COMP1110 ASSIGNMENT 2

FINAL PRESENATION

Co-developed by Carry Zhang (u6499267), Keyu Liu (u6342137), and Qixia Lu (u6805636)

THE STATISTICS

AN OVERVIEW:BY NUMBERS

Over

140

Commits

5

Java Class Files

302 MB

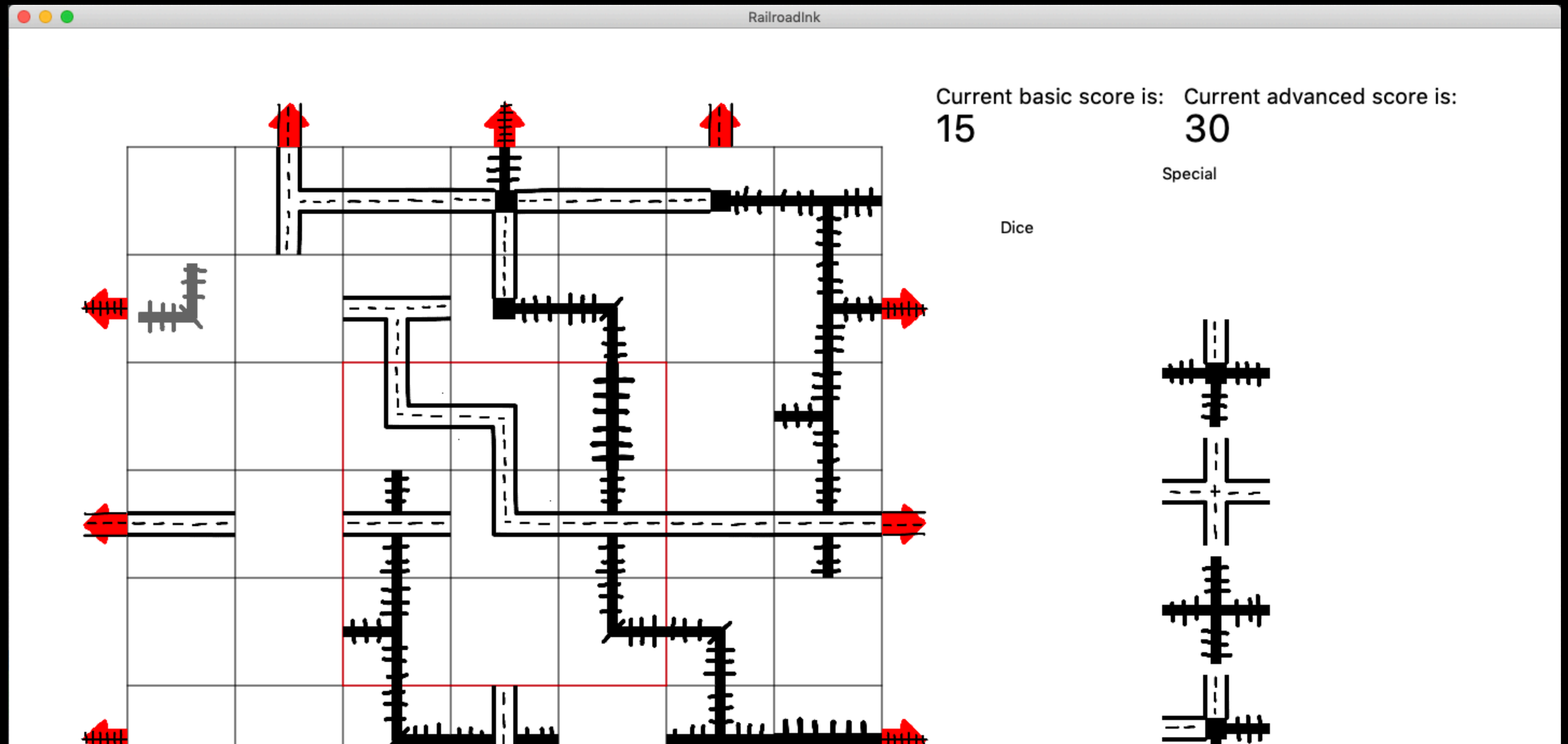
File Size

11

To-Dos Completed

