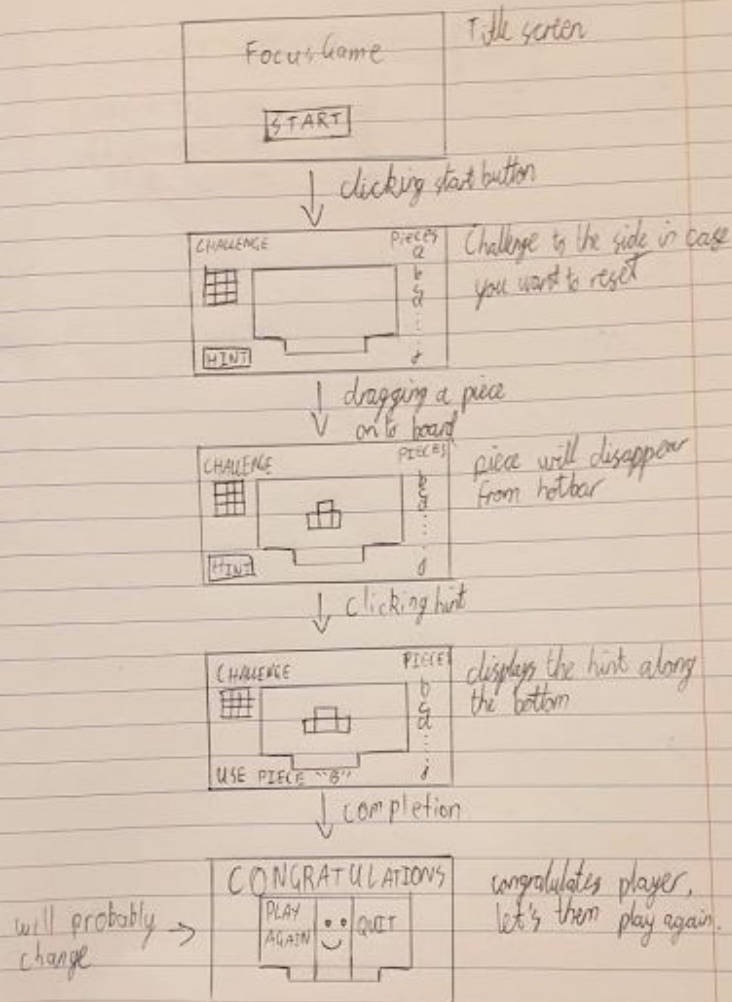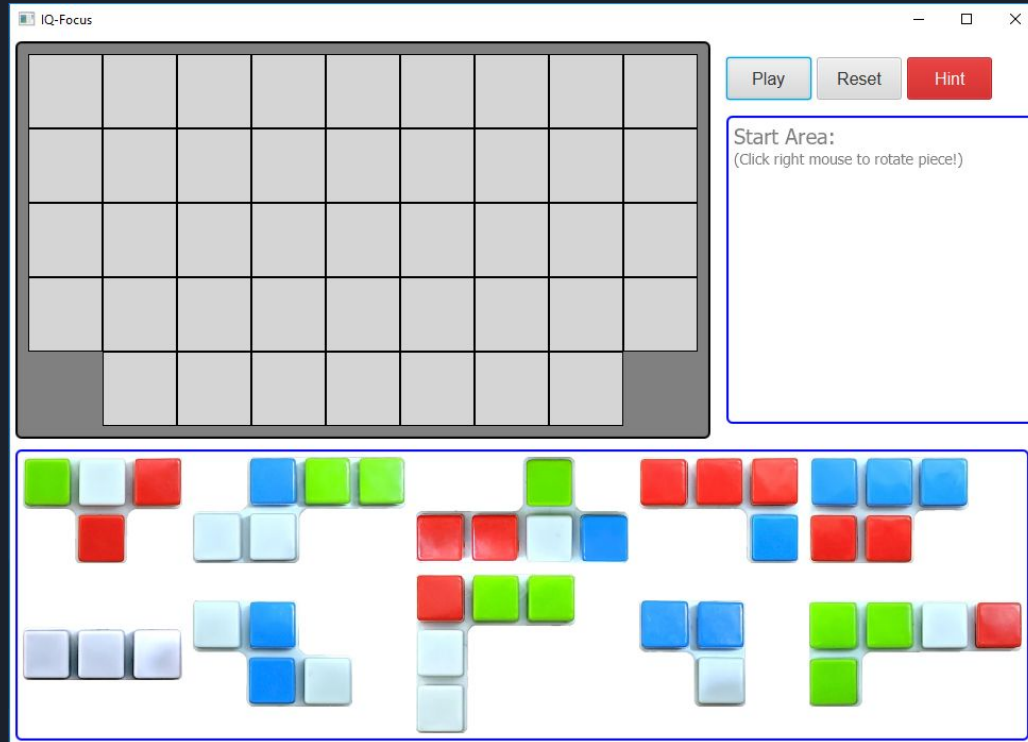# IQ-Focus

