International University of Malaya-Wales

Faculty of Science Technology Engineering and Mathematics

(BCE509)

Web Technology

Submission Title:

Assignment 1

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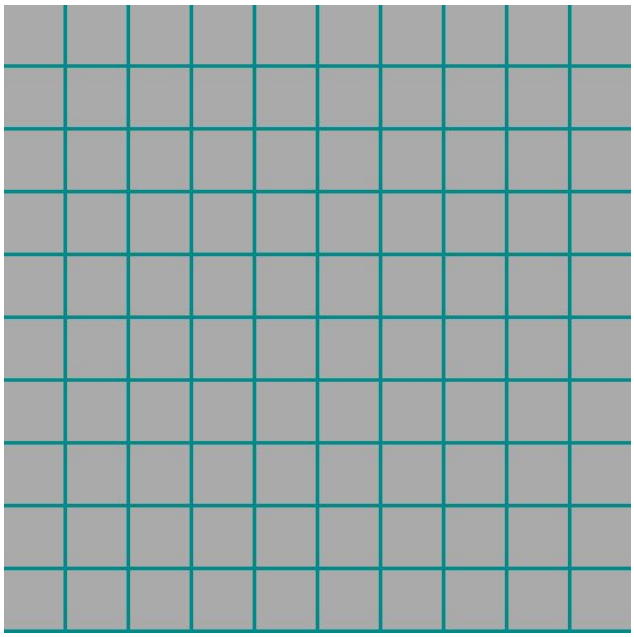
Maze Game Presentation Technical Approach:

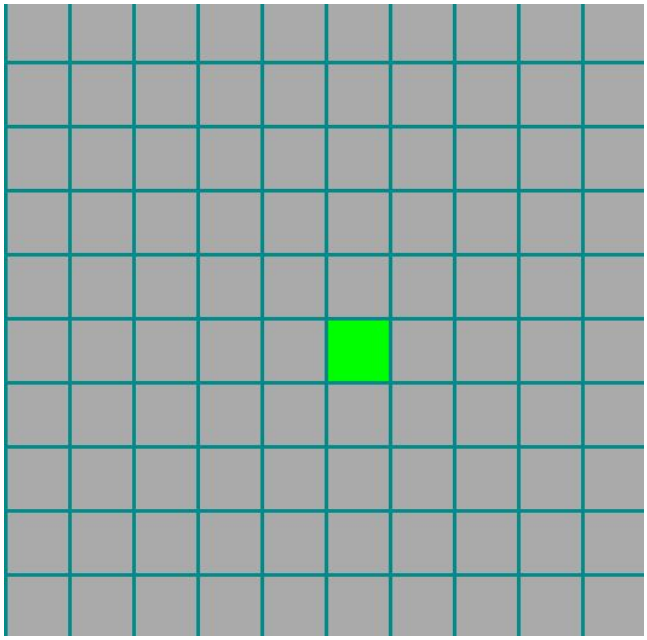
Steps:

1. Player has five points life at the starting the game and the program will deduct 1 point at each collision of the player and a bomb; The player is able to request for help the keystroke B to see a bomb and will result in a 1 point deduction and E to see the door with a 2 point deduction.

2. **Build the grid from 0 to 9 vertical and horizontal using ctx function of canvas**



3. **Position the player object at [5][5].**



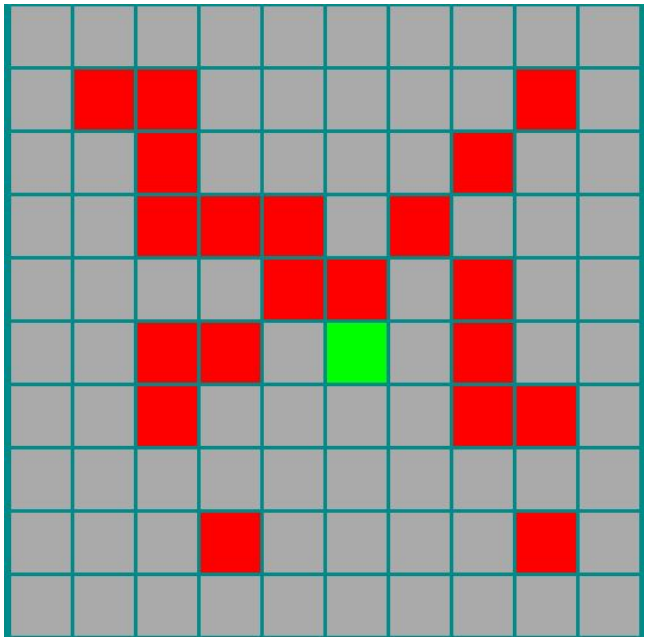
4. **Define the Bombs position using one dimensional array with random position using javascript random generator from 0 to 9 pointer. All the bombs positions are hidden to the player, this example is only to show the possibility of hitting a bomb.**

