



B2- C Graphical Programming

B-MUL-151

TekAdventure

Adventure video game

v1.2



TekAdventure

Adventure video game

binary name: tekadventure
repository name: tekadventure
repository rights: ramassage-tek
language: C
group size: 3-4
compilation: via Makefile, including re, clean and fclean rules



- Your repository must contain the totality of your source files, but no useless files (binary, temp files, obj files,...).
- All the bonus files (including a potential specific Makefile) should be in a directory named *bonus*.
- Error messages have to be written on the error output, and the program should then exit with the 84 error code (0 if there is no error).



The TekAdventure project consists of programming an adventure video game that displays the following characteristics:

- The decor should display a two-dimensional parallax, whose point of view changes depending on the position of the mouse or the character. In this way, a decor is made up of several copies of different depths.
- The character should be able to move around on a position graph. With each of the graph's nodes that contain information relating to its depth (and therefore influencing the character's size) according to its depth, the character is also likely to pass from copy to copy on the screen.
- It should be possible to ask the character to move around on the screen. He/she will then move from position to position by following their links.
- Your character should be animated when he/she walks.
- Your interface should make it possible for your character to receive certain decor interaction orders, like "Go", "Take" or "Look".
- Your decors, graphics, depth, parallax and the position of your nodes and their values should be defined by configuration via a file, whose format you will create.



Extras

- Your program should be accompanied by an editing map that allows you to arrange the copies, place the click zones, the movement nodes and to configure them. Being able to call one of your C functions is a bonus. Being able to write or include C directly in your project map is even better.
- Your program should include nodes that perform weight's function, allowing a character to move from one area to another with a more natural behavior - with curves being drawn instead of straight-line movements.
- Certain nodes should also be able to have physical reality: a space drawn with width and height where the character can move about without restrictions linked to the position graph.
- Part of the grade will come from an aspect that is not described here: the game itself.

Don't hesitate to observe classic games like: Monkey Island, Space Quest, Indiana Jones and The Fate Of Atlantis or Zac Mc Kraken. Obviously we're not expecting a very long adventure.



Authorized Functions

- C Math library (-lm)
- C Libdl (-ldl)
- stat
- opendir
- closedir
- readdir
- open
- close
- read
- write
- srand
- rand
- time
- malloc
- free

CSFML functions:

- all of Graphics module's functions
- all of System module's functions
- all of Window module's functions
- all of Audio module's functions
- all of Network module's functions