Structured Programming
COMP 6710
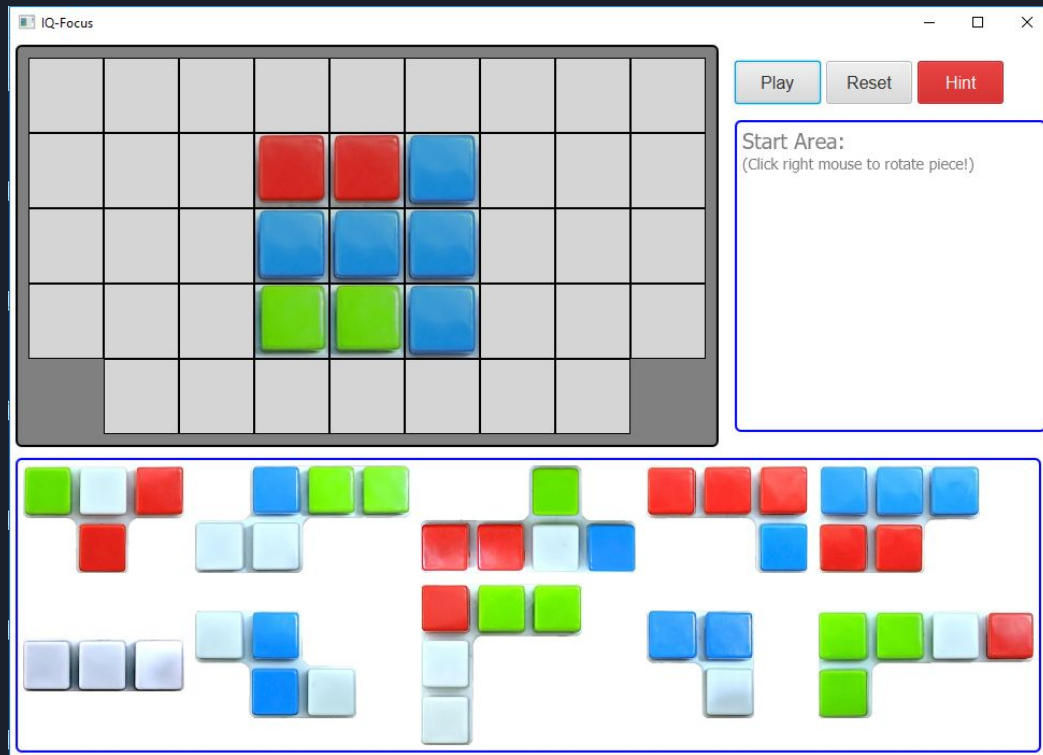**Tutorial - Tuesday 12**
Group - U
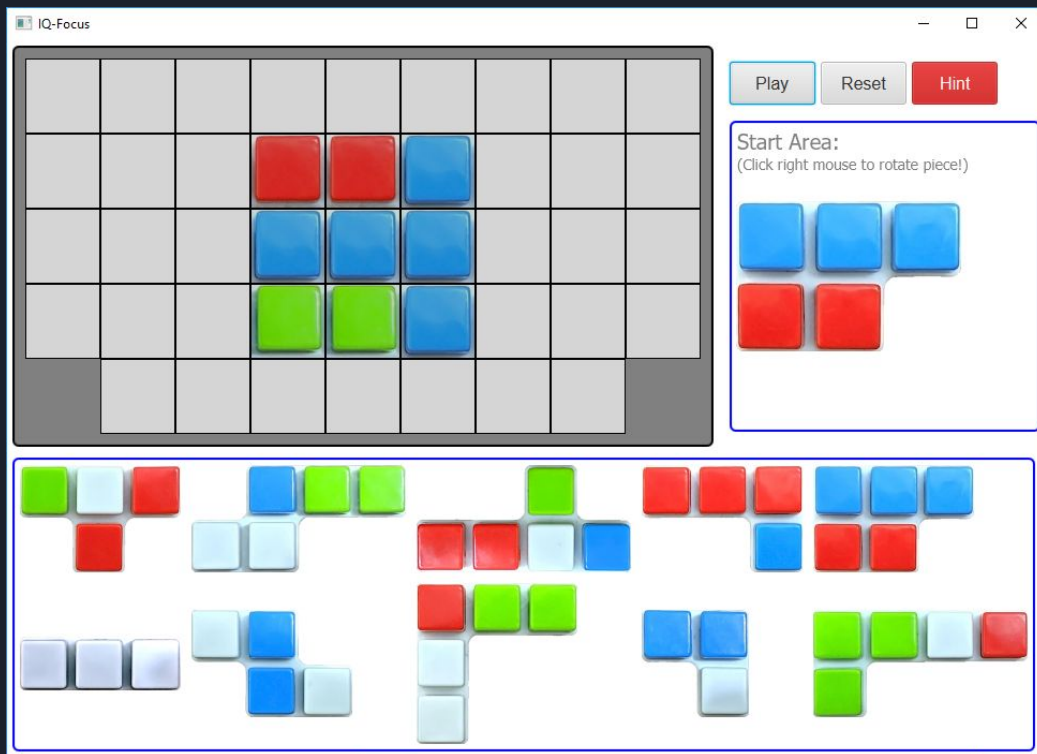**Tutor -** Yiyi Shao

