

**New Era University Integrated School
No. 9 Central Avenue, New Era, Quezon City
Senior High School**

METEMP|SYSCHOSIS: A 2D General Knowledge Pixel Game

**A Game Design Document Presented to the Faculty
of New Era University Integrated School
Senior High School Department
Quezon City**

**In Partial Fulfillment of the Requirements
for the Technical-Vocational-Livelihood Track
Information and Communications Technology (ICT) Strand**

Casupanan, Geydel

Valenzuela, Emmanuel

Aquino, Bryan Jay

Gaspado, Justin

De Guzman, Karl Dexter

Lacanilao, Mary Grace

Achero, Noriel

2021

APPROVAL SHEET

This Game Designed Document entitled “METEMP|SYCHOSIS: A 2D General Knowledge Pixel Game” was prepared and submitted by 12 ICT 2 Group 1 in partial fulfillment of the requirements for the Technical-Vocational-Livelihood Track, Information and Communications Technology (ICT) Strand, has been examined and recommended for acceptance and approval and approval for oral examination

JOSEPHINE BLANDY DELGADO-LLENARESAS, LPT

Game Design Document Adviser

Approved by the Committee on Oral Examination with a grade of _____ on _____

PROF. RAUL M. GUINA

Chairman, Game Design Document Committee

ENGR. JOEMAR A. SILAO

Member

LEO VILLE VILLALUZ, LPT

Member

Accepted as a partial requirement for the Technical-Vocational-Livelihood Track,
INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) Strand.

PROF. NELITA P. ARNAR
Technical-Vocational-Livelihood
Coordinator

DR. RONNIE G. CAINGLET
SHS Vice Principal

DR. SUNDAY S. SIBUL
Principal

ACKNOWLEDGEMENT

First and foremost, the game designer and developers of this game would like to show the gratitude and appreciation to the Almighty God for blessing us with the strength and knowledge needed to complete this game design document.

From the Research Team, Game Designer, and Game Developer we are delighted that because of our collaboration or cooperation this game design was completed. Without these people we would not be able to do this game design.

We would like to show our gratitude and appreciation to thank our family, relatives, and friends for all the support, moral, and financial support they have given or shown so that we can make it well and finish this game design.

It is a genuine pleasure to express our deep sense of thanks and gratitude to our Professor in Computer Programming, Mr. Leoville Villaluz, who shared knowledge with us and gave us suggestions and in helping us to understand what the problem was with our game design.

We also owe our deep sense of gratitude and appreciation to our lovely Professor in Research Project, Mrs. Josephine Blandy Delgado-Llenaresas, that she guided us in every step we would take to fix or improve our game design.

Finally, we want to thank all of the panel members for their unwavering commitment, cooperation and support in the finalization of this game design.

DEDICATION

This research paper and the game METEMP|SYCHOSIS is dedicated to grade 6 students, teachers, family, and friends by the game designers and developers. And a particular thanks to our supportive families and group mates, who always motivate and drive us to complete their work and the game we're working.

TABLE OF CONTENTS

TITLE	PAGE
APPROVAL SHEET.....	i
ACKNOWLEDGMENT.....	ii
DEDICATION.....	iii
TABLE OF CONTENTS.....	iv-vii
LIST OF FIGURES.....	vii

1 GAME OVERVIEW

Game Concept.....	1
Genre.....	1-2
Target Audience.....	2
Pedagogical Objectives.....	2-3
Game Flow Summary.....	3
Look and Feel.....	4

2 GAMEPLAY AND MECHANICS

Gameplay.....	5
Game Progression.....	5
Mission/Challenge Structure.....	5

Puzzle Structure.....	5
Objectives.....	5-6
Game Flow.....	7-8
Game Play Elements.....	9
Game Mechanics.....	9
Game Physics.....	9
Game Movements.....	9
Game Objects.....	9
Game Actions.....	10
Game Combat.....	10
Screen Flow.....	10
Replaying and Saving.....	11
Constraints.....	11
3 GAME STORY, SETTING AND CHARACTERS	
Story and Narrative.....	12
Back Story.....	12
Game Story/PLOT Elements.....	12
Cut Scenes.....	12-20
Game World.....	21-23

