

Software Requirements Specification

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### 1. User Stories

As a: User I want: A videogame So that I can: Teach music and rhythm As a: User I want: To see the statistics So that: I have knowledge of the areas to improve

As a: User I want: Three levels So that: I can enjoy the game for a while As a: User I want: a video game So that I can: Promote instrument learning

As a: User I want: A video game with 3 instruments So that I can: Know about them

As a: User I want: A video game So that: It is about music lessons, simulators or narrative

As a: User I want: A website So that: It contain the video game As a: User I want: A website That: Have the statistics collected

## 2. Product BackLog

#### 2.1. Functional Requirements

#### Website

- 1. Website design plan
- 2. Implementation of the Back End of the Website
- 3. Creation of the Website JS
- 4. Creation of the Website | HTML
- 5. API

#### **Data Base**

- 1. Choose the attributes that will be collected for the database
- 2. Creating the tables for the Database
- 3. Normalizar las tablas de datos hasta su 3era forma normal.

## Videogame

- 1. Musical composition
- 2. Level design
- 3. Rithm mechanics

- 4. Background music
- 5. Main character movement mechanics
- 6. Enemy AI
- 7. Scene transitions

Total: 15 Functional Requirements

## 2.2. Non Functional Requirements

#### Website

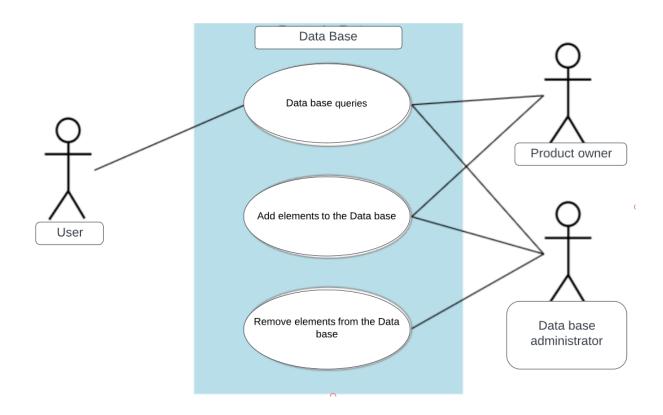
1. Website CSS design

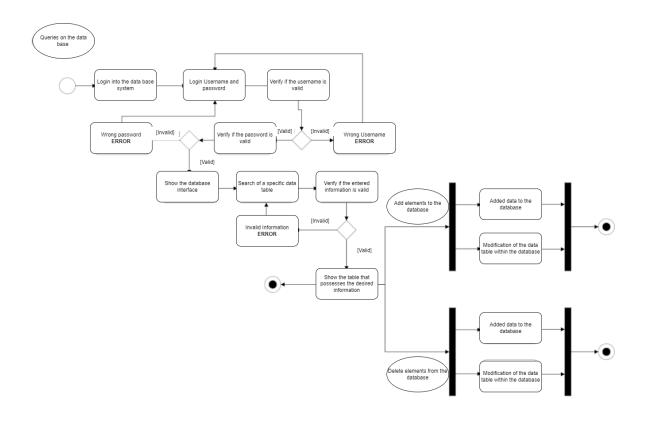
### Videogame

- 1. Background Movement
- 2. Design and animation of the main characters
  - a. Bosses (Mixtli, Tlacuatzin, Tenoch)
  - b. Player (Chubby)
- 3. Design and animation of secondary characters
  - a. Foxes
  - b. Crows
  - c. Worm
- 4. Ambient Sound
- 5. Main Menu
- 6. Attack Mechanic