Initial sketch of GUI

Board Outline:
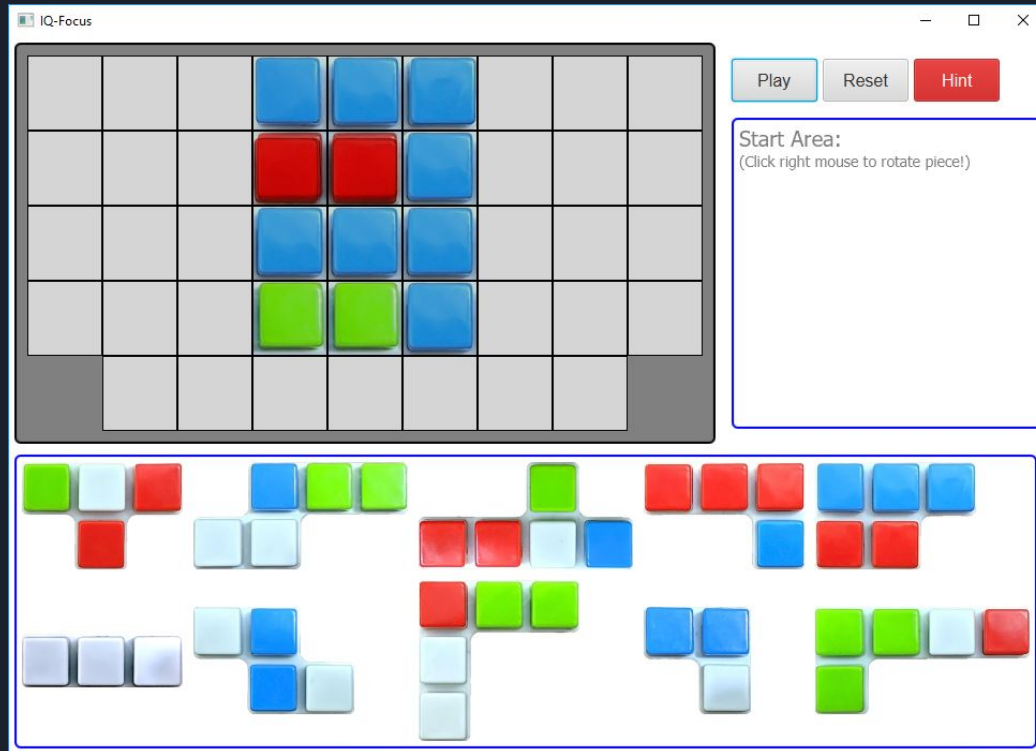
Embedding the challenge:
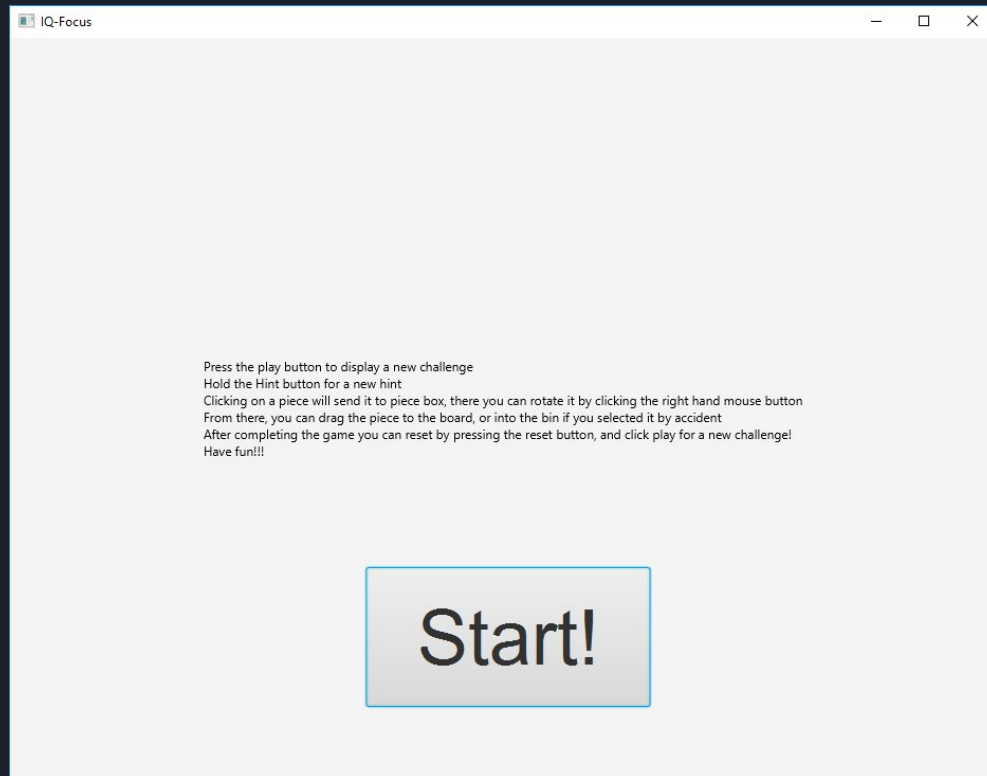
Displaying Selected Piece:

Holding the hint button

GUI development:

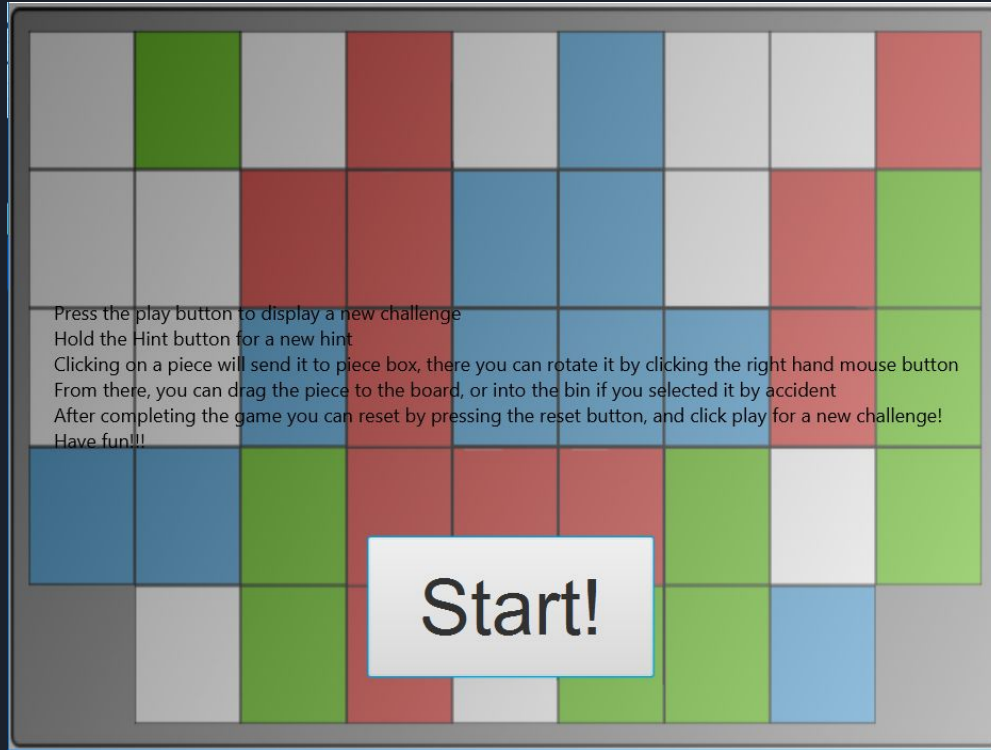| Initial implementation	Final implementation
Challenge off to the side	Embedded challenge
Pieces to the left	Pieces along the bottom
End screen	No end screen
Hint displayed as text	Hint displayed by transparent piece on board
Instructions weren't accounted for	Instructions as the initial popup