USER INTERFACE

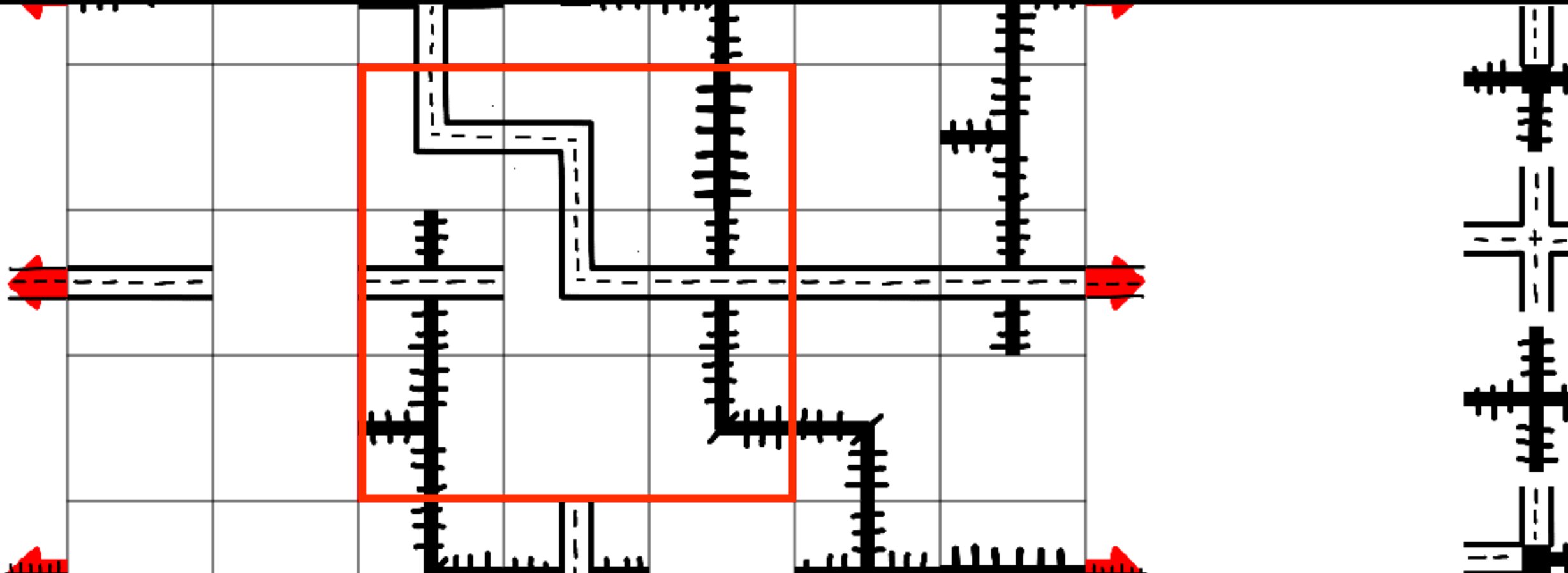
THE POWER OF SIMPLICITY



USER INTERFACE

RUN FOR RED

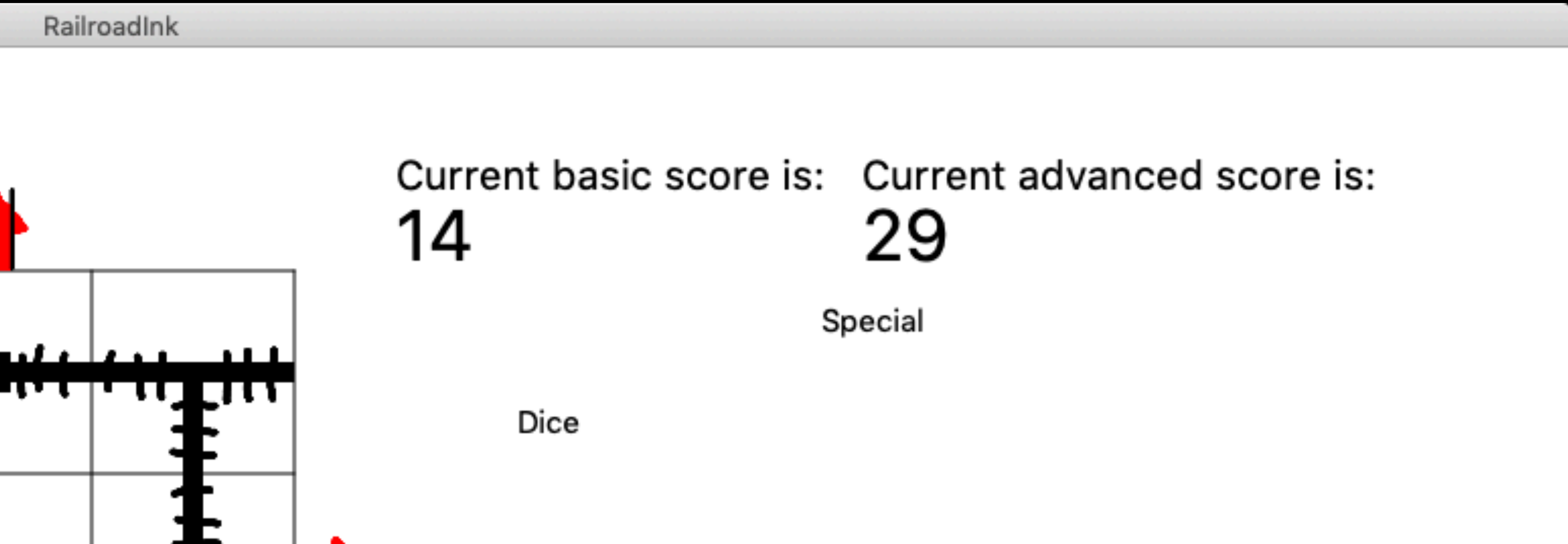
Highlighted centre area provides a simple illustration of bonus score area, so you can focus on getting that high score.