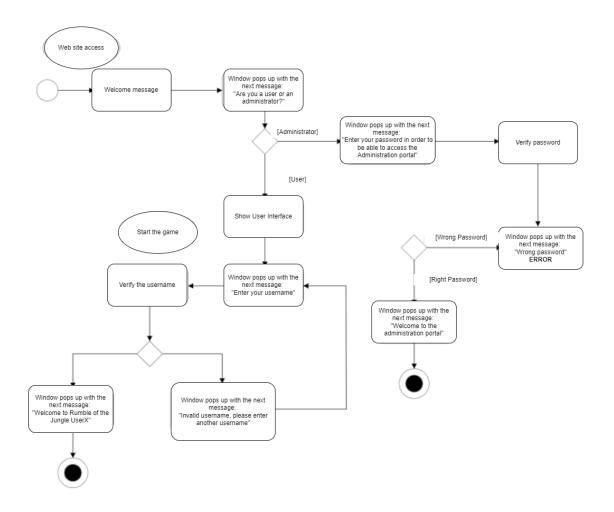
Total: 7 Non Functional Requirements

## 3. Use cases



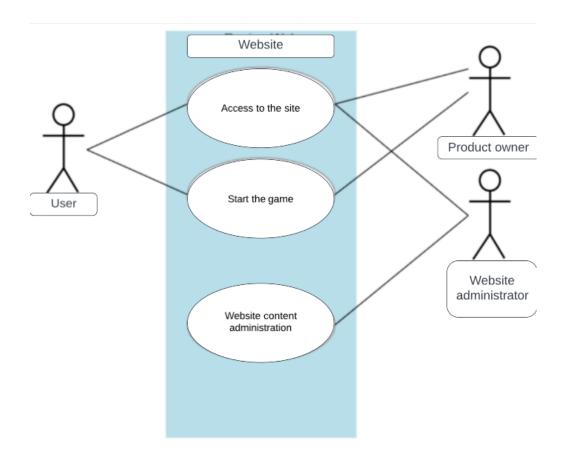


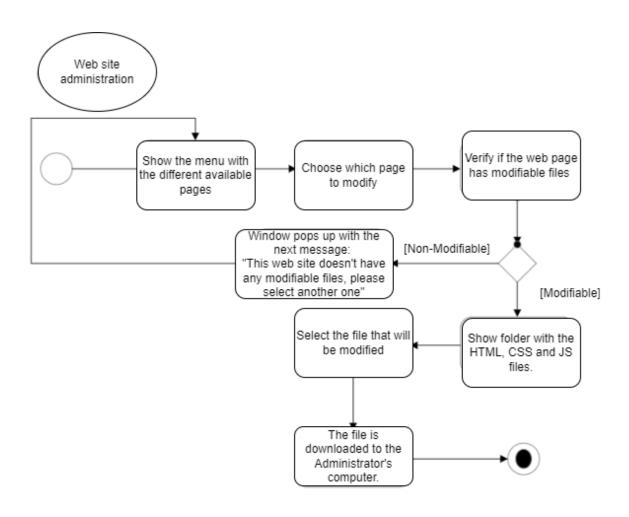
Main Flow	Step	Action
	1	The admin enters the administration portal of the database
	2	The admin needs to enter its user and password to log in
	3	System validates username
	4	System validates password
	5	The database interface shows in the admin portal
	6	Admin looks for the information
	7	The system checks if the information is valid
	8	The admin portal shows the information asked by the admin.
	9	The admin can manipulate by adding/deleting elements from the database
	10	The admin can manipulate by adding/deleting data from the database
	10	The admin can manipulate the tables inside the database.



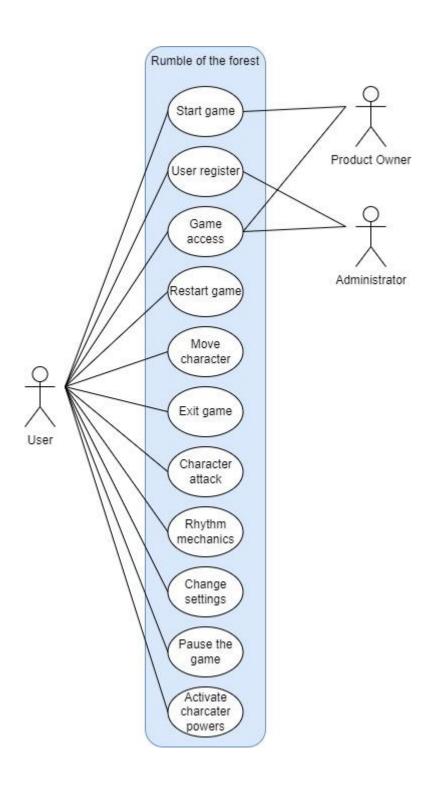
	User	
Main Flow	Step	Action
	1	Enter the website
	2	The system checks if an Administrator or User is trying to login
	3	The user types its username
	4	The system verifies if the user is valid.
	5	A windows pop ups and the game starts.