   Ex:

```
Boombtiles[0] =
"2,2|6,8|3,3|1,8|2,1|7,8|6,3|8,8|1,5|7,5|7,7|1,6|7,5|2,8|6,
3|1,7|3,6|2,8|4,4|7,6";
Boombtiles[1] =
"4,5|7,9|5,1|2,2|2,5|2,8|6,3|1,7|7,7|3,4|8,8|3,3|1,1|6,8|2,
3|1,8|2,2|3,3|7,2|6,6";
Boombtiles[2] =
"7,5|3,5|8,5|5,6|8,1|7,4|2,3|1,6|6,6|2,1|4,8|7,6|3,5|4,3|2,
2|1,1|4,4|7,7|5,4|2,6";
```

```
Boombtiles[3] =
"4,4|7,7|5,4|2,6|8,1|6,2|4,3|7,8|8,1|6,8|3,3|6,6|2,1|6,5|2,
3|1,6|5,1|8,8|2,3|5,8";
Boombtiles[4] =
"3,6|2,8|4,1|7,6|7,5|4,3|2,2|1,1|2,5|2,2|3,3|6,6|8,1|6,5|2,
3|1,6|5,1|6,8|2,3|1,8";
Boombtiles[5] =
"4,4|3,7|5,4|2,6|8,1|4,8|4,3|1,5|7,1|6,8|2,3|1,8|7,7|5,2|1,
6|8,3|6,8|4,2|8,8|3,3";
Boombtiles[6] =
"5,8|7,3|3,5|6,6|8,1|3,7|5,3|1,4|4,5|2,8|6,3|1,7|7,7|3,3|2,
2|1,3|1,1|6,8|1,1|8,3";
Boombtiles[7] =
"3,5|7,7|6,5|8,6|8,1|4,4|1,3|6,6|1,1|6,5|2,3|4,8|8,5|6,8|3,
3|1,8|7,2|5,4|1,6|8,8";
Boombtiles[8] =
"4,4|3,3|7,2|8,6|8,8|3,8|2,3|2,2|5,4|7,6|2,5|4,3|2,1|1,1|7,
5|3,5|6,3|2,6|8,1|7,4";
Boombtiles[9] =
"5,7|3,4|6,7|8,3|6,1|1,8|2,2|1,8|3,3|7,2|1,6|8,8|2,6|2,5|1,
2|6,8|4,4|1,8|7,7|5,4";
```

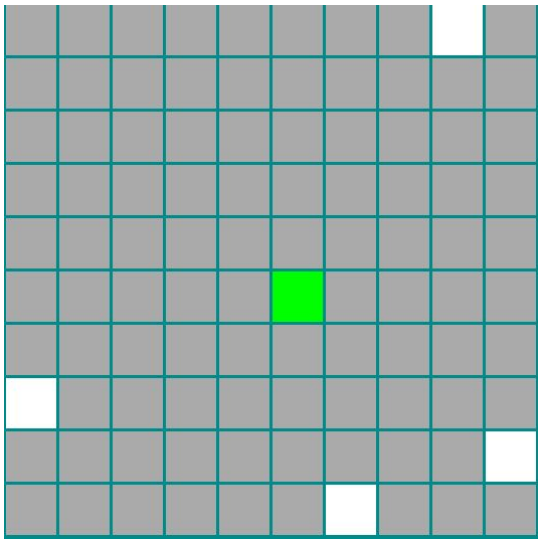
Bombs Screen: Random Position at 8.



5. **Define the Doors position using one dimensional array with random position using javascript random generator from 0 to 9 pointer. All the doors positions are hidden to the player, this example is only to show the possibility of exiting a through a door.**

