Team Members:
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Platform:
After some thought we came to agreement to use the python programming language to program for the competition. We chose python as it was the language most of us were most comfortable with. Using the pygame library in python we were able to make a custom GUI for the game which allowed the user to select which size board they wanted to play on. We also gave the different size boards a level going from novice to expert depending on the complication and size of board. Furthermore, we used photoshop to create our own images for the individual chess pieces. We also had to upload our code, presentation and documentation to GitHub.

Process:
Board: We chose to implement our board with a matrix, and use variables to represent various pieces, for example, “br” would equal black rook.

Size of Boards: We were able to choose dimensions of the board by changing the dimensions of the matrix, as we created the size of each image to be exactly 50x50 px, meaning a 16x16 board would be 800x800px. The size of the board is chosen through buttons on the startup screen.

Pictures: We used photoshop to create the images for each individual chess piece and made sure they fit with the “squares” on the board by making them 50x50 pixels.

Images of Chess Pieces: We used nested loops cycling through each value within a matrix and depending on the value the respective image is displayed at that position and the according x and y values were calculated based on the indexes of the for loops.

GUI: We used pygame to create our GUI window. Using functions within pygame, mouse position and click actions were detected within the coordinates of each box and accordingly changed the button color and initiated the according chess board.