Characters.....	24
Main Character.....	24-25
Deuteragonist.....	26-27
Antagonists.....	28-29
Minor Characters.....	30-35
4 GAME LEVELS	
Levels.....	36-37
5 USER INTERFACE	
Visual System.....	38
Marketing and Packaging Art.....	38
Splash Image.....	38
Icon.....	39
Graphical User Interface (GUIs).....	39
Menus.....	39
Heads Up Displays (HUDs).....	39
Camera Model.....	40
Control System.....	40
Overview.....	41
Commands.....	41

Sound and Music.....	42
Audio.....	42
Music.....	42
Sound Effects.....	42
6 TECHNICAL SPECIFICATIONS	
Game Engine.....	43
Platform and OS.....	43
External and Object Codes.....	43-58
7 PRODUCTION	
Scope.....	59
Scheduling.....	59
Dependencies.....	59
Cost Estimated.....	60
APPENDICES	
Appendix A - Evaluation Form.....	61-65
Appendix B - Evaluation and Results.....	66
B-1 Final Defense.....	66
B-2 Exhibit.....	66
Appendix C - Curriculum Vitae.....	67-73

LIST OF FIGURES

TABLE	TITLE	PAGE
NO.1	SCHEDULE TIMELINE	59

CHAPTER 1: Game Overview

Game Concept

Since the developers have a wide but simple variety of choices, we decided to include and merge all of our ideas. The game is a 2Dimensional perspective that will include four levels and a bonus boss battle level that will run floor by floor representing the levels with different difficulties, it will also include different kinds of game modes for example: Puzzle, educational, and quest games that will have an educational topics related to the general knowledge of Grade six level (English, Filipino, Math, and Science). The game was inspired by the anime called “Sword Art Online”.

Genre

Considering that the game will include a lot of game modes, there will be a couple of genres that the game can be considered as the Role-Playing Game (RPG) as our main genre. The other sub genres are the following:

Puzzle

In the game that we will develop there is a puzzle to challenge their brain to solve the problem and be smart in decision making. Puzzles can have interaction between the player and the game so they will love to play it. A puzzle is a game, problem, or tool that takes somebody's creativity or understanding to the test. In order to arrive at the correct or entertaining solution to a puzzle, the solver is required to bring pieces together in a logical manner. Puzzles have many benefits that can help you, not only mentally but also physically. Both sides of your brain are exercised by puzzles. The left side of the brain is in charge of analytical and logical thinking, while the right side is in charge of creativity. Because you work on puzzles, they involve both sides of your brain and make it a good exercise. Puzzles can improve your memory, Puzzles strengthen and develop new connections between our brain cells, making this a good way to improve short-term memory. Puzzles improve your problem-solving skills, we learn how to work by trial and error, develop and make observations, and change tracks if we don't succeed because puzzles require us to take different approaches to solve them.

Action Adventure

According to wikipedia, An action-adventure game can be defined as a game with a mix of elements from an action game and an adventure game, especially crucial elements like puzzles. Action-adventures require many of the same physical skills as action games, but also offer a storyline, numerous characters, an inventory system, dialogue, and other features of adventure games. In the game Metemp|Sychosis, battles are filled with actions and fights. Also, there are puzzles and adventures that a player could answer and explore.

Platform Games

Also known as “Jump n Run”, this genre is usually used for 2Dimensional Games as we had stated earlier, this game is a 2Dimensional Game. The controls are

used to jump between the platform or obstacle. One of the best examples of this game is Super Mario where the character needs to jump to avoid any obstacles.

Arcade Game

Arcade Games are games that can be finished in one sitting or in other words a game that doesn't take a long time to finish that means it doesn't have any save button, this kind of games can usually be played in public arcade shops, malls, and parks.

Strategy Games

From the word itself “Strategy”, this genre challenges the player's skillful thinking and their plan to achieve victory. Here, you will see how determined he/she is to pass the level. You can also see different techniques from different players.

Role-Playing Games

“RPG” Role Playing Game is a video game genre that the players controls the actions of the character and the characters is designed by the player the characteristics of this game. RPGs develop storytelling and narrative elements. Player control a central game character or multiple and they are going to attain victory by completing a series of that game or quest and character can grow a power or abilities. Role playing video is scripted, computer controlled the non-player characters. There is an RPG in the game so that players can experience what it feels like inside a game and what they think they would do if they were in the game. RPG is included in the game genre is because unlike other like genres it is fun to play and you can add other genre to it because you can make your own decision and you can also learn through RPG you can learn the story of a game especially if it is based on the history of an object.

