

COSC 3011  
Software Design  
Program 02

## 1 Introduction

I really do not want you ‘working ahead.’ That is not because I think you need to follow instructions, although that is large part of it, but more because you need to concentrate on making the alterations to your program as “generic” as possible so that when I tell you what follows this, you will not have to tear about a large amount of work and maybe have to rewrite all you have done.

## 2 New Requirements

That said, now we are going to add some more functionality. First, I am assuming that did I did not ask you to make any major changes to your previous version. Because someone is terribly behind and has not finished review those programs. That being said, if **Quit** button works, forget about the other buttons for this iteration of the project.

1. The possibility exists that you made the program window by simply drawing lines on a background. I hope you went farther than that but if you did not, then now, you need to add movable “tiles” in addition to those plain lines.
2. Make your tiles movable. Of course, for those over-achievers, you may already have that done.
  - I have no preference on which of the following two methods you choose. I would prefer that you do NOT do both, just too confusing.
  - You can drag/drop them from the holding areas onto the square.
  - You can make some movement based on clicks. Maybe double-click to select and single-click to place, or right then left, or center-paste, or...
  - Regardless which method you use, they must “snap” either to a position in the square or a position in the holding area. They cannot just placed anywhere on the board. That really means if they are “close” to either a position on the side or in the square they go to the “close” position. If they are too far away, pick some reasonable distance, they go back where they started.
3. Give your tiles some identity. Do not get carried away with this, but I want the tiles to be differentiated from the background of the rest of the playing surface, by each

having a solid colored background. That does NOT mean, a different color for each, but you could do that if you want (again, over-achieving). I also want each visibly numbered. Like put a number in the center, bottom left corner, something consistent of each tile.

New Game

Reset

Quit

07

06

05

04

03

02

01

00

15

14

13

12

11

10

09

08


### 3 What to do

I do not really want anything extraordinary this time, and maybe you think this is baby steps, but that is the way of it. You will again need to get your teams together, plan, and do a little programming. I want you to update your planning document(s) to reflect any design changes and/or additions to your project plan. Make sure that you also update the UML diagram to reflect the changes. The more work you do this time, to a degree, the less I will have to complain about. Of course, there is such a thing as overkill.

Do not forget, participation in the project will have a significant impact on your project/program grade. I will post a “quiz” for each milestone. Each of you will complete that quiz, grading the other members of your team. If you cannot put in the effort to complete the quiz, you must not be involved and your participation grade will be 0.

You already have your first attempt at the program. Add on to that as needed. And again, do not get so attached to a design decision that, unless there is no time left, you are not willing scrap it and start again.

## **4 What to turn in**

Create a zip (or tar/gzip) file of the directory structure that contains of all the “.java” files. DO NOT include ANY “.class” files. DO NOT create a jar file.

Make sure that your planning document(s) are included in this. Please put them someplace reasonable like in a “docs” directory. You will submit this on WyoCourses on the Program02 assignment.