

## KONO

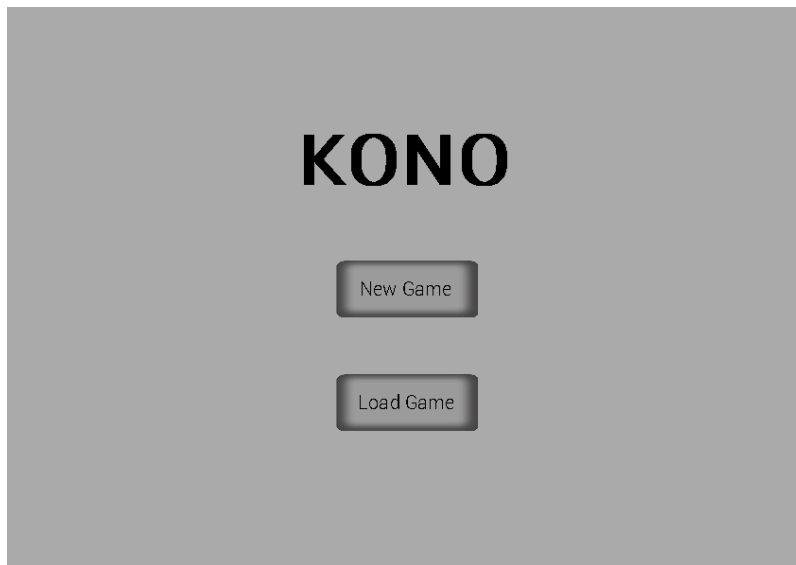
Kono is a board game similar to checkers. The project is written in python and uses pygame 1.9.3.

To run the game install pygame then run “Kono.py” from the command line.

## Game Play:

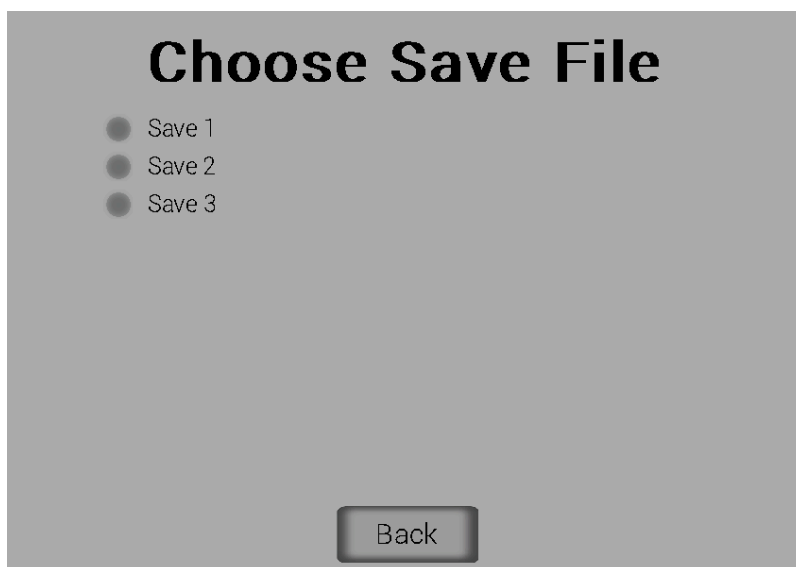
### Beginning the Game:

when the game first begins the user has the option to start a new game or load a previous game



### Loading a game:

when choosing to load a game the user can click on which save file they wish to load (only text files found within the save file and that can be loaded will be displayed)



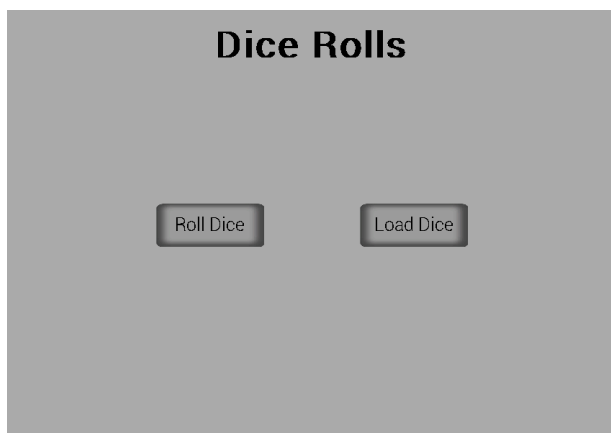
### Choosing player number:

the user is prompted if they wish to play a game with 2 human players or 1 human and 1 computer player



### Rolling the dice:

first the user must chose to either roll random dice or load rerolled dice. If the user chooses to "roll dice" random dice rolls will be generated, if they chose to "load dice" dice rolls will be loaded from "dice.txt" found with the assets folder (if this file cannot be loaded for any reason random dice will be rolled instead). either way the dice rolls and the winner of the dice rolls are displayed on the next screen



**Choosing a team:**

if a human wins the dice roll that human player will be prompted to choose their team and will move first. If the computer wins the dice roll it will randomly select a team and display its choice

**Computer choses Black Team**

Continue

**Choose Player 1 Color**

Black

White

**Choosing a board size:**

the user is prompted to choose the size of the game board

**Choose Game Board Size**

5 x 5

7 x 7

9 x 9

## Playing the game:

once all settings for the game have been determined the game can be played

the game board with an alphanumeric grid is displayed and players can move pieces by clicking them

the current score of the round is displayed as well as the current tournament standing for each player (the tournament score is calculated by awarding the difference in the round scores to the player with the current highest round score, this is then added to the sum of the previous round scores for each player)

the player's whose turn it is is displayed

a text log shows the most recent 30 moves performed, the most recent move being bolded. It

also displays the logic used by computer moves

there are four buttons that the user can press

save will save the game and return to the title screen

help will display a computer recommended move

quit will end the round and penalize the player who quit

end turn will end the current players turn (this button is only visible on the 2nd move of a turn)

The screenshot displays a game interface with a 9x9 alphanumeric grid (A-I, 1-9). The grid contains several pieces: white stars, black circles, and green circles. Below the grid, it says "Player's Turn (White)". To the right, a table shows scores for Player 1 and the Computer. Below the table is a log of the last 30 moves, with the most recent move bolded. At the bottom, there are four buttons: Save, Help, Quit, and End Turn.

