

"Here Be Dragons" (mini-quest I)

In this mini-quest, you are asked to portray the classical situation of "The Maze and The Dragon", which story follows:

"You awake still shattered from your last encounter...all is still fuzzy in your mind as you don't have any recollection on how you got to where you are...you can see a poorly-lit corridor and feel the damp smell of closed quarters. Where are your things? You are still dressed with your leather clothes, but no weapons or armour. Where are you? What dangers lie beyond?...A tinkle in the back of your head tells you that you must leave this place as fast as you can..."

Note: It is expected that you use an IDE (Eclipse) and the JAVA Language to undertake this quest. At this point there is no need to use classes, only the main program and/or auxiliary methods so that the code is modular, reusable and clearer. (KISS)

Task #1. Basic Game Logic

a) Let's start with the game map. Store in memory and print out (on console) the following map (no colors, textual characters only). *Hint: Use a two-dimensional array, initialised on declaration.*

X	X	X	X	X	X	X	X	X	X
X	H								X
X		X	X		X		X		X
X	D	X	X		X		X		X
X		X	X		X		X		X
X							X		E
X		X	X		X		X		X
X		X	X		X		X		X
X	K	X	X						X
X	X	X	X	X	X	X	X	X	X

Legend:

- X - Wall
- E - Exit
- H - Hero
- D - Dragon
- K - Key
- empty cell - free space.

b) The user should be asked to enter single character commands in order to move the main character ("hero") in 4 possible directions (up, down, left, right). If there is a wall or door towards that direction, the hero remains at the same position. Upon entering each command, the program should update the game and reprint the game map. *Hint: Use the Scanner class for input, as seen at the Tavern.*

c) The hero needs to pick up (walk over) the key ('K') to open the dungeon exit door ('E'). If the hero reaches the exit without the key it cannot leave the dungeon (the exit is closed). If the hero reaches anywhere near the dragon (any adjacent square, except diagonals), it is immediately killed and the game is over. At this point, the dragon is asleep and does not move, so the hero should be safe, as long as it keeps away from him. Reaching (stepping over) the open exit door, the game ends with victory.

Specific Tasks per Encampment

These are to be done by the packs that belong to that specific encampment.

- Encampment 2A (Monday Morning)

d) Game elements (except the Exit) are placed, randomly, throughout the maze. Every time the game launches, the Hero, Dragon and Key (its positions) are randomly placed on the game board (always on a valid cell and the dragon can't be placed near the hero, allowing, at least, one move).

- Encampment 2B (Monday Afternoon)

d) The key is randomly placed on the maze, when the game launches (on a valid position, without overlapping any of the other elements). Picking up the key does not "remotely" open the door. The Hero must reach the exit and spend one extra move (towards the exit cell) to unlock the door ('E' disappears) and only then can it move onto the exit and into freedom.

- Encampment 5 (Thursday)

d) The exit is randomly placed on the maze, when the game launches, on a valid position. This means the exit can only be placed on the outer wall (except on the vertices), without having any of the other game elements (hero, dragon, key) on any of its adjacent inner positions. Assume that the hero, dragon and key element can be at any position (not just the ones shown on the original map).

Good luck!

P.S. - Link to YouTube walkthrough video that solves the common part of the mini-quest:

<https://www.youtube.com/watch?v=8EgeWkYzCkg>