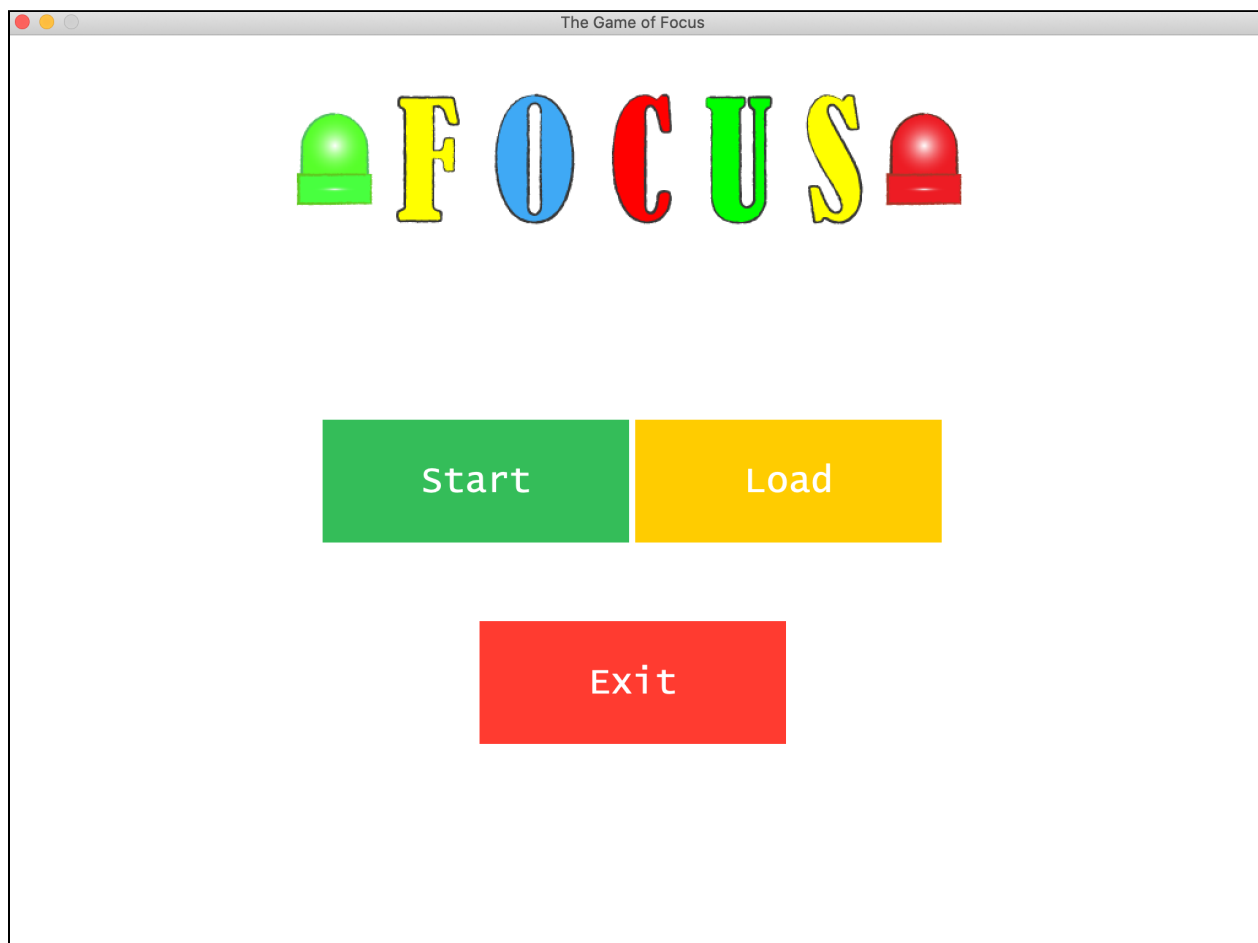# Note for the Grader

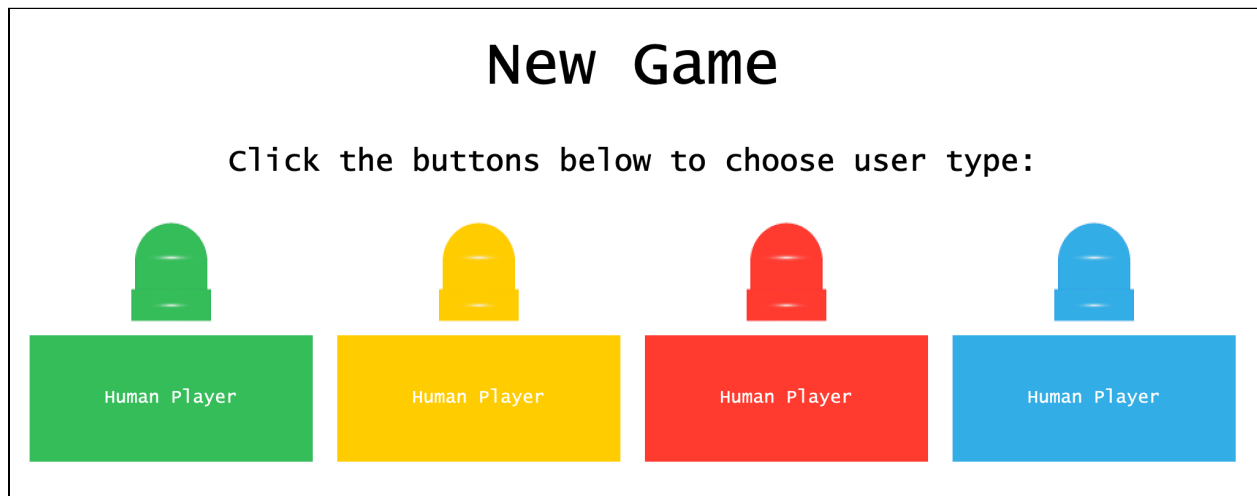The following is a breakdown of how our Focus Game works.