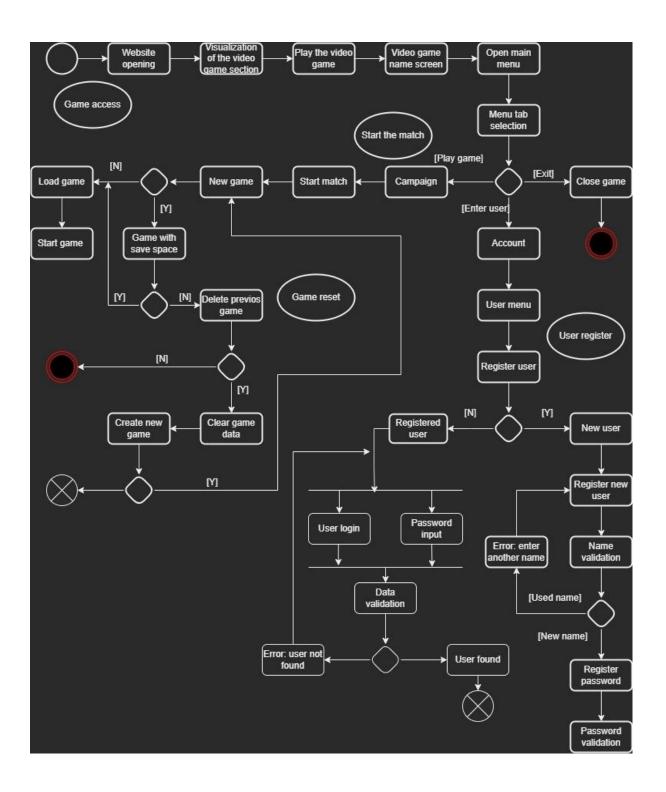
	Administrator	
Main Flow	Step	Action
	1	Enter the website
	2	The system checks if an Administrator or User is trying to login
	3	Administrator must enter its password to enter the portal.
	4	The system validates the administrator password
	5	The admin portal pop





Main Flow	Step	Action
	1	The system shows the admin menu
	2	The system validates if the selected page has modifiable files
	3	The system shows the modifiable file linked to that page
	4	The admin selects the file to modify.
	5	The file downloads to the computer





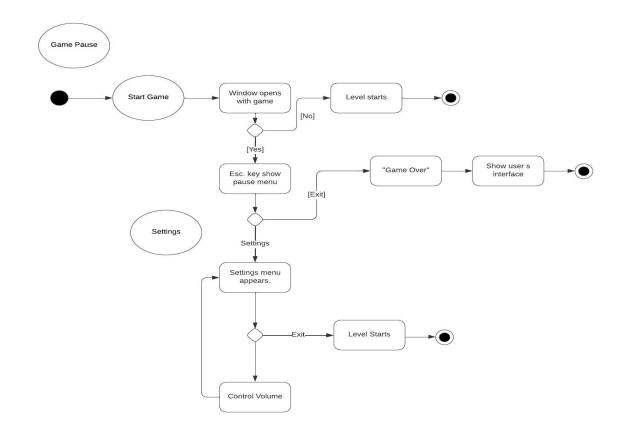
Main Flow	Step	Action: Open game
	1	Website opens
	2	The section containing the video game is displayed
	3	Game starts with splash screen
	4	Menu music is heard
	5	The menu with user and game registration options is displayed

Main Flow	Step	Action: New Game
	1	Campaign is selected
	2	The menu is displayed with the option to continue or create a game
	3	A game is created
	4	A storage space is delimited
	5	The data of the game is loaded in the selected space
	6	User data is loaded along with starting data
	7	New game starts

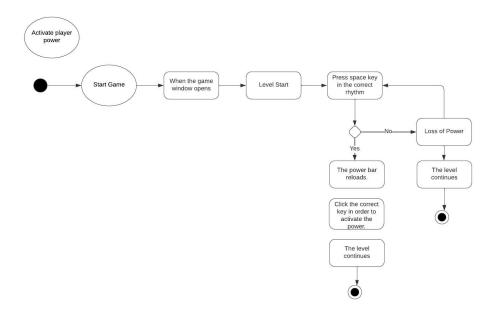
Main Flow	Step	Action: Restart game
Iviaiii i iow	ыср	Action. Restart game
	1	New game option is selected
	2	The system checks if there are available storage spaces
	3	The system asks whether to delete a space with previous data to create a new game
	4	The user confirms action
	5	The system deletes the saved data
	6	End of game reset process

