# CSSE 220---Object-Oriented Software Development

## Exam 1 – Map & 2D Array Part, January 2021

**Allowed Resources on Part 3**. Open book, open notes, and computer. Limited network access. You may use the network only to access your own files, the course Moodle and the course web pages, the textbook’s site, Oracle’s Java website, and Logan Library’s online books. You may only use a search engine (like Google) to search within Oracle’s Java website - all others uses or accessing websites other than those mentioned above are not allowed.

**Instructions.** You must disable Microsoft Lync, IM, email, and other such communication programs before beginning the graphics part of the exam. Any communication with anyone other than the instructor or a TA during the exam may result in a failing grade for the course.

You must actually get these problems working on your computer. Almost all of the credit for the problems will be for code that actually works. If you get every part working, comments are not required. If you do not get a method to work, comments may help me to understand enough so that you can earn (possibly a small amount of) partial credit.

Submit all modified files via Moodle.

Instructions

There are a total of 4 operations in 2 different files as follows:

* 2 operations are in *MapProblems.java*
* 2 operations are in *TwoDArrayProblems.java*
* See screenshot below

To **Pass** this part:

1. You must successfully implement 3 of the 4 operations that are contained in this starter package
2. All JUnit tests must pass for the 3 operations that you choose to implement

* Note: If you pass all JUnit tests for all 4 operations, this may be used as a bonus of sorts towards the rest of your exam grade. For example, if you were really close to passing a different part of the exam, and if you successfully complete all 4 operations in this starter package, that may be enough to help you pass the other part as well.

Upload the 2 *.java* files listed below to Moodle Exam 1 Part 3

* *MapProblems.java*
* *TwoDArrayProblems.java*

Table

Description automatically generated