PORTO FEUP FACULDADE DE ENGENHARIA UNIVERSIDADE DO PORTO

Project Proposal

T01G03 LCOM - 2021/22

Project description

This project is based on the "bomberman" game, which has different levels. Each level has an arena with many obstacles where the player has to defeat multiple monsters and destroy obstacles by planting bombs. The bombs can explode in vertical and horizontal direction. The player's objective is to survive and escape through the exit.

Devices to be used

- Timer
 - Keep a fixed frame rate in the main game loop.
- Video Card
 - Show menu and game interface.
 - o Draw all game objects and enemies.
 - Usage of double buffering and page flipping techniques, in order to prevent flickering.
- Keyboard
 - User input to interact with the character (Space Bar to plant bombs and WASD to move).
- Mouse
 - Select options in the main menu.
 - After planting a bomb you can click it to make it explode.
- RTC
 - o Inform the user about the current date and time.
 - Add a leaderboard with the players' times and when they accomplished them (if we have time to do so).

Work Plan (3 weeks)

- 1. Timer and Video Card
- 2. Keyboard and Collision Detection
- 3. Mouse, RTC, Documentation and Report

Students

Alexandre Correia - up202007042 Duarte Lopes - up 202006408 Tiago Branquinho - up202005567 João Sousa - up201904739

