Maze report

The Data structure :

1. Stack:

Use this structure in the DFS to push the children of the point on it and to pop the next node which should visited.

2. Queue:

Use this structure in the BFS to enqueue the children points of the node which maked as visited then dequeue the point which I want to visit her children.

3. 2D Array of point :

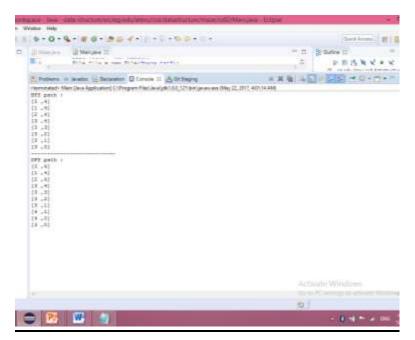
Use it to store the parent of the node in the position of the children node.

• Sample Run:

7 6	
S	
.#####	
#####.	
.#####	
E	

Main [Java Application] C:\Program Files\Java\jdk1.8.0_121\bin\javaw.exe (May 22, 2017, 1:08:58 AM)		
p 5		
0 4		
0 3		
0 2		
0 1		
0 0		
1 0		
2 0		
2 1		
2 2		
2 3		
2 4		
2 5		
3 5		
4 5		
4 4		
4 3		
4 2		
4 1		
4 0		
5 0		
6 0		
6 1		
6 2		
6 3		
6 4		
6 5		

5 5 ##..S ..#.. .##.. E....



• The Diffeernce between DFS && BFS:

1. IN the DFS:

I only visit the parent node and loop on her children and push them in the stack to visit it later.

2. In the BFS:

I visit all children node before enqueue them in the Queue this give me only the shortest bath between the start and end point.