Educational Game

Educational games are games explicitly designed with educational purposes, or which have incidental or secondary educational value. (wikipedia) The main genre of the game “METEMP|SYCHOSIS” is educational. Since all of the contents of the quest within the game is about the Core Subjects of the Junior High School Curriculum.

Target Audience

Our target audience are the Grade six students for the reason that their current curriculum has the four major subjects (English, Math, Science, and Filipino). This will be able to help them learn something while practicing their logical and critical thinking skills while enjoying.

Pedagogical Objectives

The game that the developers created takes on the role of a tutor or coach, assisting students in achieving their learning objectives. Our game also allows us to work together and use each other's abilities and experience in order to complete a series of learning tasks. This

can take the form of educational projects that include graphics, music, game, interaction, and simulations.

Game Flow Summary

Dialogue (short explanation about the current situation of the main character). The protagonist enters the stage. Dialogue Explanation of the Quest.

Level 1 –

Game Category: Puzzle Game

Name of the Game: Simple Maze

Perspective: Top Semi-Side

Difficulty: Easy

Level 2 –

Game Category: Click Game

Name of the Game: English Battle

Perspective: Side View

Difficulty: Easy

Level 3 –

Game Category: Click Game

Name of the Game: Celestial Hunt

Perspective: First Person View

Difficulty: Medium

Level 4 –

Game Category: Platform Game

Name of the Game: Castle Chase

Perspective: Side View

Difficulty: Very Hard

Boss Level –

Game Category: Text Array

Name of the Game: Game Mastah

Perspective: Side View

Difficulty: Hard

Look and Feel

The game will feature pixel and 2dimensional art style like Super Mario Bros with pictures of the characters being represented by 2D art style, the game will also feature different kinds of biomes like grassland, river side, castle, etc. Depending on the level of the game with the matching soundtrack that will be composed by the game composers.

CHAPTER 2: Gameplay and Mechanics

Gameplay

Game Progression

The game **METEMP|SYCHOSIS** is a 2Dimensional perspective educational role playing game (RPG) that will include four levels that will run floor by floor representing the levels with different difficulties, it will also include different kinds of game modes. Every level of the game has different challenges that need to pass for them to proceed to another level. Each level has its own content that when they fulfill the tasks they will obtain items that will help them for the next level.

It all started because of a young man that has been absorbed by the monitor of the computer because of the mystery website that he clicked. That leads him to the unfamiliar world called Alfheim which in this world He will encounter different characters that will help him all throughout his escape from that world.

During the game, there are possibilities that if He fails, it can put his life in danger but when he passes the obstacles He will benefit from it and it can make his journey easier. The player has only 3 lives, he should protect his lives at all costs because when the player has no more life chances He will be defeated and will go back to the first level.

When the player obtained all the items and finished all the levels of the game, At the end, the player will decide what kind of ending they want to finish the game.

Mission/Challenge Structure

The Challenge Structure/Mission of the game is to obtain all the items which helps the player to pass all the game level challenges and difficulties. The player has 4 levels to pass. Each level contains different genres including: Puzzle Game, Mission Game, Riddle Quest Game, Strategy Game, and Platform Game.

All the challenges information are all based from the Junior High School 4 major subjects, such as English, math, Filipino, and science. All the difficulties are based on different level's questions and objectives.

Puzzle Structure

The puzzle Structure of the game is based on Maze games like bomberman, Text Array like bookworm adventure, and platform games like super mario bros.

