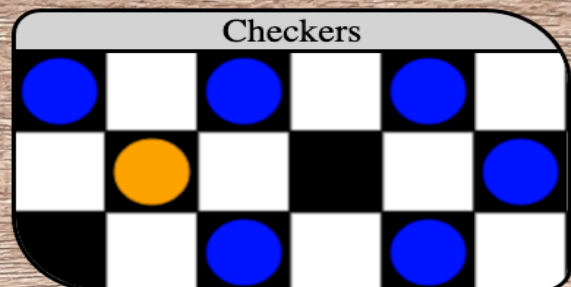
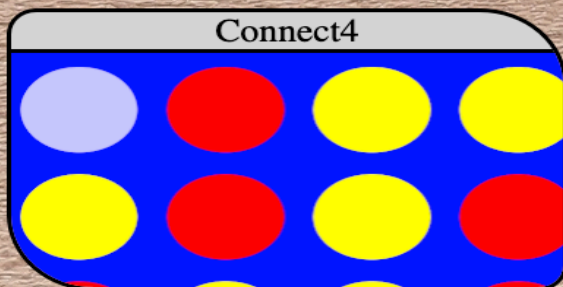
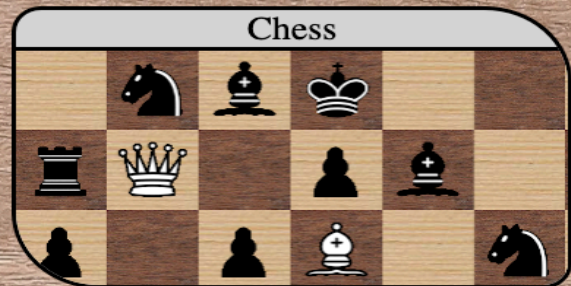
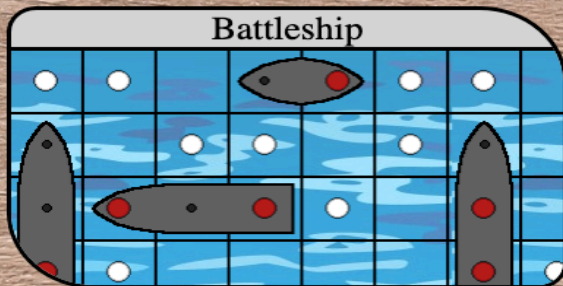


Group 13 Project 2 Rule Book:

Christian Harris, Adam Auer, Brian Jones, Kerr Salabao, Chase Odgers
EECS 448, Prof. Andy Gill, Spring 2020

Game Center



Battleship Rules

Setup

Place your fleet of 5 ships on the ocean grid.

Rules for placing ships:

- Place each ship in any horizontal or vertical position but not diagonally.
- Don't place a ship so that any part of it overlaps the edge of the grid or another ship.
- None of the ships' positions can be changed once the game has begun.

Game Play

You and the computer will alternate turns, making one shot per turn to try to hit each other's ships.

On your turn, pick a target hole by selecting its cell location on the computer's board.

When you make a shot, the computer's board shows whether your shot is a hit or a miss.

It's a hit

If you pick a shot location that is occupied by a ship on your opponent's ocean grid, your shot is a hit!

Your opponent's board is updated with a red peg in the corresponding hole of the ship on the ocean grid.

It's a miss

If you pick a shot location not occupied by a ship on your opponent's ocean grid, its a miss.

Your opponent's board is updated with a white peg on the ocean grid to mark a miss.

Sinking a Ship

Once all the holes in any one ship are filled with red pegs, the ship will sink. If the computer's ship is sunk, it will display which ship has been sunk.

End of the Game

Whoever is the first player to sink their opponent's entire fleet of 5 ships wins the game.