Main Flow	Step	Action: User registration (new user)
	1	Users selects account option
	2	The user menu is displayed
	3	The system asks if register user
	4	The system validates decision
	5	The user does not have a registered user
	6	The system displays the registration menu
	7	The system validates username
	8	Password is validated
	9	An account is created for the user based on name and password
	10	Registration menu closes

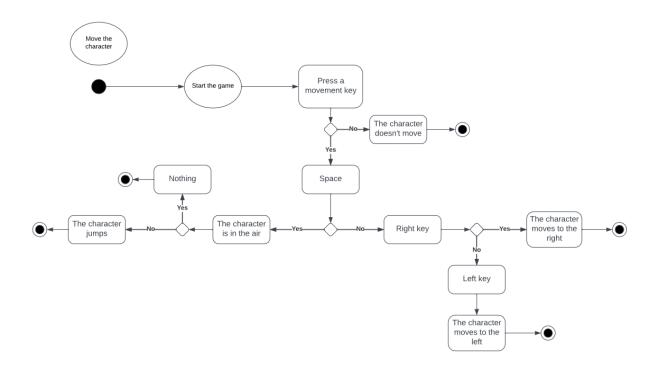
Main Flow	Step	Action: User registration (existing user)
	1	The user selects account option
	2	User menu is displayed
	3	The system asks if register user
	4	The system validates decision
	5	The user has a registered user
	6	Acces menu is displayed
	7	The system validates the entered name
	8	Entered password is validated
	9	The system compares data with database for validation
	10	Matches are found and data is correct
	11	User account access is given
	12	Access menu closes



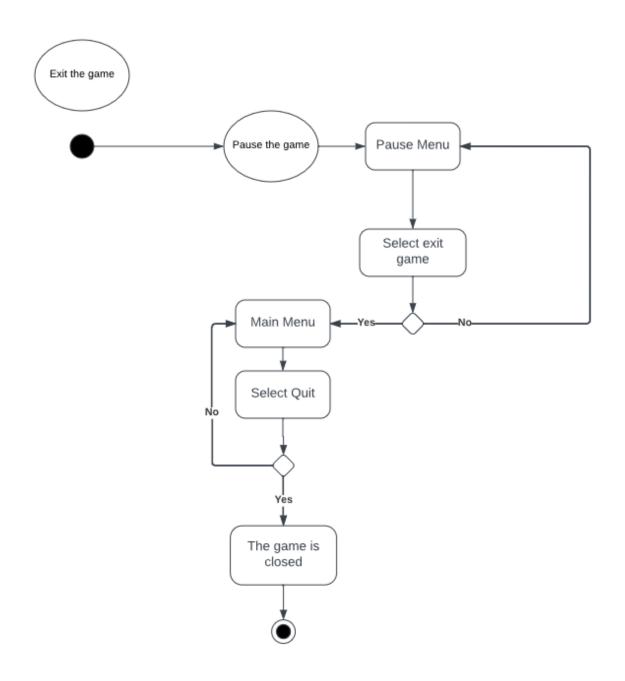
Main Flow	Step	Action
	1	The Game starts
	2	Esc. Keys shows the pause menu, on the contrary the game starts
	3	Options appear
	4	When clicking setting menu settings pop up.
	5	Game ends or restarts, depending on the choice.