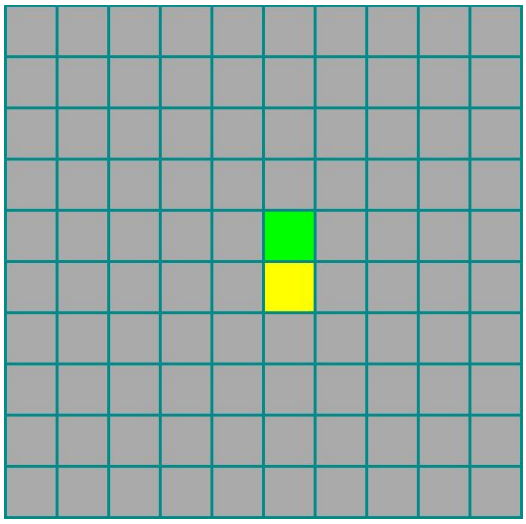
```
Doortiles[0] = "9,5|7,9|5,0|0,6";
Doortiles[1] = "9,8|6,9|8,0|0,7";
Doortiles[2] = "9,1|3,9|6,0|0,4";
Doortiles[3] = "9,2|5,9|1,0|0,5";
Doortiles[4] = "9,6|7,9|2,0|0,4";
Doortiles[5] = "9,7|8,9|5,0|0,6";
Doortiles[6] = "9,4|5,9|8,0|0,4";
Doortiles[7] = "9,2|3,9|7,0|0,7";
Doortiles[8] = "9,2|7,9|6,0|0,4";
Doortiles[9] = "9,7|4,9|7,0|0,8";
```

Doors Screen: Random Position at 8.



6. **Player Movement using the keystroke: W= UP, A=RIGHT, S=DOWN and D=LEFT. At this stage our object position was in [5][5] with variables i=5 and j=5 any movement from the keystroke will determine from our i and j variables.**

   Ex: i = 4 and j=5;

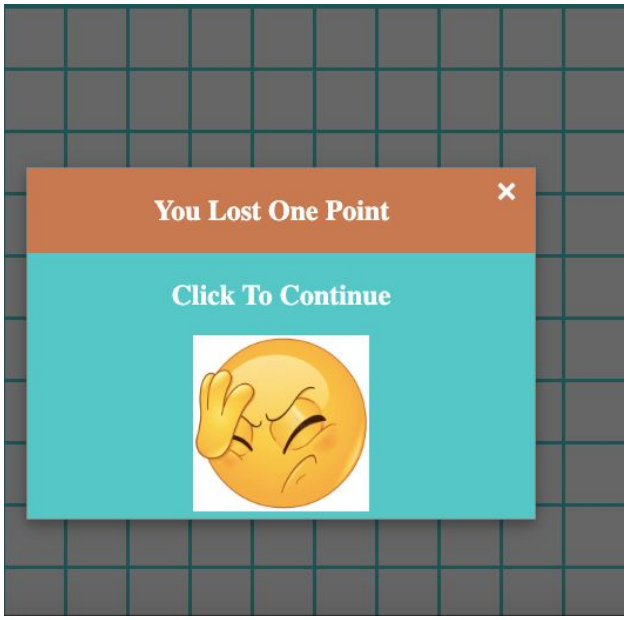


Note:

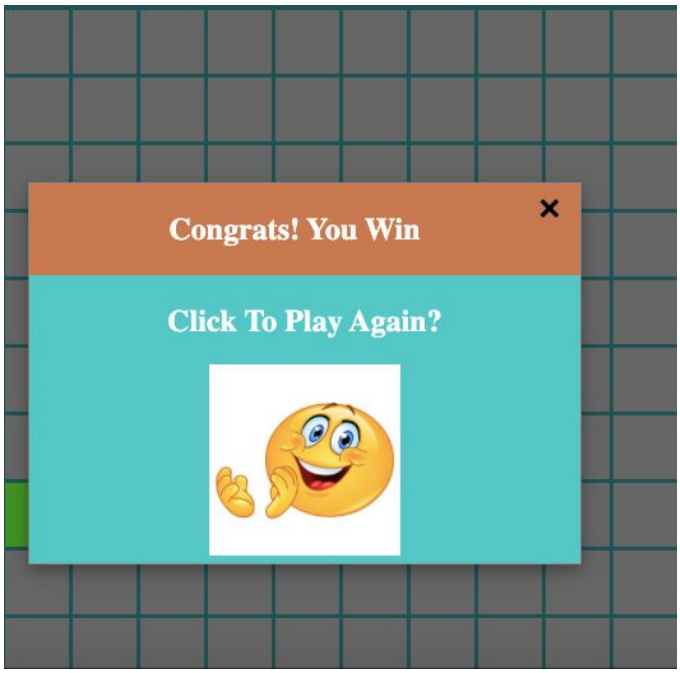
The yellow box is to determine where the previous of the player and

The green box is the current position of the player which I have mentioned above.

7. **When the player collides with the bomb. It will display as below:**



8. **When the player finds a door. It will display as below:**



9. **Request for Help: When player click on Keystroke B to see one Bomb**

10. **Request for Help: When player click on Keystroke E to see one Door**

11. **When the player to click an invalid move Wrong Move:**