Game rules taken from: <https://www.ultraboardgames.com/battleship/game-rules.php>

How the Pieces Move

Each of the 6 different kinds of pieces moves differently. Pieces cannot move through other pieces (though the knight can jump over other pieces), and can never move onto a square with one of their own pieces. However, they can be moved to take the place of an opponent's piece which is then captured. Pieces are generally moved into positions where they can capture other pieces (by landing on their square and then replacing them), defend their own pieces in case of capture, or control important squares in the game.

The King -

The king is the most important piece, but is one of the weakest. The king can only move one square in any direction - up, down, to the sides, and diagonally. Click on the '>' button in the diagram below to see how the king can move around the board. The king may never move himself into check (where he could be captured).

The Queen -

The queen is the most powerful piece. She can move in any one straight direction - forward, backward, sideways, or diagonally - as far as possible as long as she does not move through any of her own pieces. And, like with all pieces, if the queen captures an opponent's piece her move is over. Click through the diagram below to see how the queens move. Notice how the white queen captures the black queen and then the black king is forced to move.

The Rook -

The rook may move as far as it wants, but only forward, backward, and to the sides. The rooks are particularly powerful pieces when they are protecting each other and working together!

The Bishop -

The bishop may move as far as it wants, but only diagonally. Each bishop starts on one color (light or dark) and must always stay on that color. Bishops work well together because they cover up each other's weaknesses.

The Knight -

Knights move in a very different way from the other pieces - going two squares in one direction, and then one more move at a 90 degree angle, just like the shape of an "L". Knights are also the only pieces that can move over other pieces.

The Pawn -

Pawns are unusual because they move and capture in different ways: they move forward, but capture diagonally. Pawns can only move forward one square at a time, except for their very first move where they can move forward two squares. Pawns can only capture one square diagonally in front of them. They can never move or capture backwards. If there is another piece directly in front of a pawn he cannot move past or capture that piece.

Promotion

Pawns have another special ability and that is that if a pawn reaches the other side of the board it can become any other chess piece (called promotion). A pawn may be promoted to any

piece. [NOTE: A common misconception is that pawns may only be exchanged for a piece that has been captured. That is NOT true.] A pawn is usually promoted to a queen. Only pawns may be promoted.

En Passant

The last rule about pawns is called "en passant," which is French for "in passing". If a pawn moves out two squares on its first move, and by doing so lands to the side of an opponent's pawn (effectively jumping past the other pawn's ability to capture it), that other pawn has the option of capturing the first pawn as it passes by. This special move must be done immediately after the first pawn has moved past, otherwise the option to capture it is no longer available. Click through the example below to better understand this odd, but important rule.

Castling

One other special rule is called castling. This move allows you to do two important things all in one move: get your king to safety (hopefully), and get your rook out of the corner and into the game. On a player's turn he may move his king two squares over to one side and then move the rook from that side's corner to right next to the king on the opposite side. (See the example below.) However, in order to castle, the following conditions must be met:

- it must be that king's very first move
- it must be that rook's very first move
- there cannot be any pieces between the king and rook to move
- the king may not be in check or pass through check

Notice that when you castle one direction the king is closer to the side of the board. That is called castling kingside. Castling to the other side, through where the queen sat, is called castling queenside. Regardless of which side, the king always moves only two squares when castling.

Check & Checkmate

As stated before, the purpose of the game is to checkmate the opponent's king. This happens when the king is put into check and cannot get out of check. There are only three ways a king can get out of check: move out of the way (though he cannot castle!), block the check with another piece, or capture the piece threatening the king. If a king cannot escape checkmate then the game is over. Customarily the king is not captured or removed from the board, the game is simply declared over.

Draws

Occasionally chess games do not end with a winner, but with a draw. There are 5 reasons why a chess game may end in a draw:

- The position reaches a stalemate where it is one player's turn to move, but his king is NOT in check and yet he does not have another legal move
- The players may simply agree to a draw and stop playing
- There are not enough pieces on the board to force a checkmate (example: a king and a bishop vs. a king)
- A player declares a draw if the same exact position is repeated three times (though not necessarily three times in a row)

- Fifty consecutive moves have been played where neither player has moved a pawn or captured a piece.