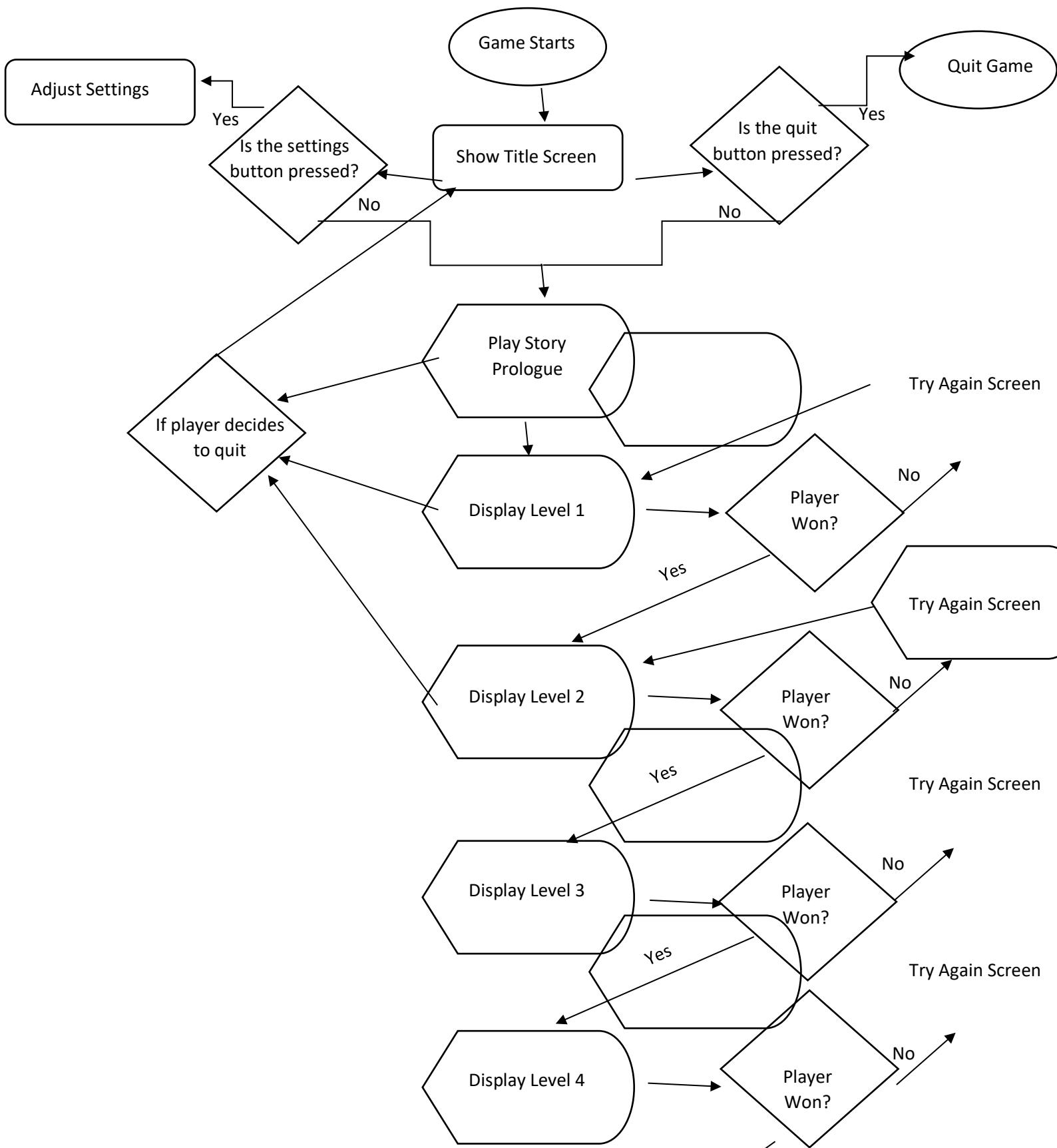
Objectives

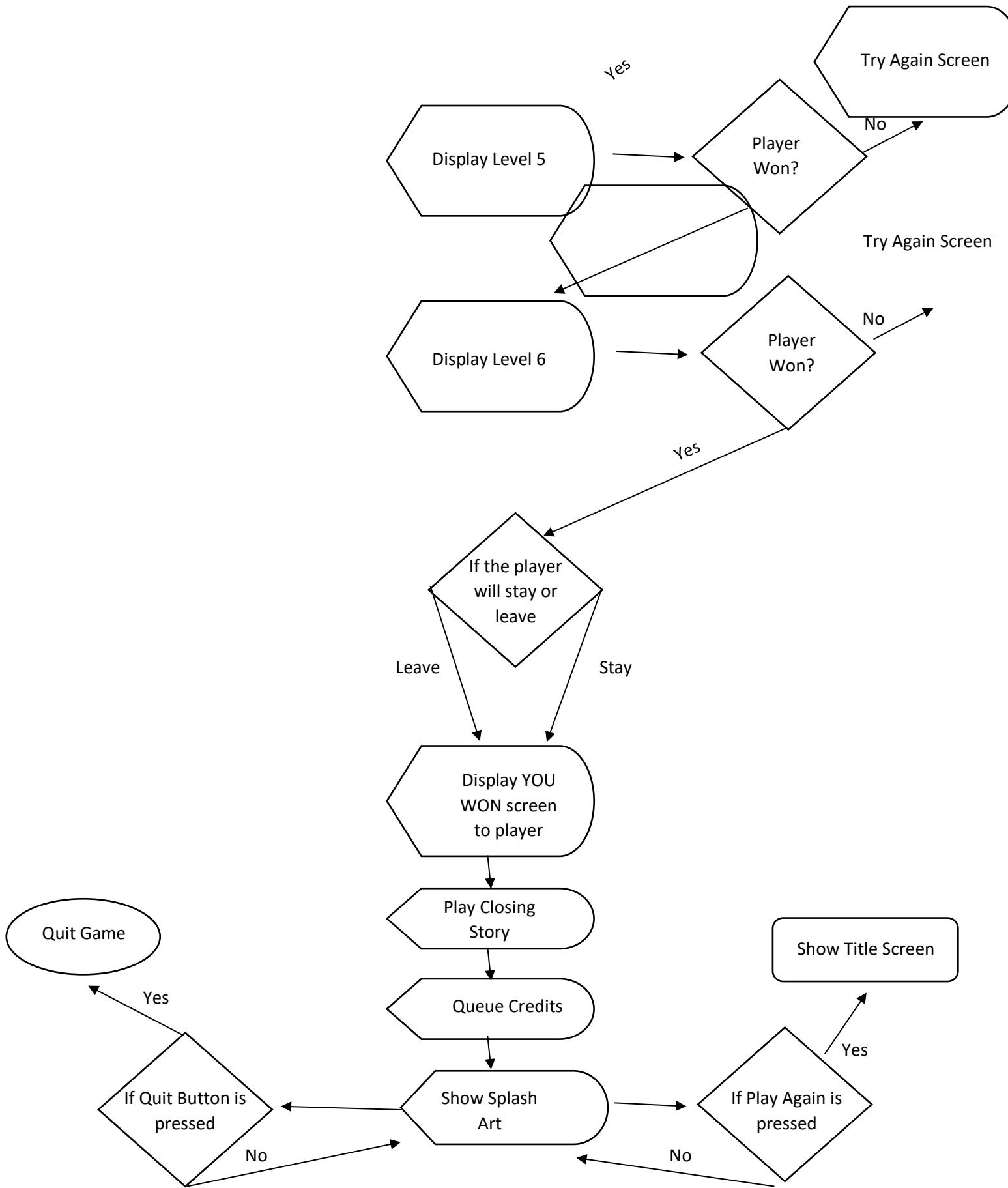
The objective of the game is that the players need to complete all the items needed at every level for them to finish the game the way they wanted.

These objectives also needs to be considered:

- Get out of the maze
To find the sister of Rene Descartes and to get the key item that will lead and help Xavier and Fox Spirit to proceed at the next door.
- Defeat William Shakespeare
To give them permission to proceed at the next quest and then he will give Xavier a refill of hearts that can help them at the next level.
- Hunt the stars
Help Baiden identify the stars in the night sky while staying for the night at the camp.
- Find the scream
Follow the scream that you heard while talking to simoun.
- Defeat Metemp at the castle
Overcome obstacles on the way to Metemp's castle. In order to defeat Metemp, the player must answer and complete the words and riddles presented.

Game Flow





Game Play Elements

Here are the following Gameplay Elements of the game METEMP|SYCHOSIS:

LIFE COUNT - They are located at the top left part of the screen while on levels. Lives are symbolized into Hearts. There are 3 Hearts in every level. Once you are defeated in a level your Hearts also decrease. But once you pass through and proceed to the next level, your hearts/lives will be automatically refilled back to 3 lives. If there are no lives left, the game will automatically go to the game over frame.

Game Mechanics

Game Physics

The importance of physics in the game work as such:

- When an obstacle is in front of the playable character it cannot proceed further in that direction.
- Gravity should be present.

Game Movements

The importance of movements in the game work as such:

- PCs move in a 2D side scrolling plane, either from the left to right, or from right to left.
- PCs can jump after straight up and down or in a parabola going left or right.

Game Objects

Key Sword - there will be a key sword in the game that helps the character to fight, a sword in the shape of a key that will be given by the NPC in the introduction part of the story.

Clothes - there will be a pair of adventurer's clothes and Cape. That makes the main character look more decent and charismatic. It will be gifted in level 1.

