FEUP – MIEIC – LCOM 2019/2020

Project Specification

Group Section 1, Group ID 03

1. Authors

João Carlos Machado Rocha Pires (up201806079)

Pedro Jorge Ribeiro Botelho de Moniz Pacheco (up201806824)

2. Short description of the project

Our project is a game, called *Homem Bala*, which consists in a videogame of the famous circus performance (https://www.youtube.com/watch?v=unQtXYfzxO4). The user will be able to control the cannon, through directional keys, and throw the Bullet Man into a target. Each level will have a time associated, in order to make the game more challenging.

3. Modules

3.1. Timer

In this module, we'll work on the timer device, via interruptions, creating a countdown timer to be used in our game with the purpose of making it more challenging.

Group member responsibility: Pedro Pacheco

3.2. Keyboard

In this module, we'll work on the keyboard device, via interruptions, allowing the user to control the direction of the initial throw and pause the game, accordingly to specific keys.

Group member responsibility: João Pires

3.3. Mouse

In this module, we'll work on the mouse device, via interruptions, so that the user can select one of the options from the different menus.

Group member responsibility: João Pires e Pedro Pacheco

3.4. Video card in graphics mode

In this module, we'll work on the video card in graphics mode, creating three main screens, with some variations, using mostly the functions created in Lab4.

Group member responsibility: João Pires

3.5. Menus

This module will be the complement of the module described in 3.4. and will consist of short and intuitive menus to allow the user to choose which action to perform.

Group member responsibility: Pedro Pacheco

4. Development Plan

Our development plan consists in the distribution of the modules through the five weeks in which we'll add module by module to reach the final version of the game.

4.1. First week (28/11 – 4/12)

During the first week, we'll develop the main screens of our game. (Module 3.4.)

4.2. Second week (5/12 – 11/12)

During the second week, we'll introduce the keyboard device to control the movement in the game. (Module 3.2.)

4.3. Third week (12/12 – 18/12)

During the third week, we'll introduce the timer device to create a countdown for each level of the game. By the end of this week, we'll be able to show the first demo of the project in the Lab class. (Module 3.1.)

4.4. Fourth week (19/12 – 25/12)

During the fourth week, we'll create the menus using VBE. (Module 3.5.)

4.5. Fifth week (26/12 – 01/01)

This will be the last week of development, in which we'll introduce the mouse to control the menus. (Module 3.3.)

4.6. Sixth week (02/01 – 06/01)

During this week, we'll focus on writing the final report and check if everything is working as expected.