

Computació Gràfica i Multimèdia

Work Package 2

Màster en Enginyeria Informàtica

2021/22 year

Project description

This year we will develop a project devoted to the creation of a “race in labyrinth” 3D videogame.

Work plan for the second work package

The second work package is composed of the following tasks:

- Inclusion of a starting point for the main and the enemy characters.
- Inclusion and animation of the main character.
- Inclusion and animation of the enemy character.

Task 1. Inclusion of a starting point for the main and the enemy characters

Some details are given next:

- The game requires that both the main and the enemy characters have a starting point.
- The starting point of the main character will be the upper left square. The starting point for the enemy character will be the lower right one.
- Modify the map drawing procedure so that both squares are drawn using a different color.

Task 2. Inclusion and animation of the main character

Some details are given next:

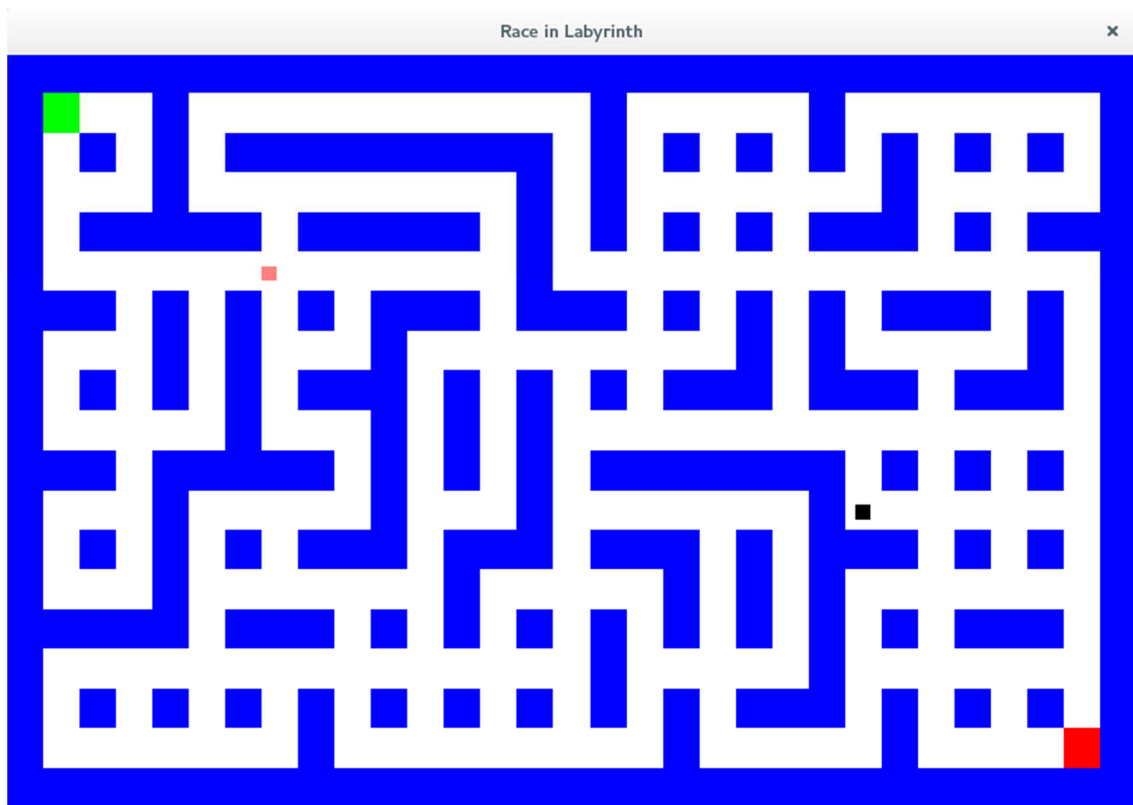
- The main character can be simply represented as a square or a circle.
- Its objective is to move onto the enemy starting point.
- It moves from the center of a square to the center of a contiguous one. Movements are indicated through the keyboard.
- Its movement has to be smooth and implemented using variable frame rate.
- Its starting point in the map is the upper left square.
- It cannot move to a square occupied by the enemy character.

Task 3. Inclusion and animation of the enemy character

Some details are given next:

- The enemy character can be simply represented as a square or a circle.
- Its objective is to move onto the main character starting point.
- Its movement has to be smooth and implemented using variable frame rate.
- The enemy character moves from the center of a square to the center of a contiguous one. Its movements are decided autonomously. Implement it as an intelligent agent that makes its own decisions.
- Its starting point in the map is the lower right square.
- If cannot move to a square occupied by the main character.

An example is next shown.



Deadline

This activity is recommended to be handed in before **October 7th, at 18:10h**, by uploading a zipped file containing the source code through the corresponding activity of the virtual campus. Include only “.c”, “.cpp” and “.h” files together with a “Makefile” script which compiles the project in a Linux console.