Fang Necklace – It is the last reward that will be given to the player if he/she finishes the game.

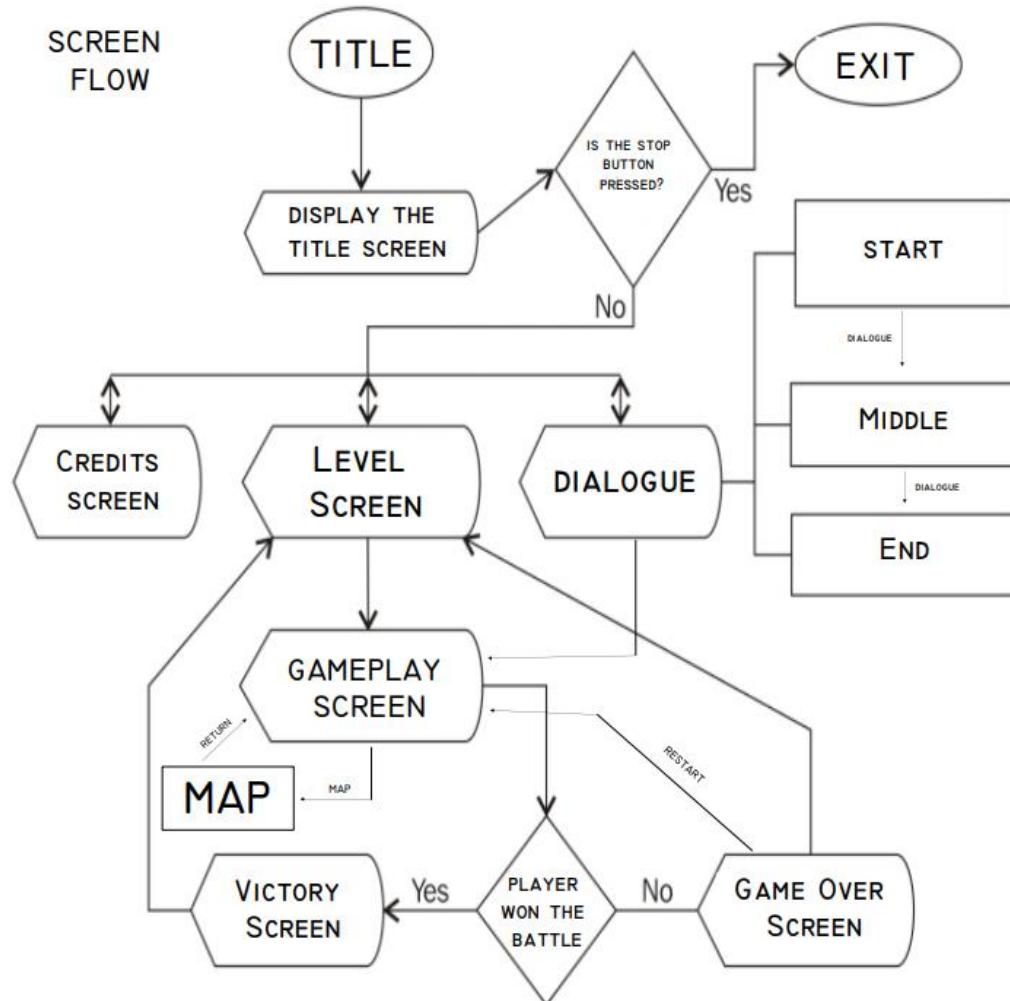
Game Actions

The action used for the game is spells movement using the text array and click game to fight the opponent. Each opponent has riddles or questions that must be answered using a text array. If the answer to the question or riddle given is correct, our character will attack his opponent, if the answer they entered is incorrect, his opponent will attack him.

Game Combat

In the game combat, he has two opponents. His first opponent is William Shakespeare in Level 2, in Level 2 there is a question that must be answered using a Click game. When the answer is given correctly, William Shakespeare will be attacked, on the other hand, when the answer is given incorrectly, William Shakespeare will attack Xavier. The same will happen to his second and last opponent in Boss Battle, Metemp. They need the right answer so they can beat their opponent to move to the next stage or level.

Screen Flow



Replaying and Saving

The game METEMP|SYCHOSIS has no saving feature, since it is an arcade game. Unlike the other RPG games, you can still save it and continue playing even after you exited the game. Instead, the game will restart once you exited, like Super Mario Bros. An example of Arcade game is that once you lose the game, you're going to go back from the starting point.