Start Page:

IQ-Focus

Press the play button to display a new challenge
Hold the Hint button for a new hint
Clicking on a piece will send it to piece box, there you can rotate it by clicking the right hand mouse button
From there, you can drag the piece to the board, or into the bin if you selected it by accident
After completing the game you can reset by pressing the reset button, and click play for a new challenge!
Have fun!!!

Start!

Updated Start Page:

Press the play button to display a new challenge
Hold the Hint button for a new hint
Clicking on a piece will send it to piece box, there you can rotate it by clicking the right hand mouse button
From there, you can drag the piece to the board, or into the bin if you selected it by accident
After completing the game you can reset by pressing the reset button, and click play for a new challenge!
Have fun!!!

Start!

Challenges creating an edge case

❖ There used to be a box underneath the piece box that showed the challenge
❖ Clicking the play button would add a challenge to that box, without erasing the previous challenge
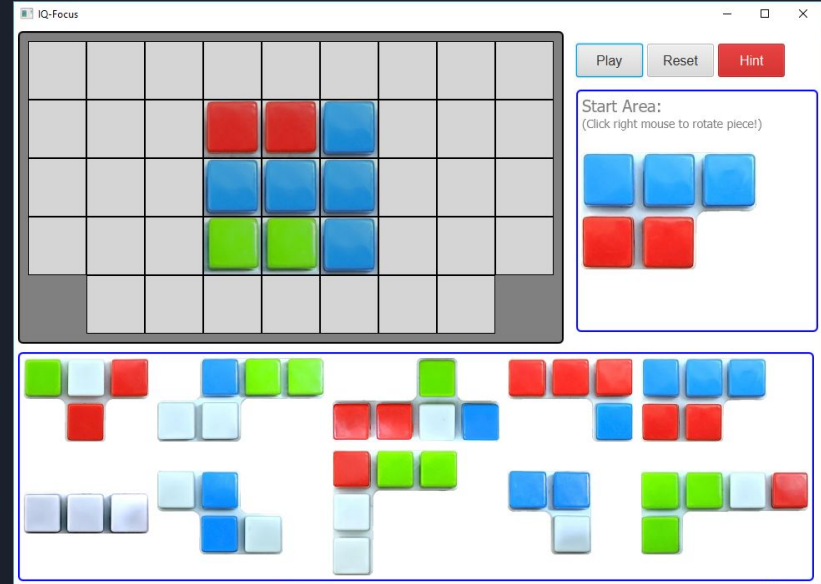
Finding multiple solutions:

❖ Data Structure used : List<Set<String>>
❖ Purpose : Task 11
❖ An extension for Task 9.
❖ Reason :
  ➢ Classifying the randomly generated challenges based on the number of solutions.
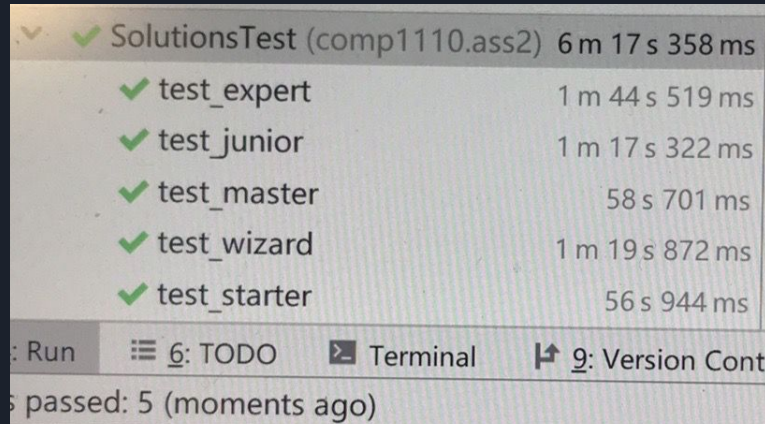
A piece selection edge case
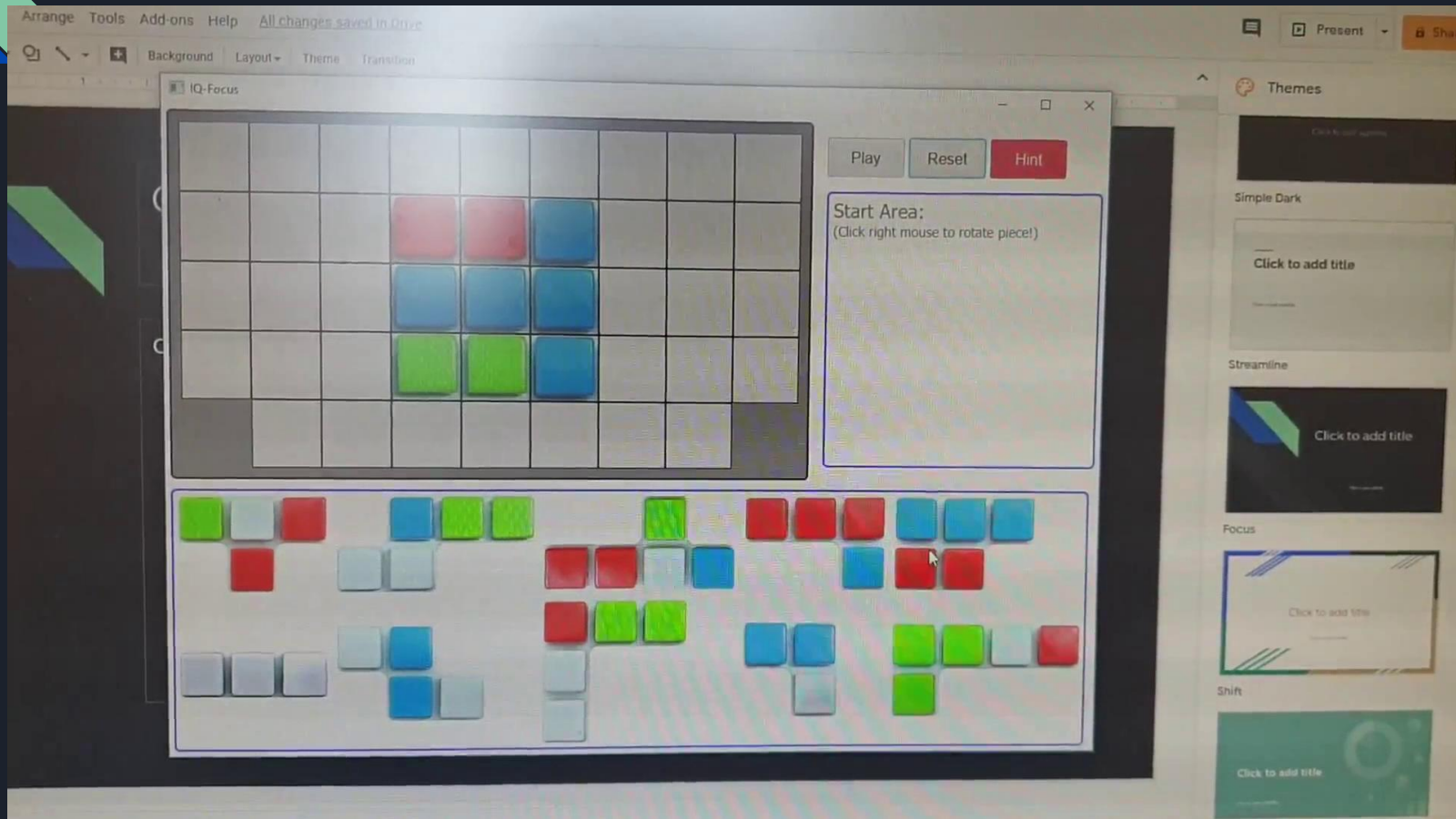
An exercise in hardcoding