USER INTERFACE

AIM HIGH

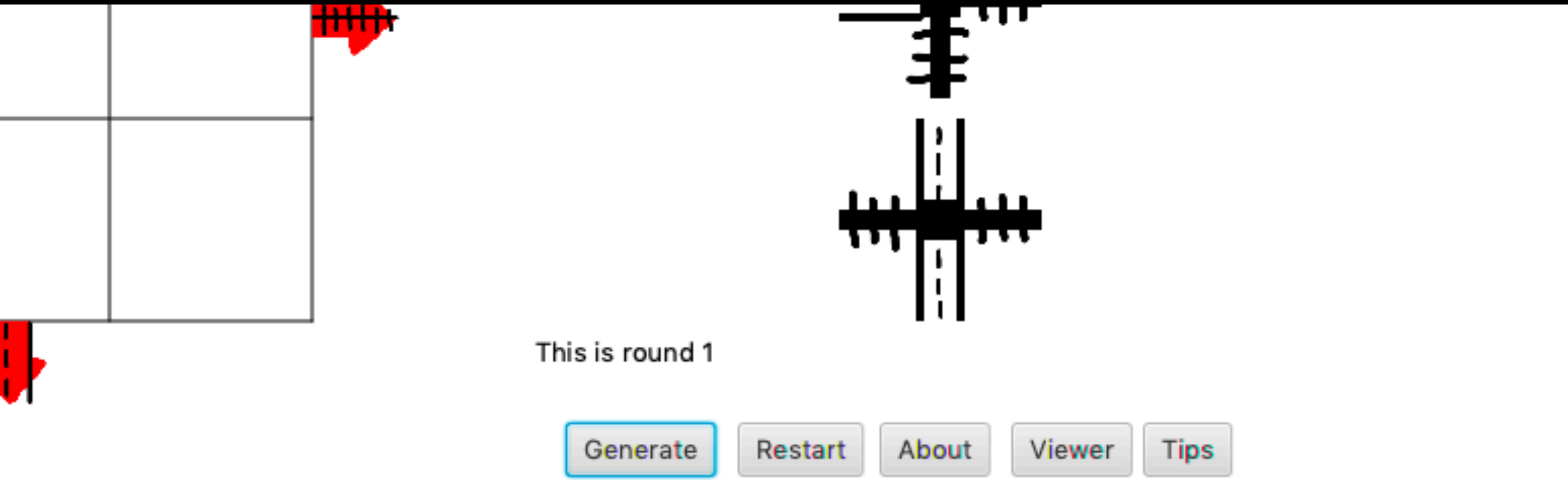
With real-time updated score counter, including both basic score and advanced score.



USER INTERFACE

POWER TO YOU

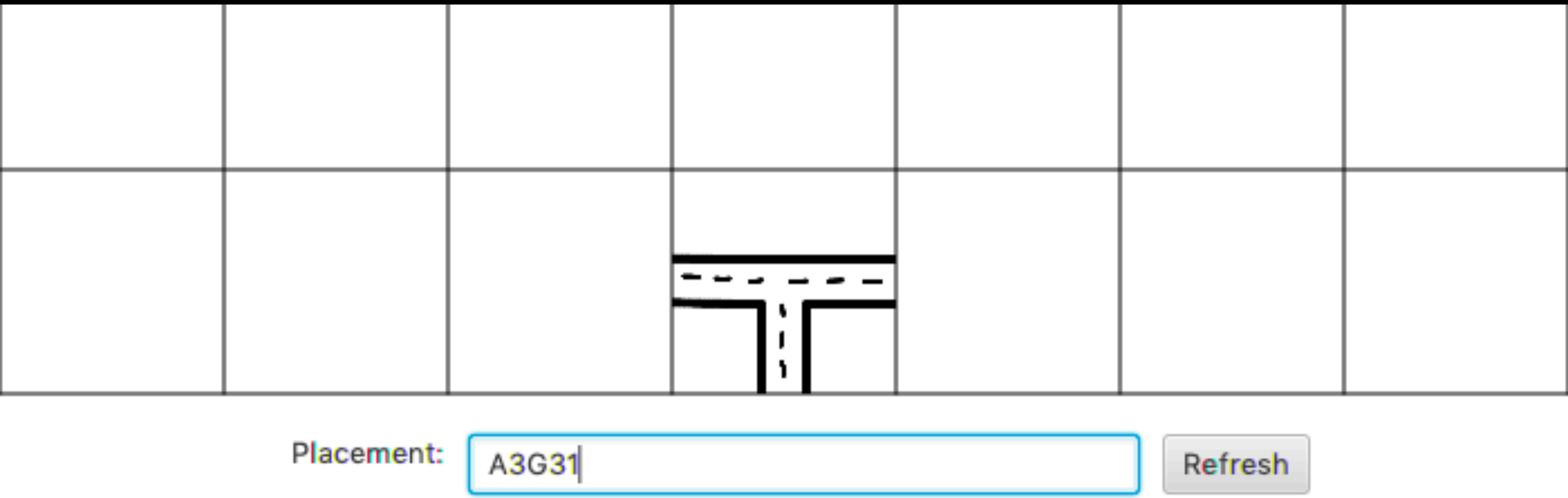
Adequately-placed easily-accessible buttons with great features including a placement viewer.



