Group 6 - Iteration 3 Notes for Grader

The following is the most important thing to note about how we decided to implement pieces and stacks.

When first designing the code for the minor release, it made the most sense to us to look at a Piece entity as being equal to a Stack with a height of one. We justified this by the fact that a piece and a stack share common attributes.

- Color
- Both are part of the game board
- A piece can be added to a piece or a stack; that doesn't matter.
- The distance of every move is determined by the height of the Stack
    - In our case, a Piece moving one unit of distance equals a Stack of height unit 1 only being able to move 1 distance unit.

We also use a 2D array for the board that creates Stack objects (game pieces). It was difficult for us to incorporate Pieces and Stacks in the same board.

All of the above is our justification for using only a Stack class in our design.

With that being said, we still did our modelling with the PIECE terminology to reflect that we are only attempting to move a single piece (or a stack of height one). We have built beyond the use case so if you would like to test out capturing pieces / adding to the reserve, feel free to try.

Bugs and other notes:

- When testing our moves, please only make valid left / right / up / down moves. We plan on expanding our isLegal function to reflect invalid diagonal moves. If you accidentally make a diagonal move, the game will be stuck and you will have to restart.
- We plan on having a button border highlight when a Piece / Stack is clicked. This will make the gameplay more intuitive and allow for a player to see exactly where they have selected. That will be implemented in the final release.

- Depending on your screen resolution, the Active Player label on the bottom of the screen which indicates the active player may get truncated by the GridLayout. It changes colour to reflect the Active Player if it gets truncated. If this label is not truncated, please ignore this point.
- We plan on having the Confirm Move button to only be selectable once both moves phases have been set (click one and click two of two separate Stacks). Right now it does not reflect this but this change will help the user know exactly when they are ready to make a move.
- Cancelling a move is possible in this iteration. If you select two moves you can cancel in the following scenarios:
  - If you reselect the first stack (or the stack that is to be moved) it will cancel the **entire move**.
  - If you reselect the second stack (the destination stack) it will only cancel the second half of the move and not the first.
  - This is not immediately obvious but we plan on having a reset move button in the final iteration.
- We have preloaded every player with 1 reserve piece each so you can easily check out Move a Piece from the Reserve use case. We are having a painting issue with the very first turn but once you make that turn, the Reserve number for each player updates. This is not a big concern for us as the Final Iteration will start with 0 reserve pieces.

We hope you enjoy the minor release of the Game of Focus! If you have any problems with JAR or source code, please reach out to us.

Cheers,

Josh, Tony, Dilum, Zayed, Sanjid
Group 6