Specification

The Chess application begins and allows the player to play a game of chess with another player.

Algorithm

1. Open a new window with the title of Chess Application
2. Print the board image to the screen
3. Initialize all of the pieces along with their positions and moves
4. Begin by allowing the white side to move first
5. Predetermine valid moves
6. When a move is attempted, check move against predetermined valid moves
7. Continue to other players turn and repeat until there are no predicted valid moves left or until there are only the kings left on the board
8. Display winner message to screen, displaying which player won the game.

Flowchart

Refer to the flowchart file

Code Design

|  |  |
| --- | --- |
| Array | For the Board and instances of the same variable |
| Object | For instances of classes |
| Boolean | For variables that have to be true or false |
| Int | For variables that need to be and integer |
| String | For variables that need to hold multiple characters |
| Math.abs | For returning variables without a negative |
| For loop | For running code a specific number of times |
| Do while loop | For running code until something occurs |
| Char | For holding and comparing character values |
| System.out.println | For printing things to the console |
| Scanner | For console input |
| Methods | For separating code into smaller tasks and calling them |
|  |  |

Implementation

Refer to the Java Files in this directory

Testing and Debugging

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