Rules taken from: <https://www.officialgamerules.org/chess>

Connect 4 Instructions:

The first player inserts a checker into the grid. Only after the checker has been released can the second player make his or her move.

Turns continue to alternate between the first and second players until someone gets four checkers of the same color lined up in a row or the board is filled without any winning moves.

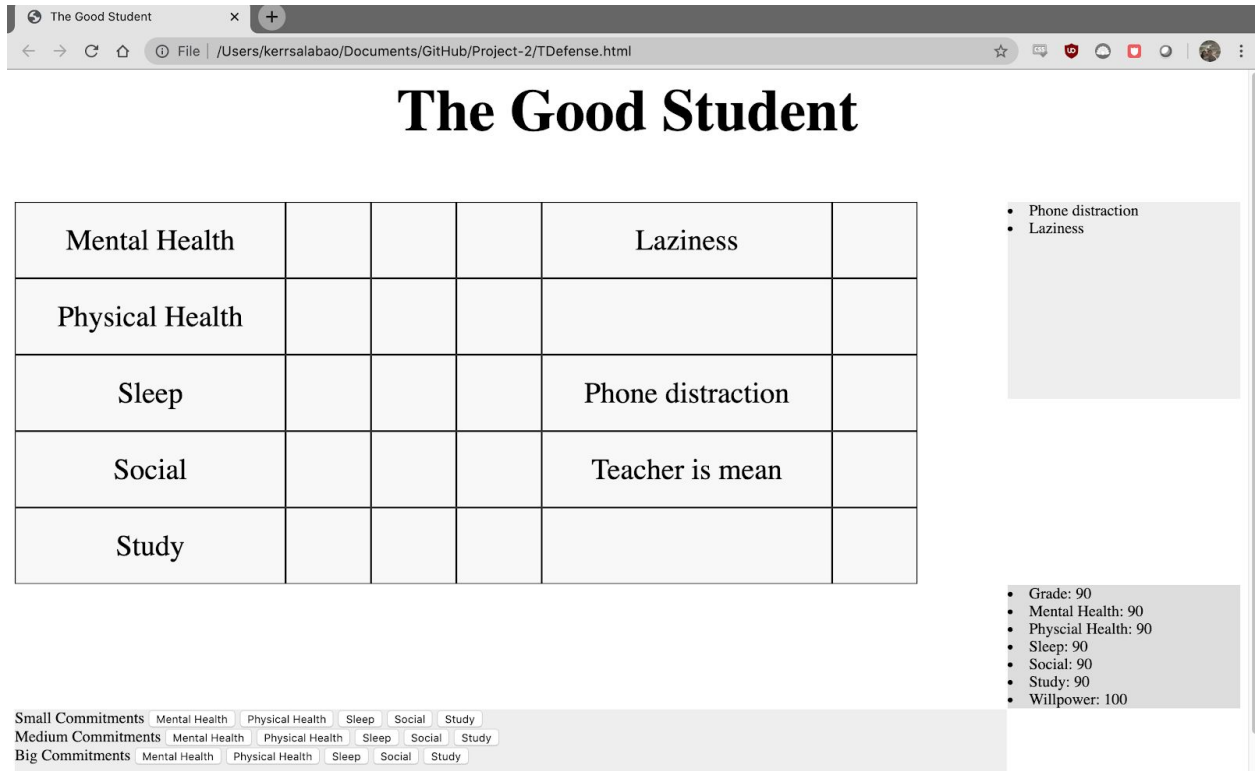
Connect 4 Rules:

The game rules for Connect Four are just as simple as the directions for play. Since only one checker can be placed in the board at a time and all of the slots are divided into rows and columns, it's not possible to cheat and move a checker once it has been placed. Checkers in the board may not be manipulated. Each player may drop only one checker into the grid per turn.