USER INTERFACE

CHECK IT OUT

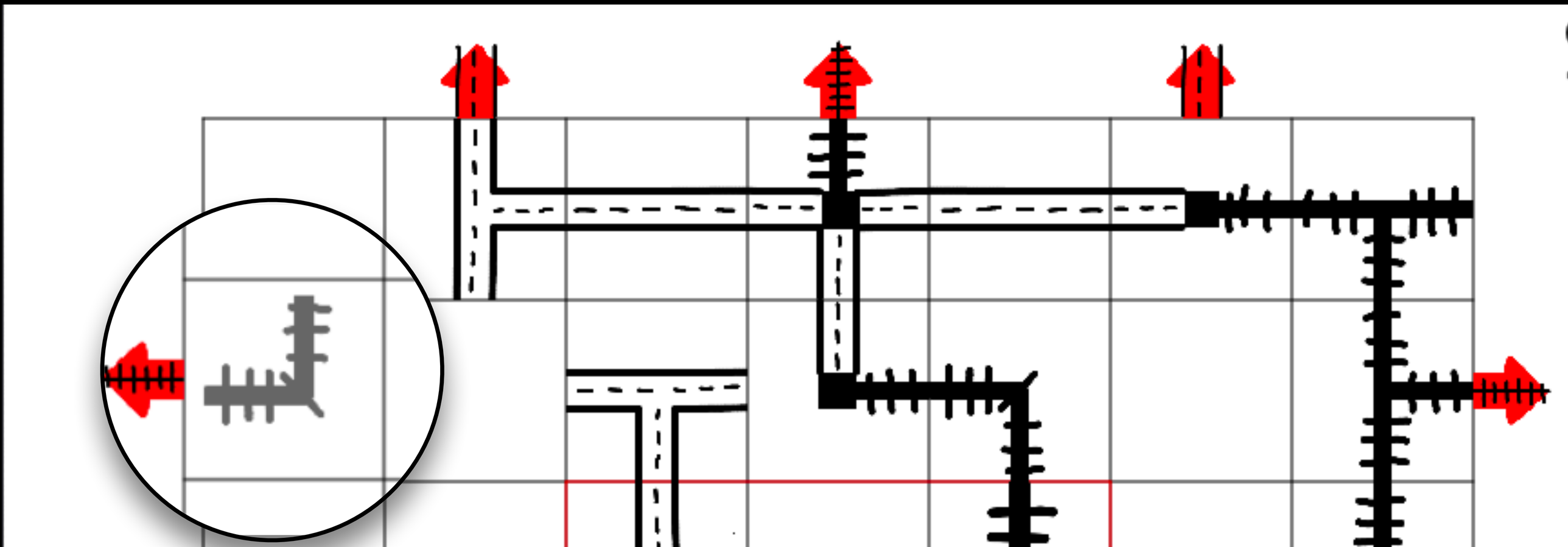
Built-in pop-up placement viewer provides a quick reference, without adding distractions to the current game board.



USER INTERFACE

FOCUS ON WHAT MATTERS

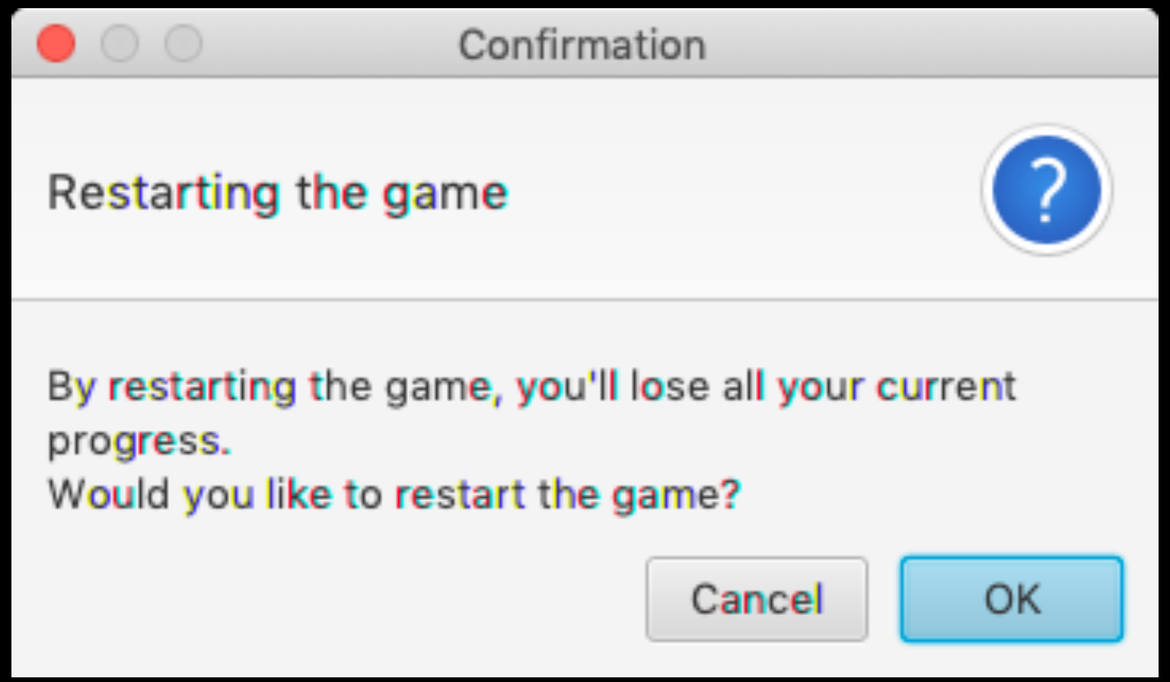
Selected pieces are coloured differently so you can drop that perfect placement confidently.