When you open the JAR file, you will be taken to the start menu. This has three options:

- Start
- Load
- Exit

Click on Start to advance to the New Game Menu.

After you are at the menu, you can click on the buttons below each piece to toggle between a human and computer player. Our game supports any number of human / computer players to play a game.

New Game

Click the buttons below to choose user type:

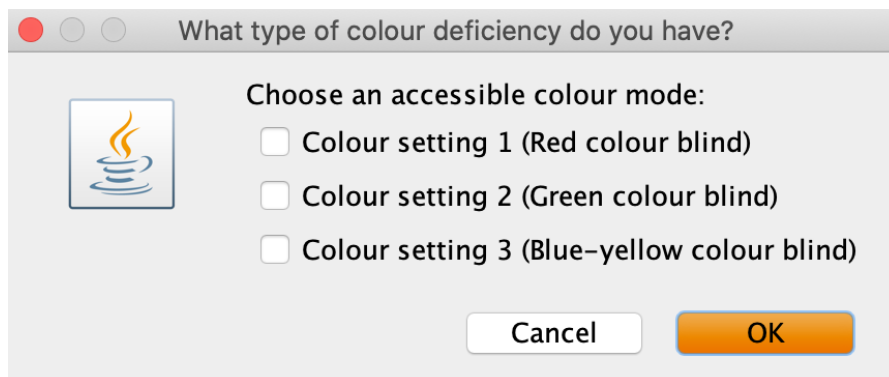| Human Player	Human Player	Human Player	Human Player

Below that you can select your computer difficulty and your colour blind settings.

By default, the difficulty mode is set to 'Easy'. If you have a game with 4 humans, you are still required to check a difficulty. The user is notified if they have not selected a difficulty mode.

Select your Difficulty:

☑ Easy Mode   ☐ Hard Mode

By default, the classic colours are selected for the color mode. We decided to include options for the three most common types of colour blindness. If you click on Colour Blind Accessible, a modal window will pop up requesting the user to select an accessible colour mode. Once you select a mode, all of the coloured elements will match that particular color palette.

What type of colour deficiency do you have?

Choose an accessible colour mode:

☐ Colour setting 1 (Red colour blind)

☐ Colour setting 2 (Green colour blind)

☐ Colour setting 3 (Blue–yellow colour blind)

Cancel   OK

Once you have selected all of the options you will advance to the main game screen. The screen includes the following:

1) The main game board.
2) The stack information preview panel.
3) The message panel.
4) The move reserve and confirm move buttons.
5) The player info panel including reserves, captures, and total pieces for each player.