Main Flow	Step	Action
	1	The Game starts
	2	When the game windows opens
	3	Level Starts
	4	Press Space key in the correct rhythm.
	5	The power bar reloads.
	5.1	Loss of Power
	5.2	Level Continues
	6	Click the correct key in order to activate the power.
	7	The level continues

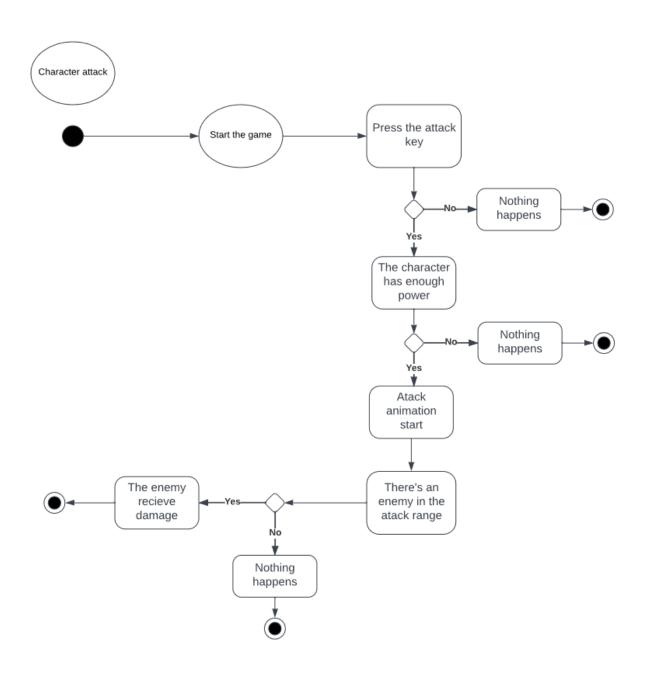


Main Flow	Step	Action
	1	The user starts the game
	2	A movement key is pressed
	3	The character moves in the direction of the pressed key

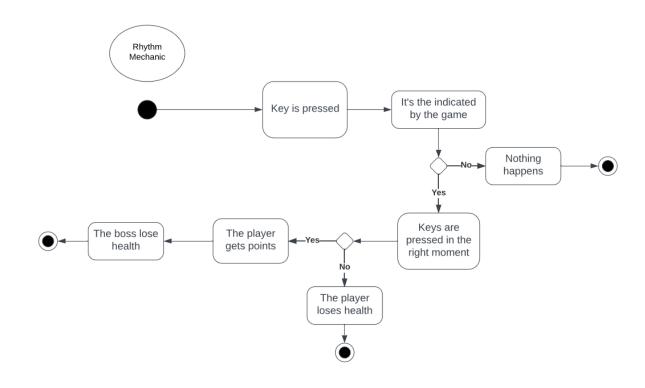


Main Flow	Step	Action	
	1	The user starts the game	
	2	The user goes to the Pause Menu	

3	The Exit Game button is pressed
4	The player goes to the Main Menu
5	The Quit button is pressed
6	The game closes



Main Flow	Step	Action		
	1 The user starts the gam			
	2	The character has enough power		
	3	The attack key is pressed		
	4	The character attacks		



Main Flow	Step	Action	
	1	The user gets to the Boss Fight	

2	A valid key is pressed	
3	The key is pressed in the right moment	
4	The boss loses all it's life	
5	The Boss Fight ends	
6	The game continues	

# 4. Virtual Board

## 4.1. Sprint Backlog

Backlog	Description	In charge	Priority	Label
Instrument selection	Select the percussion instruments that will be used for the didactic development of the video game.	Joshua Amaya	High	Videogame
Animate the main character	Planning and final design of the multiple states in which Chubby can be found	Iván Díaz	Medium	Videogame
Design the main character	Create the main design of Chubby, the squirrel	Iván Díaz	Medium	Videogame
Create the User Stories	Define short and simple descriptions of features that Product Owners, customers and users might want.	Everyone	Urgent	Diseño de Software
Create the User Case Diagrams	Create the diagramas for the different requirements and use cases along their corresponding tables	Everyone	Urgent	Diseño de Software

Video Planning	Modify, polish and translate the presentation of Rumble Of The Forest, to make the video.	Octavio Fenollosa Ivan Diaz	High	Software Design
Diagrams of Activity for each User Case Diagram	Create the Diagrams of Activity for each User Case Diagram	Everyone	Urgent	Software Design
Design the different Foxes	Create and design the enemy characters	Ivan Diaz	Low	Videogame
Create the ambience sounds.	Design the ambience sounds that will be used inside the videogame, such as the next examples:  • Jump  • Walk  • Strike  • Etc  We will be using an 8-bit sound style, in order to fully immerse the player into the "Chubby" universe.	Ivan Diaz	Low	Videogame