Full list of 120 challenges provided by Solution.java

Optimisation of tasks 6 & 9:
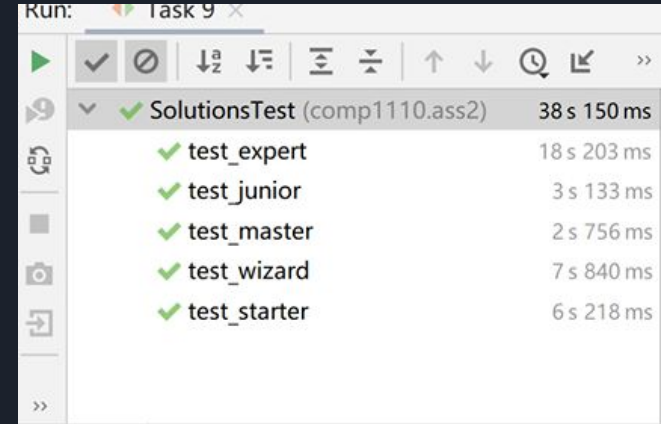
Putting a piece on the central area of the challenge majorly constrained the range of search

The removal function

❖ Idea of remove function: drag it to trash can!
  ➢ Like the method in mobile phone OS
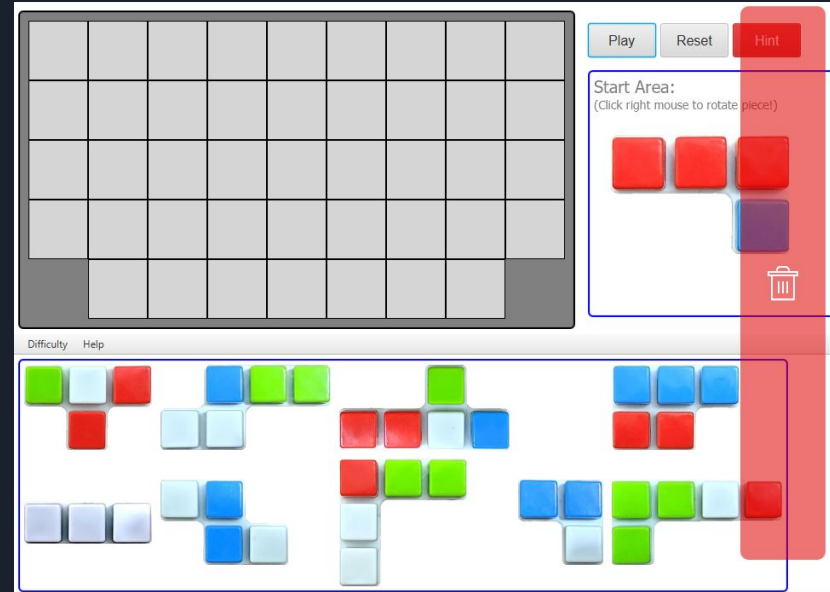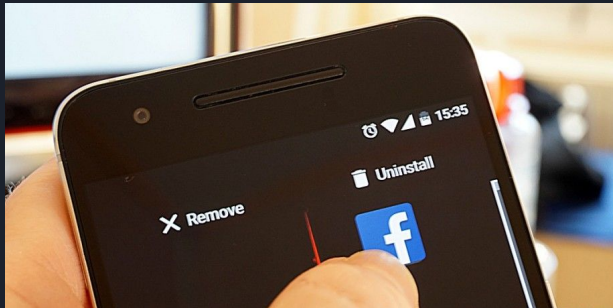
The hint button and it's overlay features

Modify any incorrectly placed pieces and/or display the next correct step