To make a move, click on one piece of the board. This action will highlight the selected button and will also show which moves are available to choose. In the example below, yellow has a stack of three. We select the stack and it is then highlighted yellow (the current player colour). The neighbouring moves of distance three are then highlighted in grey to show the available moves from that stack.
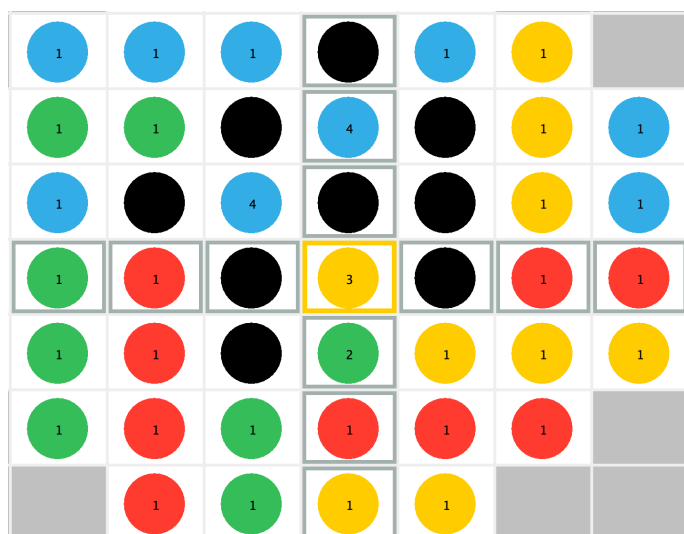
Now you will know all of the available moves for that initial stack. After making one of the moves, the board will look like this (check out the red piece to the right).
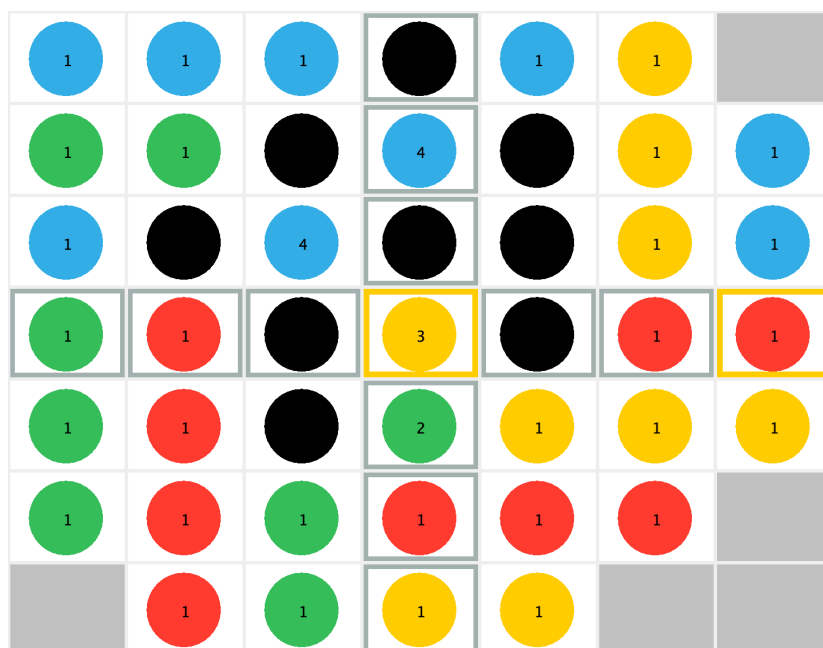
When you select a stack, it will preview what's in the stack in the Stack Information Panel. This is the current stack preview for the example above.
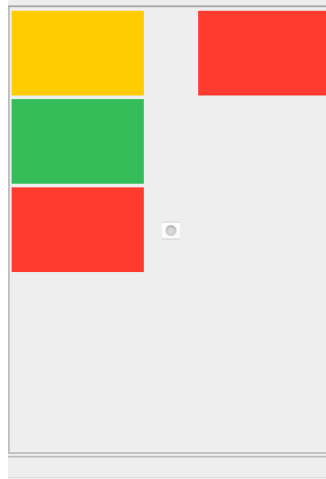
If you wish to cancel a move you can do the following:

1) To cancel an entire move (both the to move stack and destination stack), either click on the to move stack or click somewhere else on the board.
2) To cancel the second half of a move, click on the second button.

Once you are happy with your move, press the confirm move button on the lower right side of the panel. The game automatically passes the turn to the next player. This is demonstrated by both the reserve and confirm buttons changing colour to the next player's colour and by displaying a message in the message panel.

Computer Move

If it is a computer player's turn, the 'Confirm Move' button will change to 'Do AI Move'. This will instantly make its move and pass the turn to the next player.

Reserve Moves
Keep an eye out for reserve pieces! If you have one available, you can use it by pressing the Move Reserve button on the top right side of the window. If there are no reserve pieces available, that button will be inactive and will say 'No Reserves' (a bug warning - sometimes the first click on the Move Reserves does not work. If this happens, click on it a second time and it will now be selected and the selection will be represented in the Stack Information Panel). If you wish to cancel a reserve move, press the Move Reserve button again and the move will clear back to the initial state.

Winning Conditions

There are two ways to win the game:

1) To dominate the board with a single player by being the only person left on the board (we decided to recognize a domination even if the opponent has reserve pieces they can move in future turns)
2) To capture at least 10 opponent pieces.

The File Bar

We have included a JMenu bar with some options. You can Save and Quit a game, load a game, or simply quit and exit. You can also trigger the music on and off.

The file bar for the new game is different from the main game. They include the difficulty and the colour accessibility options.

Saving and Loading

You can save and quit in the middle of the game via File -> Save and Quit. This will save your game.

You can then reload that game either from the very first menu by pressing the Load button or by pressing Load from File -> Load.

Known Bugs:

- After loading a game, sometimes the invalid corner pieces are drawn in a weird way. This behaviour is not seen in normal game play.
- Sometimes the first click when pressing Move Reserve does not register. If that happens, click again.
- If you win a game and start a new one, two instances of the background music will play and you will be promptly sent to 8-bit music hell.
- Sometimes the file bar doesn't update properly when switching from the main gameboard back to the main menu. Some of the options may not be relevant to the window it's being displayed on.
- We recommend playing this on a slightly bigger monitor than in E-1049 lab. This game was designed on three modern hi-resolution laptops. If the screen is truncated, we recommend trying again on a bigger view screen.

If by chance the JAR does not work, please open the terminal from the src folder and type the following:

1) ***javac *.java***
2) ***java App***