Constraints

Constraints are the restriction/limit of the game. It will help you to know if there's a bug in the game and prevent you from doing things that you are not allowed to do.

CONSTRAINTS OF THE GAMES

- When there is a blocked object in front of the character, the character is not allowed to pass through the said object.
- When the character jumps, the character should not float and should fall to the platform ground.
- Flying is impossible for the main character.
- Players are not allowed to skip a level.
- Main character is not allowed to leave the screen borders while being moved by the player.
- METEMP|SYCHOSIS doesn't support the saving option because it is an arcade game and the game engine which is called adobe action flash cs6 actionscript 2.0 does not support the code of the saving features.

CHAPTER 3: Game Story, Setting and Characters

Story and Narrative

Back Story

Xavier is an introverted young man.

He frequently goes to an internet café by himself to play online games.

While surfing the internet, Xavier came across a strange cryptic website.

He clicked the button, and a glitch static appeared on the computer monitor.

The static stopped.

Xavier was about to leave in the internet café when the monitor engulfed his whole body.

Game Story

The story started in the internet café, a young boy named Xavier was browsing on the internet when suddenly a mysterious email showed up. He clicked the button then a glitch static came to the pc monitor, the static stopped. When he's about to leave, his body was swallowed by the monitor. That's all that happened on scene one.

Xavier fell from the sky and landed on the hollow forest, a mysterious fox spirit appeared. He thought he was already dead because a floating fox is talking to him. The fox said that he's the savior of Aincralfheim realm but Xavier didn't get it. That's all in scene two. Proceeding to the next scene; while Xavier and the Fox Spirit are arguing, a man rush towards them while being chased by corrupted deer. Mysterious Fox will give Xavier a key sword which Xavier will use to defeat the corrupted dear. The man will introduce himself as Rene Descartes, and he will give Xavier a clothing that will protect him. After that, Xavier and the Fox Spirit will go inside the maze to look for Rene Descartes sister. On the fourth scene; After Xavier and the Fox Spirit solved the maze, they will find Rene Descartes sister, Reign Descartes. Reign will present the key she found to Xavier to get out of the maze, Rene Descartes is waiting at the door. Because of that Rene refills Xavier's life bar as a reward, then Xavier and the Fox Spirit leave and go into another door. On the fifth scene they're in the dark library, suddenly an NPC will appear with the light. It's William Shakespeare, the keeper of the library. He challenged Xavier to beat him by answering all his questions correctly. Xavier won, and as a reward, William refilled Xavier life bar and show the door going to the next floor. They're on the waterfall/riverside when a kid fell from the tree. The kid will introduce himself as Baden Powell, he presented a key that will lead them to the next floor and gives it to Xavier. While they're at the camp, they did star gazing to find the different Constellations. After star gazing, Xavier and the Fox Spirit told their goodbye to Baden and open the next door. Inside, they saw another locked door. Suddenly Fox Spirit will experience headache and she will remembers everything from her memories.

Fox Spirit will immediately teleported by someone inside while Xavier remained outside. Because of that, Xavier looked for some way to go out, when he saw another door and used his key sword to open the door. In the last scene; the door led him to the garden of the castle, he saw a man near the door, Xavier rushed towards the man. He tried to ask the man about Fox Spirit but he couldn't understand what the man was saying. While Xavier and the man are talking they hear a loud scream coming from nearby, Xavier will go to check it out and they will find Isagani. Simoun will ask Isagani what he is doing there and Isagani answered he's tired of practicing how to defeat the monsters when they hear another scream. Xavier asks if it's from the inside of the castle, Simoun gives Xavier an advice that he should take care if he wants to go there. Xavier is walking in the hallway when he sees a violet woman, it's Metemp. Metemp and Xavier fought, Xavier won and the Fox Spirit is back.

Suddenly a glowing light shines from the Fox Spirit, it's Sychosis. Sychosis told Xavier everything, Metemp and Sychosis are twins they ruled the Aincralfheim but unfortunately Metemp became greedy, she fought her own sister, Sychosis and sent her to the lower floor. In the end, Xavier will choose if he wants to stay with Sychosis and protect Aincralfheim forever, or will Xavier choose to go back to his world and leave Aincralfheim.

