

ICOM 4015—Project 2

Points: 28% of your Project component (i.e. 7% of your final grade)

By using Java, Eclipse, and OOP, you are required to develop a Minesweeper that works very similar to the Windows Minesweeper shown below.



Note 1: In your Minesweeper, you should use other images to show the mines, e.g. a devil image.

Note 2: In the menu bar, you only provide the “Game” choice (i.e. skip the “Help” Choice).

Note 3: In the top-down menu of “Game” only provide the features that you see in the right figure above.

Note 4: You should not provide features more than what stated in Notes 1 to 3.

What you need to do?

- 1) **Choose a partner.** This project must be done in teams of 2 students (not lesser not more). **Your partner must be different than your partner in project 1.** Note that, after delivering the project, you will be invited for interviews. Each team member will be asked individually. If a team member cannot pass the interview properly, both members' grade will be impacted. For instance, if a member receives 40% in the interview, the other person cannot achieve more than 60% even if he/she knows the material 100%. What this requirement tells you? **a)** choose a good partner that can commit to the project as much as you can **b)** during the project development, make sure both of you understand every single feature, code, class, method, etc. equally and perfectly.

Deadline of announcing your team is **Monday Oct 31**. Simply, one of you, send me an email titled “ICOM4015: P2: your partner name”. Remember to CC the partner in your email as well as CCing the TAS (both).

- 2) **Research/Investigation** on the **minesweeper**. Before starting designing your minesweeper, make sure you understand how Windows minesweeper works. Simply, just play with the

Windows minesweeper around 1 hour (not several days :) until you are sure you fully understand how it works.

- 3) Design and develop your minesweeper. Remember it should work very similar to Windows minesweeper. Deadline is **Wednesday November 16**. Email me and the TAs a **zip file** that contains your minesweeper program. Your program must have a full documentation. Title of your email should be "ICOM4015: P2: Minesweeper".

Important Note: This project requires a lot of hours of working. In particular, last part (Part 3) may need more than a week or two! Therefore, if you do not start it early, you may not finish it on time.

Bonus Part:

This part is <Optional> and provides 1000 bonus points:

- Requirements:
 - o Add another type of mine to the game. This type of mine is not as strong and dangerous as the original one that means the player will not die if he/she steps on the first one of them; however, if the player steps on a second one, the game is over.
 - o Remember that in this version of your program, there are two types of mines in the game (strong or big, and weak or small).
 - o Play background music of users' choice to the game. In particular, in the top-down menu "Game", add background music. Provide some choices, however, users may want to choose their own music (by browsing the computer)
- Please note that there is no partial point for the above requirements (you either get 1000 BP or 0). So, start working on Bonus Part only after you are sure you can finish it on time.
- Deadline is **Wednesday November 16**. Email me and the TAs a **zip file** that contains the second version of your minesweeper program. Your program must have a full documentation. Title of your email should be "ICOM4015: P2: Minesweeper Version 2". In other words, those who choose to do the bonus part should send two emails: one for the main project and another for the one including the bonus part.