USER INTERFACE

STAY IN CONTROL

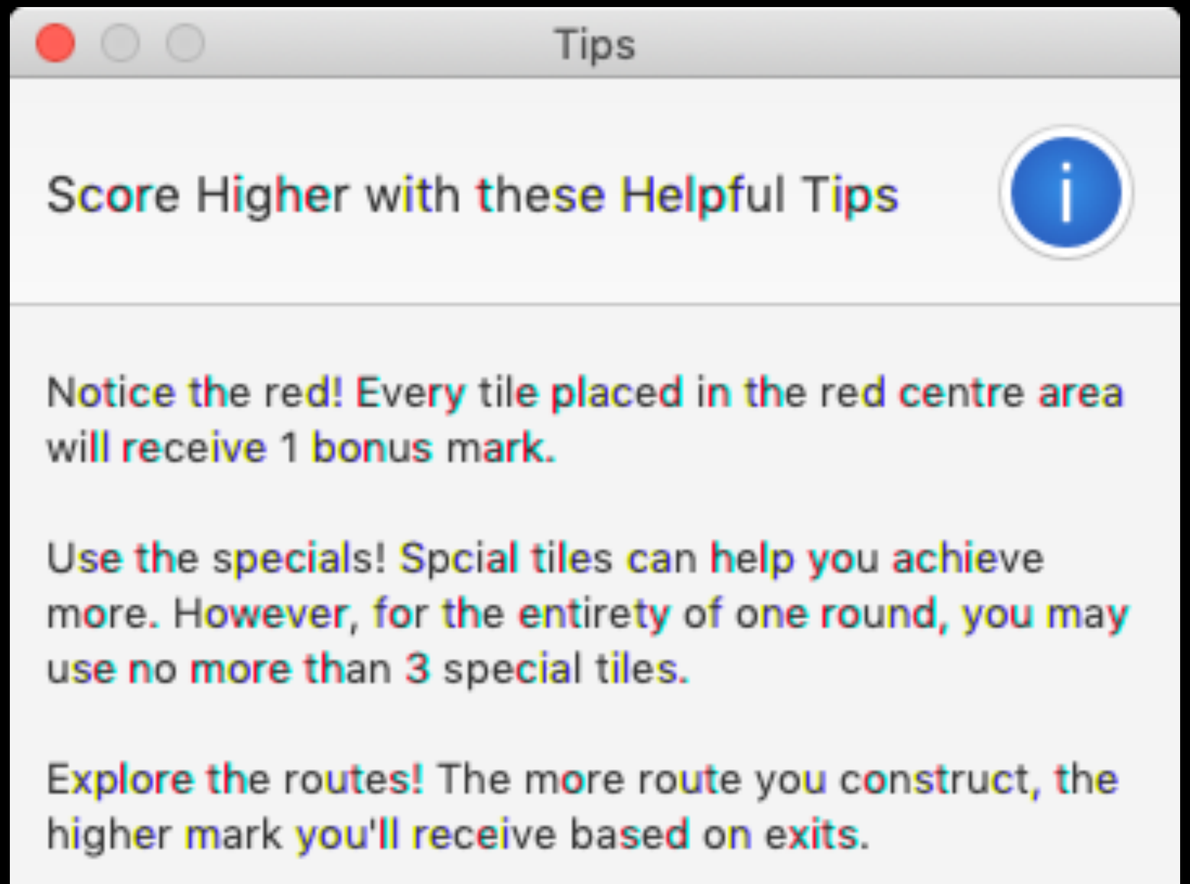
Before restarting the game, a confirmation pop up will appear double-checking whatever you would like to restart.



USER INTERFACE

BE A PRO

Get insights from the creator with the tips pop-up, listing the significants for a even better result.



DESIGN

THE REPLACE METHOD

TILE IDENTIFICATION, CENTRALISED.