A winner is declared when one player gets four of their colored checkers in a row vertically, horizontally or diagonally. Other configurations, such as squares, don't count as winning combinations. The game is declared a stalemate or tie if all the pieces are played but nobody has four in a row. How many pieces in Connect Four? If you play a few games ending in stalemate, you'll see there are 42, 21 of each color.

Rules taken from:

<https://www.siammandalay.com/blogs/puzzles/win-connect-4-connect-four-strategy-rules-instructions>



- Mobs
 - **Procrastination mobs** will spawn at a frequency depending on the difficulty.
 - Defeating mobs will give you **willpower**
 - If a **procrastination mob** reaches the final block then the **defender** at that row will take damage
- Willpower
 - Willpower is earned by defeating mobs
 - They can also be gained or taken away by random **life events**
 - Use willpower to strengthen your five **defenders**: Mental Health, Physical Health, Sleep, Social, and Study
 - You strengthen your defenders by making **commitments**
- Commitments
 - There are three levels of commitment for each **defenders**
 - Each commitment takes a certain amount of **willpower** over a certain amount of time
 - Big **commitments** are low cost and helps the most in the long run. However, you can not cancel a commitment which could end up being detrimental
 - On the other hand, small **commitments** are easier to come by and do not have a long time commitment. They are, however, not very cost effective.
 - Medium **commitments** are somewhere in between big and small **commitments**
- Life Events
 - **Life events** comes in randomly throughout the game and can either help or harm the player through various degree

Manual for BlackJack

Buttons

Play: Starts the game

Hit: adds a card from the deck to your hand

Stand: stops your turn and then lets dealer play

Double Down: Hits 1 time then ends turn to let dealer play

Split: Splits hand into 2 and then allows to continue play with 2 hands

Rules

If player count goes over 21 then player loses.

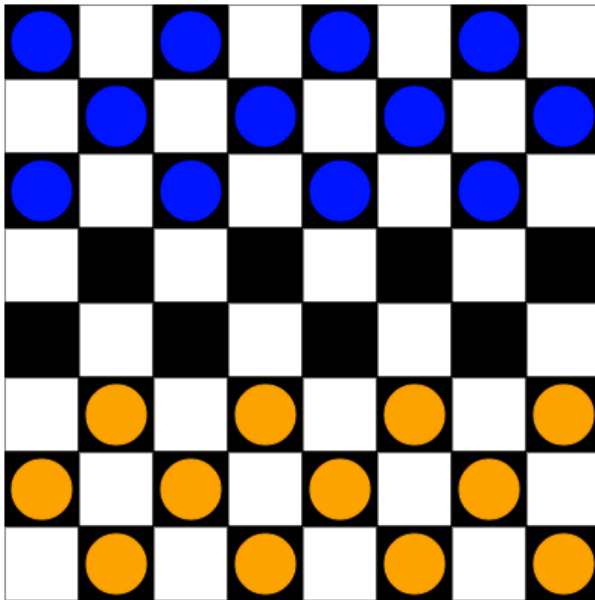
If dealers count goes over 21 and players count is less than 21 then player wins

If both counts are the same and under 21 then the game is tied

If both counts are under 21 the winner is whose ever is higher is the winner

Checkers

The game starts with a prepared board that looks as follows:



Player 1s turn

Checkers

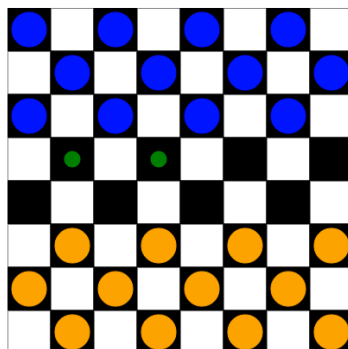
Rules:

- 1.) The goal is to collect all of the opponents pieces
- 2.) Pieces can be captured by jumping diagonally, capture opportunities are highlighted in red
- 3.) Pieces can only move diagonally in unobstructed directions, to move a piece click the piece to move then any highlight
- 4.) Kings can travel in any direction, to obtain a king move one of your pieces to the back row of the opponents start area
- 5.) When the game is finished the winner will be announced, to restart the game simply press F5 on your keyboard or click

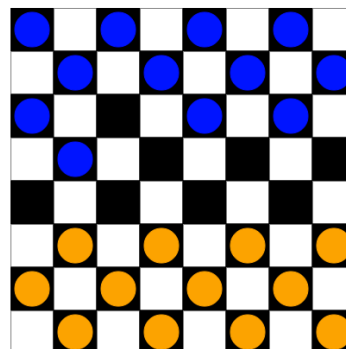
This game was made for EECS 448 at the University of Kansas, Professor Andy Gill, Spring 2020. By CHASE ODGERS using P5.js library

When the first player clicks on a piece they are offered the possible moves in green.

By selecting a highlighted green spot, the piece is moved to said spot

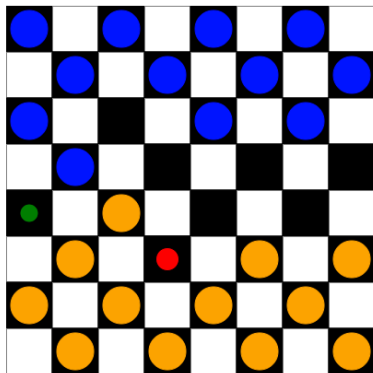


Player 1s turn

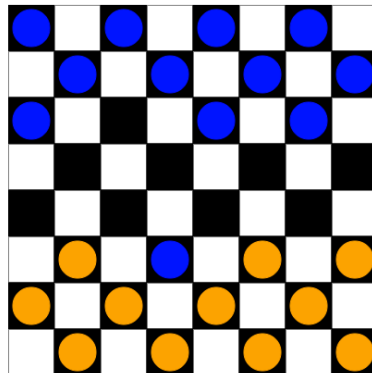


Player 2s turn

When in a position to capture an opponents piece the possible capture move is highlighted in red:

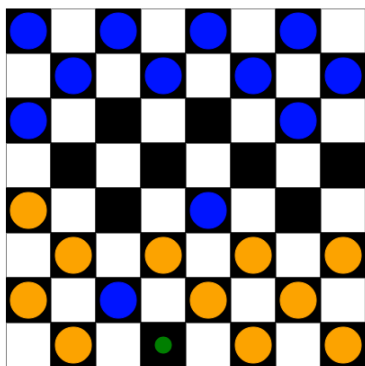


Player 1s turn

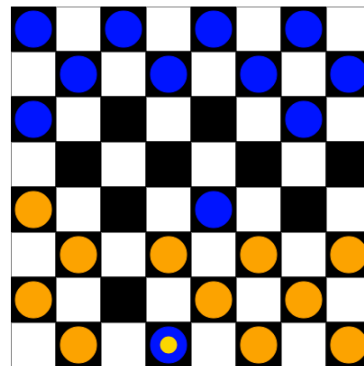


Player 2s turn

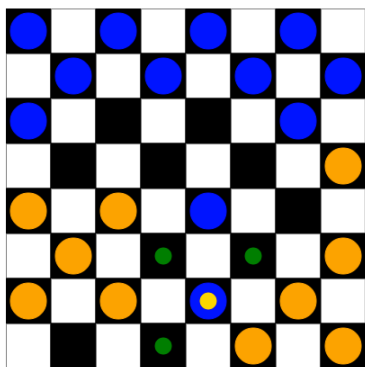
By selecting a move into an opponents back line, a piece can be “Kinged” allowing it to travel in any direction:



Player 1s turn



Player 2s turn



Player 1s turn

Once all of one players pieces have been captured the opposing player is crowned winner.



To start a new game press the F5 key or the refresh Icon.