

# Assignment Warm-up Task

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## Assignment Warm-up Task

### Task Description

Implement the [Minesweeper](#) game using the Processing library for graphics and gradle as a dependency manager. You can access the documentation from [here](#). As with any assignment, make sure that your work is your own, and do not share your code or solutions with other students.

Each tile in the 18x27 grid is initially blue (hidden), and may contain a mine. Your program must accept a parameter from command line arguments, which is the number of mines that should be spawned randomly on the board. If no parameter is provided, or an invalid one is, then the default is 100 mines.

The player can left click on a tile to reveal it. If there is a mine, all mines will begin exploding and the game ends. Display the message "You Lost!" in the top bar. The mines explode in a

cascade/progressive manner, where each explosion will begin 3 frames after the previous one began.

The mine animation image sequence is provided in the scaffold, comprising of the 10 files "mine0.png" to "mine9.png".

If there isn't a mine on that tile, the tile will show a number representing how many adjacent mines there are. The colours for these numbers are given to you in an `int[]` array for RGB values in the scaffold, `mineCountColour`. If there are no adjacent mines, it remains blank, and all adjacent tiles will also be revealed. If all non-mine tiles are revealed, the game ends. Display the message "You win!". The player can right click on a tile to flag or unflag it. If flagged, it cannot be left-clicked to reveal.

A timer in the top-right corner records how many seconds elapsed since the game began. The player can press 'r' to restart the game.

### Marking Criteria (4%)



[Assignment\\_Warmup\\_Minesweeper.pdf](#)

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Note that the size limit is 20MB so please follow the instructions carefully and do not submit any folders other than src.

Please follow the instructions to submit your assignment:

1. Zip the assignment files (src folder, build.gradle). Ensure these are in the root directory of the zip file (not inside a subfolder called 'assignment' or something else. To do this, highlight all of the files and right click -> send to zipped folder. Don't do this to the folder they are contained within, but the files themselves).
2. Upload the zip file here
3. Unzip the zip file (when uploading, select "upload and extract"). You should see ONLY src, build.gradle in the root directory of the workspace. **Do not submit the build folder, or gradle folder.**
4. Click SUBMIT to record your submission

Thank you. :)

To verify that your submission works, click on "Submissions" (top right corner), click the most recent submission, right click on your workspace and select "Download All", unzip the folder, and run `gradle run`. This is the process your marker will use for running your code. If you are unable to get your code to run this way, your marker will also be unable to get your code to run.