Developed by Qixia Lu (u6805636)

THE REPLACE METHOD

NAME & RENAME THE SHAPE

Identifying the connection with ease by renaming the shape based on its exits, for a centralised tile management.

Placement.java | Board.java | Viewer.java

```
22          map.put("A3", "HHH0");
23          map.put("A4", "H0H0");
24          map.put("A5", "H00H");
25          map.put("B0", "H0R0");
26          map.put("B1", "HR00");
27          map.put("B2", "HRHR");
28          map.put("HE", "H000");
29          map.put("RE", "R000");
30      }
31
```

THE REPLACE METHOD

HERE AND THERE

The method has been used across the entire assignment, including key tasks such as Task 5 and Task 8.

```
33      public String replace(String a){
34          String State = map.get(a.substring(0,2));
35          StringBuilder replace = new StringBuilder(State);
36          char indexUp = State.charAt(0);
37          char indexRight = State.charAt(1);
38          char indexDown = State.charAt(2);
39          char indexLeft = State.charAt(3);
40          switch (a.charAt(4)){
41              case '1':
42                  replace.setCharAt( index: 0, indexLeft);
```

THE REPLACE METHOD

TO THE EDGE

Finding the edge connection based on its shape.

```
439         Placement p = new Placement();
440         if (pL == '0' || pL == '6' || pR == 'A' || pR == 'G'){
441             //use the replace method to find whether the tile side has touched the edge of the board
442             if (pL == '0'){
443                 if (p.replace(t).charAt(3) != '0'){
444                     count++;
445                 }
446             }
447             if (pL == '6'){
448                 if (p.replace(t).charAt(1) != '0'){
449                     count++;
450                 }
451             }
452             if (pR == 'A'){
453                 if (p.replace(t).charAt(0) != '0'){
454                     count++;
455                 }
456             }
457             if (pR == 'G'){
458                 if (p.replace(t).charAt(2) != '0'){
459                     count++;
```

