

# Universidad Politécnica Superior

# **Video Game Technology**

Video Game Memory, TeamExtreme

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TeamExtreme



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# Introduction

#### Game concept

The game's proposal is to make an RPG, inspired by different references to concepts seen in class, and applied to this subject. The game consists of a girl, who when entering a virtual reality machine (RV) not noticing erased the main memory partition of the player. Then the main adventure will be to recover the lost memory fragments at different levels and finally confront a Boss to recover the last fragment and be able to escape from the RV.

#### Main Features

Reminder is a simple game in terms of aesthetics and gameplay. As for Juabilidad it consists of 3 levels and a final boss. That when the player dies will be returned at the beginning of the level.

Gender	Style	Ambience
Rpg	2D ADVENTURE	FANTASY WORLD

#### Public directed

To any player who likes a good adventure, but especially oriented to a female audience between 13 and 15 years.

#### Platform

PC, Windows 7 operating system and MacOS, with JVM.

#### Game mechanics

#### Gameplay

The player controls a character that can be moved in any direction of the plane. The map is changing along the levels. Some of the main skills of the character is to move and interact with objects. Later it will be unlocked more.



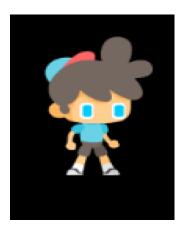
## Elements

Git:



Its name is Git, it is the main character controlled by the user. Git loses his memory due to an incident with the RV machine and will have to recover it. It can move in any direction to overcome the levels.

#### Samus:



His name is Samus, is an NPC that will accompany us throughout the adventure to help us recover our memory. The actions you have are simply dialogues



Chests:



They are entities within the game that will allow us to collect weapons, be they bows, swords or arrows

# Teleporters:



They are platforms used in the second level that teleport us from one side to the other of the map

#### Walfrick:



It is the final Boss and holder of the last memory of Git. It represents its greatest fear and will have to fight it. It has different attacks to end the life of Git and to stay inside the RV permanently.



# Flow of the game

### **Playing**

The user is tested at different levels to evaluate his wit, his memory and his rapid response to new stimuli. Each level evaluates one of these skills.

## End of the game

The end of the game is given when the three memory fragments have been collected and the final Boss has been defeated the game will be finalized.

# Player Control

#### Interaction with the character

The user can interact with Git using very simple and intuitive controls for any new user. In addition to the explanation of these at the beginning of each level:

"Address" buttons (WASD or arrow keys): the Direction buttons will allow the user to move in any direction possible.

"Interact" Bot (Enter): This button will allow the user to interact with any object in the environment, either to pick up something or perform any other type of action.

"Jump" Bot (SPACEBAR): This button is only available on the third map that is Scrol side.

#### Interaction with the environment

The character can interact with the environment by finding physical barriers like walls, also barriers that can be opened if a number of requirements are fulfilled. To interact use the interact button.

#### Interface interaction

The player will be able to interact with the interface using the control arrows. Within the options you have you can start starting or exiting the game. In future versions you can also change the resolution of the screen, raise and lower the volume and also turn off the music.



### Art

#### Style

The video game uses a 2D design style, with characters of 32. This means that the images are made by pixels, so they are sensitive to resizing, one thing to implement in future versions.

#### Music

A relaxing and soothing song is used to offer the user a quiet and stressfree experience. Aimed at the target audience.

#### Textures

Textures are 2D textures caught from a tile set. Used to make maps and objects in them. They are 2D textures formed by pixels so if you expand a lot the resolution can give you a bad experience in terms of graphics.

#### Levels

At first you wake up in a room where an introduction is made and you learn to move. From there you can go to all playable levels.

In the first level the map is a maze in which you have a reduced vision until you manage to clear the fog. The objective is to clean the fog first and then collect the memory fragment

The second map is an open map, with visibility where the objective is to reach the central area, where you will be given the fragment, through a series of teleporters.

The third map, is a map of lateral scrol where you have to go jumping until you reach the end to collect the fragment. You have to jump over obstacles with the space key and if you collide with something You will return to the beginning of the level.



# Technology and development tools.

## Programming language

We have used the Java Virtual Machine, the decision to use this language is because it was in the specifications of the project, as well as being compatible with many releases and with all the operating systems. Besides, being a virtual environment you don't have to worry about compatibility issues or memory allocations.

#### Libraries

To realize the project we have mainly used the library of Slick2D, recommended by the Professor, because of its wide content we were able to make a videogame based on state. Allowing the personalization of each one.

#### Version Control

Project version control has been done with a Git repository stored on GitHub. It has proved very useful to manage the simultaneous work on different sections of the videogame. In addition, reviewing the repository we can see what changes were achieved at every moment of the life of the project from the beginning.

## **Thanks**

We thank our teacher of video game technology for allowing us to carry out this project, which we believe has formed as programmers and we hope to have fulfilled the expectations of the same