Assignment 8 CSCI 133 Section 03, 04, 05

What to turn in:

1. **Entire IntelliJ folder zip-compressed.**
2. The compressed file should be named: **Assignment_8-SL#-<your csusloginID>.zip** where SL# is your submission number, a number between 1 and 7 – see below for details.

Please zip the entire IntelliJ folder and submit it.

1. This is due one hour before your lecture *next-to-next week*, which is the week of April/22. All requests for extensions without proper documents will be silently ignored. Requests should come ahead of the deadline.
2. Please read the instructions first before asking questions and please avoid asking for information already covered in this document.

Assignment:

Create the clone of the mine sweeper game that is shown in the accompanying video(s).

Your program should:

Set the board dimensions to the following:

int POLY_OFFSET = 40, POLYGON_LENGTH = 100, POLY_PADDING = 40;

int NUM_POLY_ROWS = 9, NUM_POLY_COLS = 6;

Total number of mines should be 4, randomly distributed – randomization similar to how it was done in "Game of Life" Assignment.

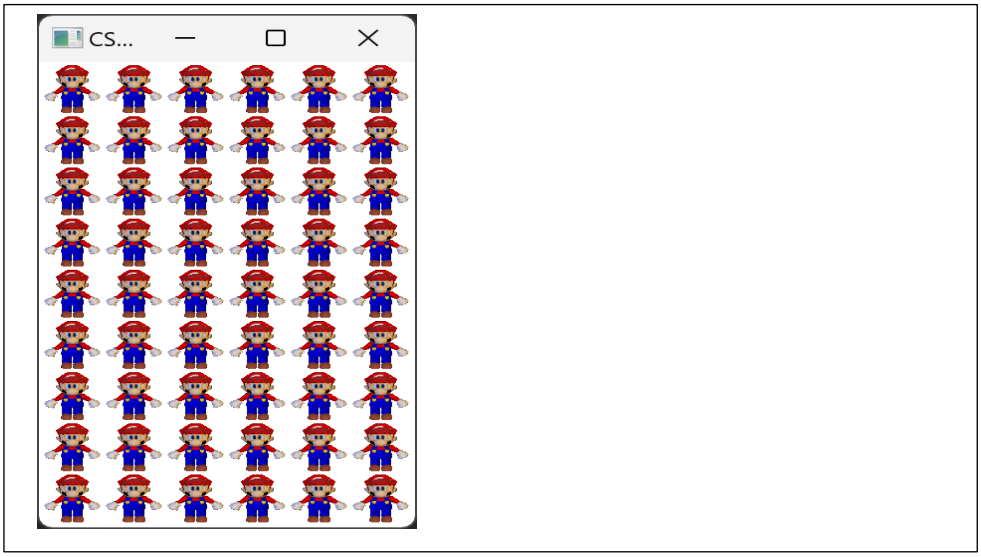
Partial credits will be awarded as indicated at the end of this document.

1. Print the board configuration in the IntelliJ console on loading the program. Notice that each load of the game will have the mines in random locations. Mario locations are printed as 0's and mine locations as 2.

2. Tiles displayed as square polygons and no textures added. Tiles should be blue color; the background should be white or black.

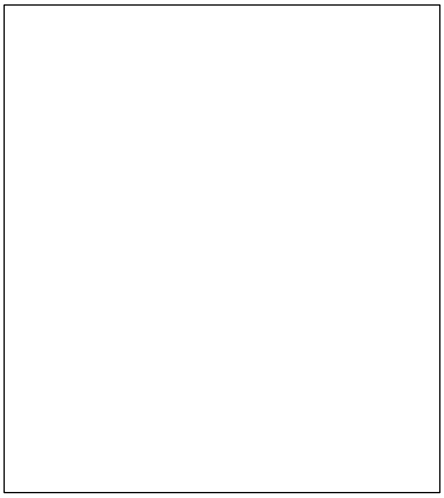
3. Should print the (row, col) that a tile is clicked on, if AND only IF the Left Mouse Click was on a tile. It should not print anything if the click was in the areas outside any of the tile. For each click, the message string should be printed *exactly once*, only when the click *was on an unexposed cell*.

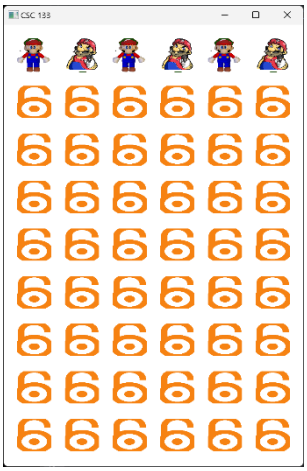
4. Texture map all the four tiles with the same texture. The texture should be loaded as a single image of four sub-images which are loaded into the memory as a single texture. See the image below. (A possible candidate image provided.)



5. Show four different textures, three different ones in the first row and the fourth one in the rest of the rows – see the image below.

   The image below shows Mario with a gun for the fourth texture, you can use that or you can use the fourth image in the texture provided, which is an image for a mine.





6. On clicking the tiles, the texture changes appropriately, based on whether you clicked on a tile with state 0 or state 2.

7. The game is reproduced as shown in the video.

Each step in above is suggested precursor to the next step. But if you are confident of any of directly coding up any these steps, including step #7, you are welcome to do that and submit it.

Following is the points break up for each step:

Item#	Points	Description
1	15	Print random array in the IntelliJ console for the (9 x 6) board.
2	25	Add 9 x 6 tiles without texture.
3	40	Add mouse click. The mouse click should respond with a message in the console window **only when clicked on a tile and not respond when clicked in dead areas** of the window**.**
4	60	"Mario everywhere" – all tiles show Mario's texture (or a texture of your choice).
5	80	"Mixed textures" – enhancement on "Maio everywhere" – now add other textures as shown on above.
6	100	"Switch textures". When you click on a tile, it changes textures, and **if you click on a changed texture**, nothing happens.
7	140	Mine sweeper clone working as in the video