DESIGN

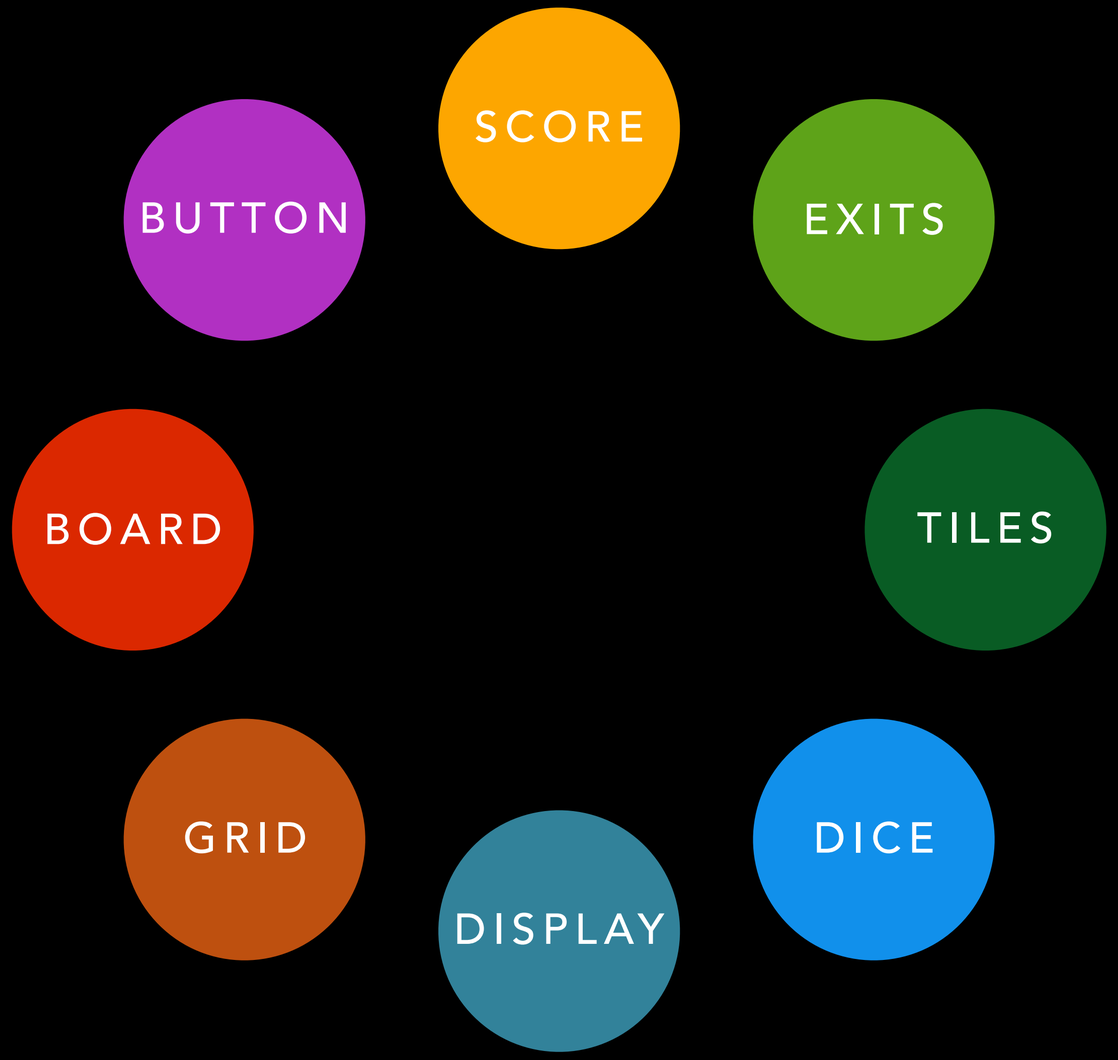
GROUPING

FOR AN ORGANISED JFX

Developed by Carry Zhang (u6499267)

GROUPING

VARIOUS SPECIALISED GROUPS




```
private final Group root = new Group();
private final Group display = new Group();
private final Group grid = new Group();
private final Group exitSigns = new Group();
private final Group dice = new Group();
private final Group specials = new Group();
private final Group buttons = new Group();
private final Group score = new Group();
private final Group theBoard = new Group();
```

GROUPING

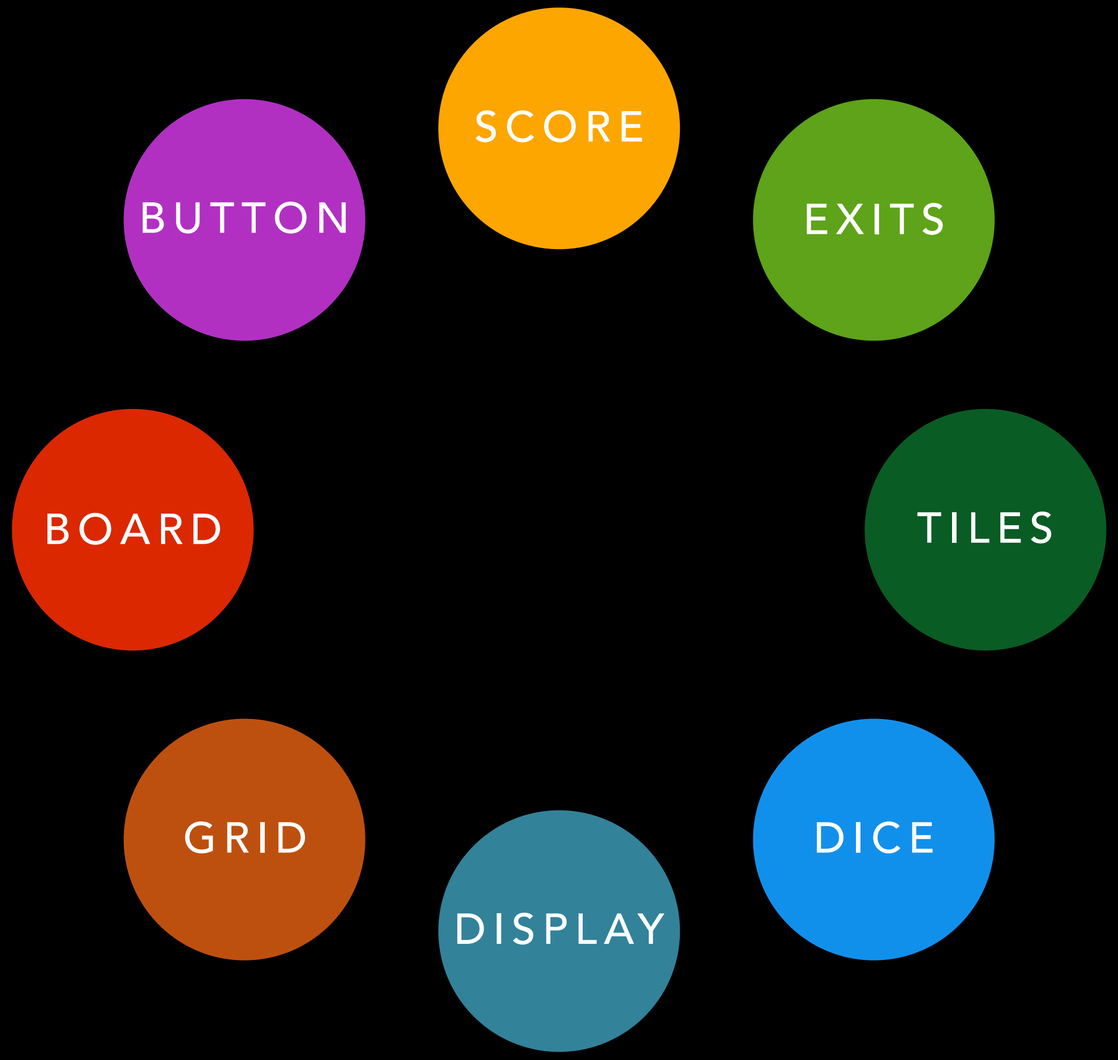
INDIVIDUALLY CONTROLLED

SCORE

The real-time score display is powered by individually controlled Score group by clearing it each time a new placement is added to the board, and stay updated with the method `updateScore`