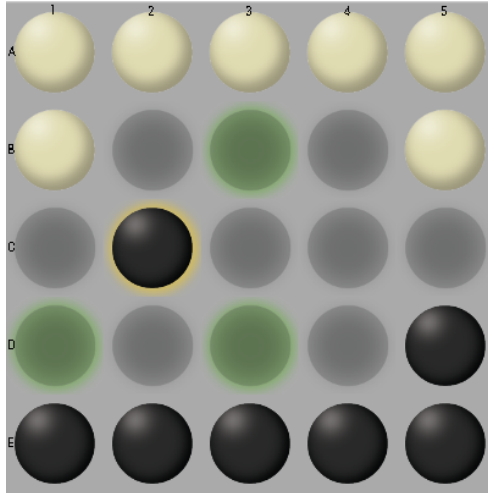
Player 1	Round	Computer
18		12
6	Tournament	0

**Player 1 moved a piece (7E to 6F)**  
Computer moved forward (5F to 6E)  
Computer moved forward (4G to 5F)  
Player 1 moved a piece (2G to 1H)  
Player 1 moved a piece (3F to 2G)  
Computer moved forward and blocked a Piece (5H to 4G)  
Computer moved forward and blocked a Piece (4I to 5H)  
Player 1 moved a piece (6D to 7E)  
Player 1 moved a piece (5C to 6D)  
Computer moved forward and blocked a Piece (9C to 8B)  
Player 1 moved a piece (7H to 6I)  
Player 1 moved a piece (8I to 7H)  
Computer moved forward (8D to 9C)  
Computer moved forward (9E to 8D)  
Player 1 moved a piece (9H to 8I)  
Player 1 moved a piece (8G to 9H)  
Computer moved forward (8F to 9E)  
Computer moved forward (9G to 8F)  
Player 1 moved a piece (7F to 8G)  
Player 1 moved a piece (6E to 7F)  
Computer moved forward (8H to 9G)  
Computer moved forward (9I to 8H)  
Player 1 moved a piece (5D to 6E)  
Player 1 moved a piece (4C to 5D)  
Computer move to a Home Position (3B to 4A)  
Computer Captured a Piece (2A to 3B)  
Player 1 moved a piece (2D to 1E)  
Player 1 moved a piece (3C to 2D)  
Computer move to a Home Position (1B to 2A)  
Player 1 moved a piece (2A to 3B)

Save Help  
Quit End Turn

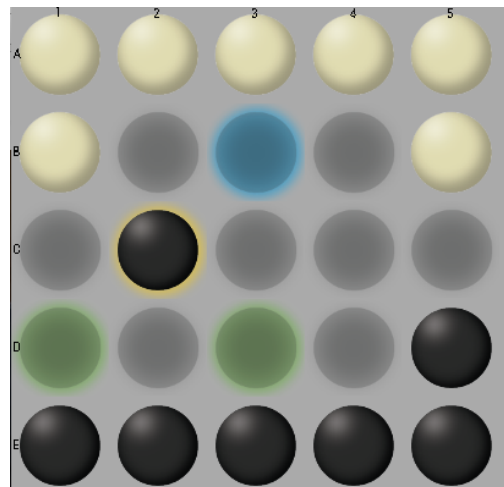
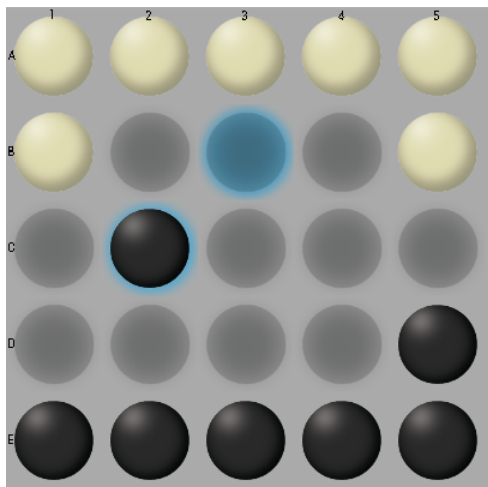
### Selecting a valid move:

when a piece is chosen by a player (assuming it is one of their own pieces) all of that piece's valid moves will be highlighted in green, the player can cancel the move by clicking elsewhere or can perform the move by clicking on one of the green spaces. On the 2nd move of the turn the game will auto select the piece that can be moved since only that piece is moveable



### Getting help:

when a player asks the computer for help it will select the suggested piece and its move in blue, it will also display the reasoning for this move in the text log, once that piece has been clicked it will turn yellow and display all of its valid moves but its suggested move will remain highlighted in blue



### Ending a round:

after a game round is over the winner of the round will be declared and it will give the reason the round ended. It will calculate and display the points to be awarded to the winner. An image of the final game board will be drawn to the screen as well from there the user can choose to play another round or end the tournament



### Ending the tournament:

when the tournament is ended the winner will be declared and the user can either start a new tournament (bringing them back to the start screen) or to quit(which will close the window)

