

REPORT - DONJON ROGUE

C PROGRAMMING PROJECT 2021- 2022

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How to launch the code?

Compile : make

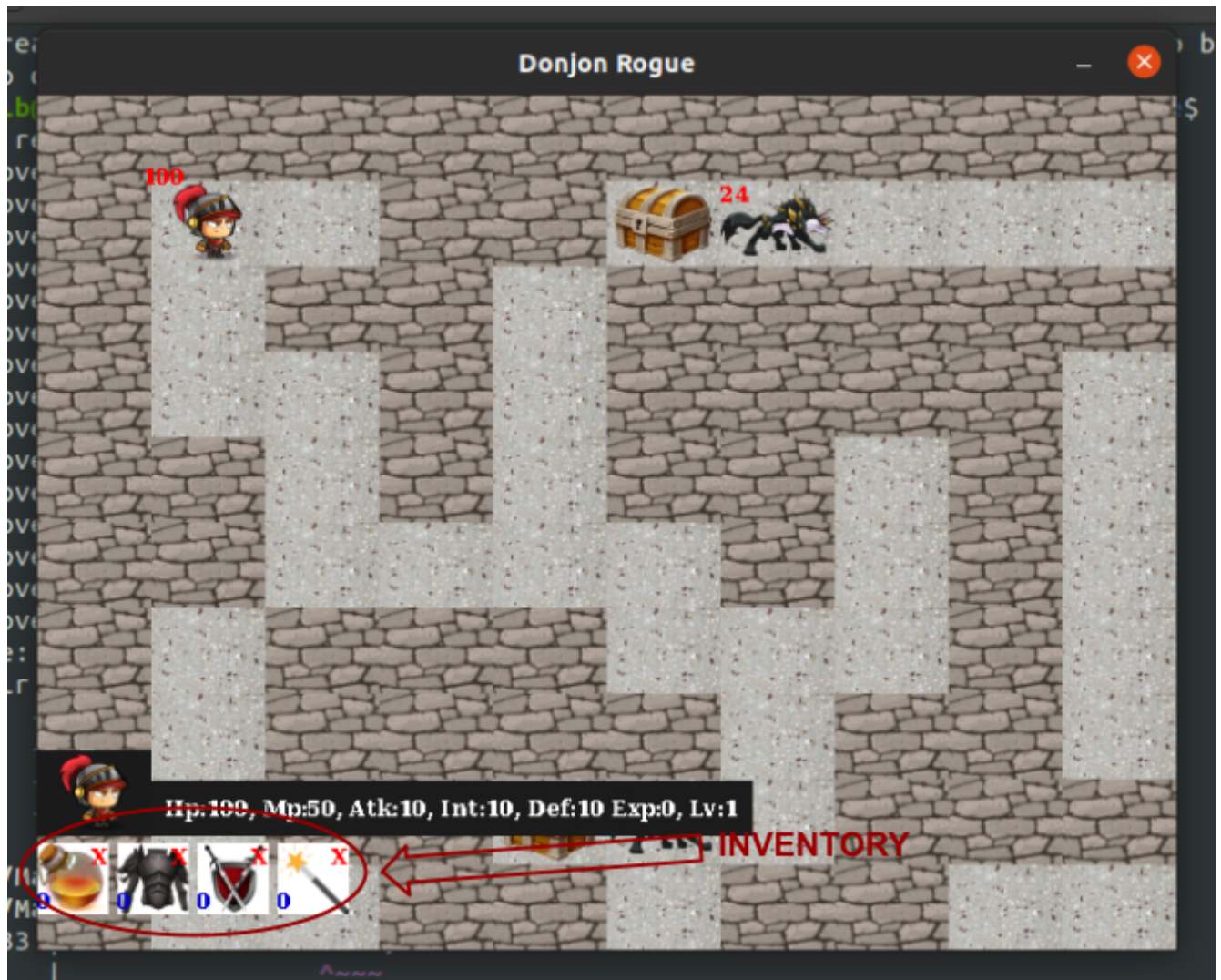
Run : ./donjon

Presentation of the project

Our project is limited to the graphical part, when we start a game, a welcome screen appears. We have to select between "new game" or "resume game". If we select "new game", the game opens with a new field, and if we click on "resume game", the player will be able to play on the previously saved field.

The player moves with the right, left, down and up arrows.

In order for the player to kill the monsters, you just have to click on them. The player can also change the attack technique by pressing "c".



How the code works

First of all, we create a ground (`ground[line][column]`), in which we will store all the elements of the game.

We will first store the player, with all that defines him (hp, mp, atk points etc), his position and his inventory.

For storing monsters and treasures, the operation is similar.

The treasures contain 4 items. They are placed randomly but in such a way that they are between three walls.

First you define the monsters (hp, atk), then you place them in front of the treasures.

When the player kills the monster, he must position himself on the treasure. The contents of the treasure are then displayed: the player can choose what to take by clicking on the items offered. If the player's inventory is full or if he does not want to keep an item, he can click on the cross at the bottom right of each item.

Improvement path / what we failed to do

The save

As far as saving is concerned, we managed to save only the terrain with the location of the monsters and treasures generated during the first launch.

To do this we took a seed equal to the time of the current game and stored it.

However, we did not manage to save the killed monsters or the already opened treasures.

The floors

We did not manage to generate the other floors.

Indeed, when we reduce the size of the terrain (for example when we divide by 4 the width and length), the generation works. But with the current size, there is a segmentation error. So we preferred to leave only one floor to make the game playable.

Group work

Our organisation: how did we work together?

We called each other by screen-sharing and coded together thanks to VSCode's LiveShare, we could see live what the other was coding. So, when we were stuck, we would search on our side and then come back to show our progress.

Conclusion

This project allowed us to produce a video game. Although the project seemed to be difficult to code at first, it forced us to think intelligently about how to slice, organise and produce the code.