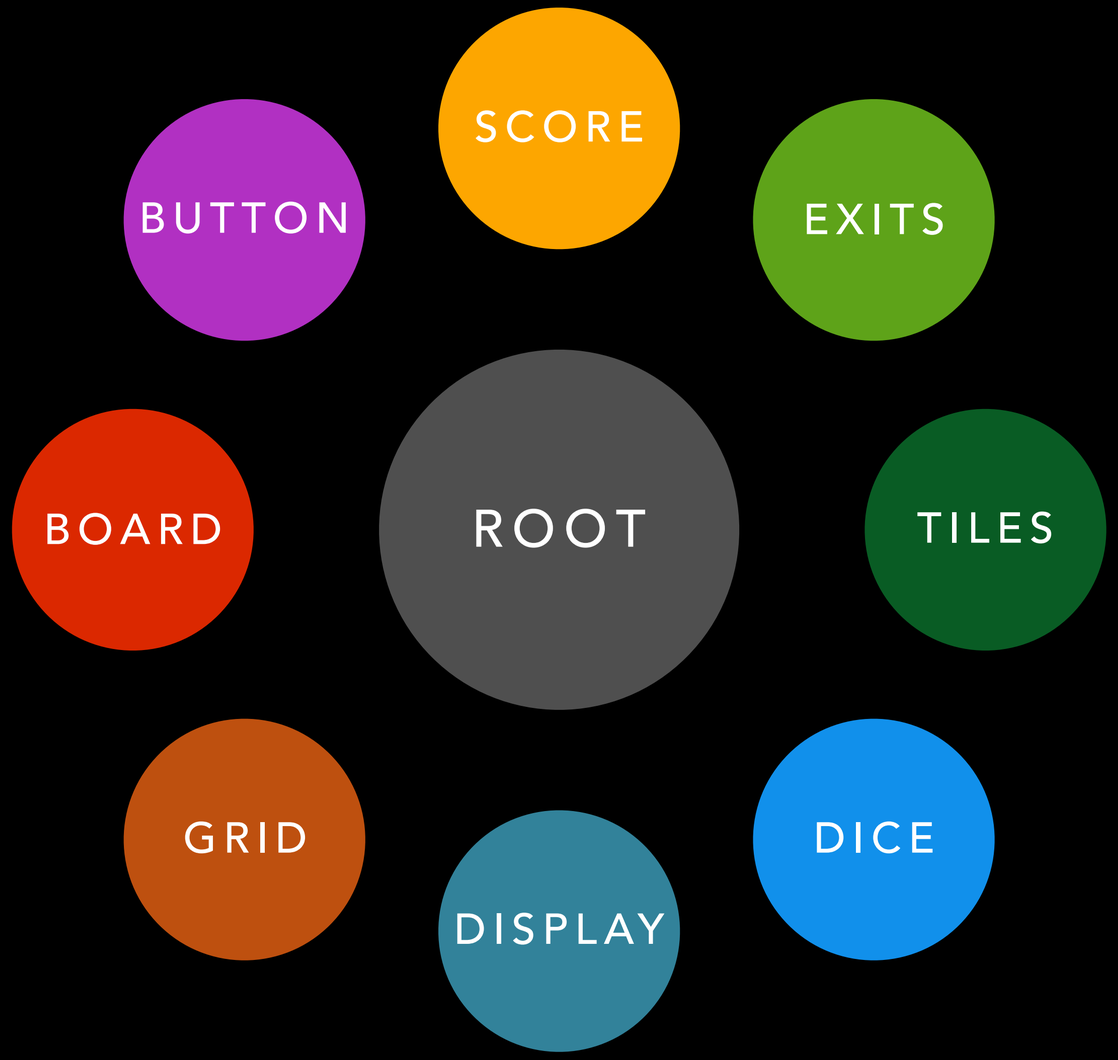
GROUPING

VARIOUS SPECIALISED GROUPS



GROUPING

AND ONE ROOT TO RULE IT ALL




```
Scene scene = new Scene(root, WINDOW_WIDTH, WINDOW_HEIGHT);
root.getChildren().addAll(grid,display,exitSigns,dice,buttons,
specials,score,theBoard);
```

Demo

SUMMARY

EXTRAS & WRAPPING UP...

- Java-doc standard documentation for the Game class
- User-friendly interface with great functionality
- Object oriented approach used throughout
- Partly inspired by the code from Assignment 1

```java
/**
 * Move the piece to the new position
 * @param movementX & movementY distance the mouse has moved since its original position
 */

void drag(double movementX, double movementY) {
    setLayoutX(getLayoutX() + movementX);
    setLayoutY(getLayoutY() + movementY);
}
```

ANY QUESTION?

QUESTIONS & ANSWERS