### Faculdade de Engenharia da Universidade do Porto



# **How to Survive MIEIC**

Desenvolvimento de Jogos de Computador Grupo 09

Mestrado Integrado em Engenharia Informática e Computação

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## 1. Game Concept

How To Survive MIEIC is a single player Role-Playing Game (RPG) where the player is a MIEIC student from FEUP who needs to balance his social life with his academic life through some predefined challenges, without dying and before time ends.

#### **NPCs**

The game has three types of Non-player characteres: students, teachers, and zombies.

There are different types of students. Some simply ask the player for beers, being responsible later on for the completion of a secret challenge. However, there are two students with specific roles. One appears at the beginning of the game in order to help the player start the challenges, and the other is used to do a group project with the player in order to complete a specific challenge. There is also another student that takes part in another secret challenge.

There are also four different teachers with different roles, and they are used to complete the challenges, handing out project assignments, being responsible for the final exam or being a part of the quests.

Finally, the game includes some zombies whose only goal is to attack the player until his life bar reaches zero.

The player interacts with students and teachers through dialogues.

### **Collectable objects**

There are four collectable items needed to complete the challenges: **beers**, **books**, two **projects** and one **key**. The beers and the books are spread throughout the game, the beers in plain sight and the books hidden in shelfs and lockers, while the projects and key are placed in specific places that the player needs to find out.

### **Challenges**

The player must complete 5 challenges before time ends and without being killed by the zombies:

- Gather 5 Books;
- Gather 5 Beers;
- Talk to 4 Different Students;
- Deliver 2 projects (thorugh interaction with some professors and students);
- Pass the Final Exam (by answering correctly to at least half of the questions or by cheating).

### **Secret Challenges**

There are some extra and secret challenges that are not needed to win the game but are used to keep it interesting even after its completion. The player only finds out they existed after completing them. They are as follows:

- Pass the Final Exam with a Grade of 20/20;
- Convince a Professor to Raise Your Final Exam Grade (following a specific dialogue with the exam responsible professor and showing some preserverance);
- Kill a Zombie (by pressing a certain key (k), that is not revealed to the player in the instructions);
- Discover How to Pass the Exam with 0 Effort (handing out 5 beers to different students, the next student (who should ask for a beer) reveals a tip to pass the exam);
- Convince a Professor to Let You Retake the Exam (following a specific dialogue with the exam responsible professor);
- Cheat on the Final Exam (finding the student who will let you cheat).

### 2. Installation

- 1. Download the executable files;
- 2. Open the executable file;
- 3. Have fun playing!

**Note**: **Linux** users only need to download the .x86\_64 extension file. **Windows** users need to download .exe & .pck extension files, have them on the same directory and to run, open the .exe file.

# 3. Playing Instructions

- Arrow keys (up, down, left & right): to move the player along the screen;
- Space Bar: to interact with the NPCs (Students & Professors);
- P key: to pause the game;
- **Mouse**: to navigate the menu as well as to see the challenges (which can be expanded with the button on the top right corner)

# 4. Development Tools & Resources

#### **Game Engine:**

Godot 3.2.3: https://godotengine.org/

#### For characters sprites:

RPG Maker: https://www.rpgmakerweb.com/

#### For assets:

• Kenney: <a href="https://kenney.nl/">https://kenney.nl/</a>

Cute Wallpaper: <a href="https://cutewallpaper.org/">https://cutewallpaper.org/</a>

#### For audito:

PaintyFilms

# 5. Development Process

Both members of the group contributed the same amount to the final project. The different task associated with the development would be distributed evenly by the members, in a way that both had contact with every different aspect of the game design (dialogues, scenary, animations, challenges, etc.). The communication was constant and when facing a harder challenge, the pair programming strategy was implemented.

Regarding the biggest challenges faced during the development, it is important to mention two main ones:

- The familiarization with the game design process and the game engine, that was new to both members;
- The creative process behind the dialogue and challenge building.

Some further work that could be done, if given the time, includes:

- Addition of sound effects;
- Improvement of some visuals, namely the sprites of some characters;
- Development of new more ellaborated challenges (both mandatory and secret);
- Development of more levels, simulating the several semesters.