Cut Scenes

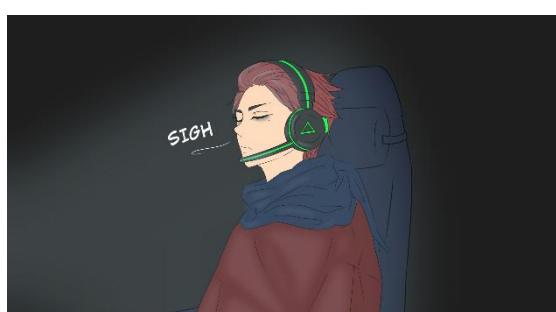
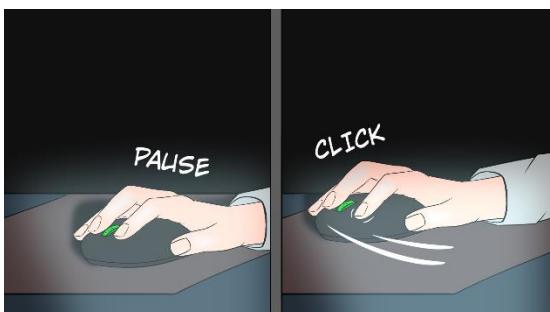
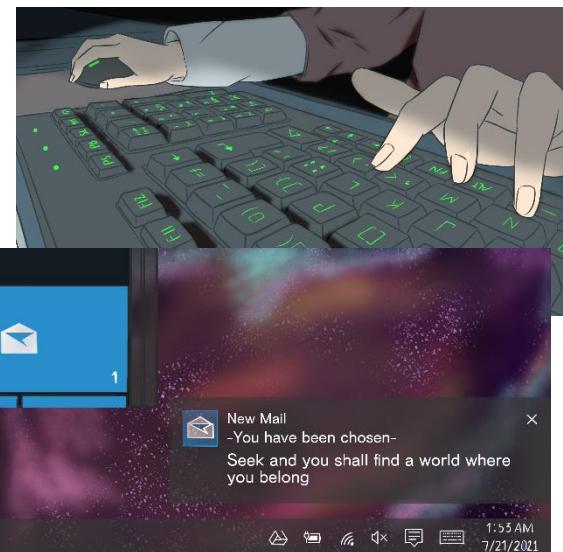
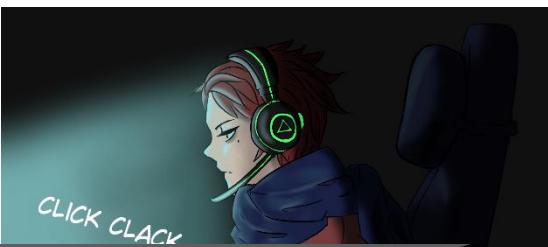
Cut Scene No. 1

Actors: Xavier

Description: Prologue - Real World

Storyboard:







Script:

1st Scene - Prologue - Earth

-Loading Screen-

Xavier is an introverted kid. He hangs out by himself in the internet café to play games.

While browsing the internet, he stumbled upon a weird mysterious website.

He clicked a button then a glitch static came to the pc monitor.

The static stopped.

Xavier was about to leave, but his body was swallowed by the monitor.

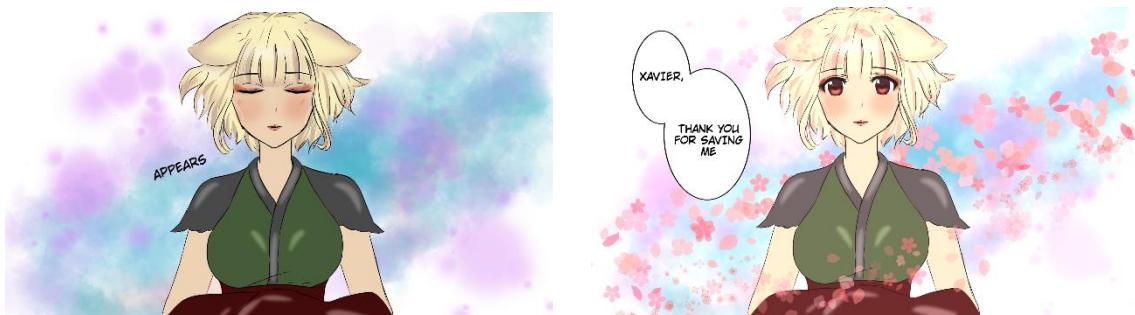
-End of Loading Screen-

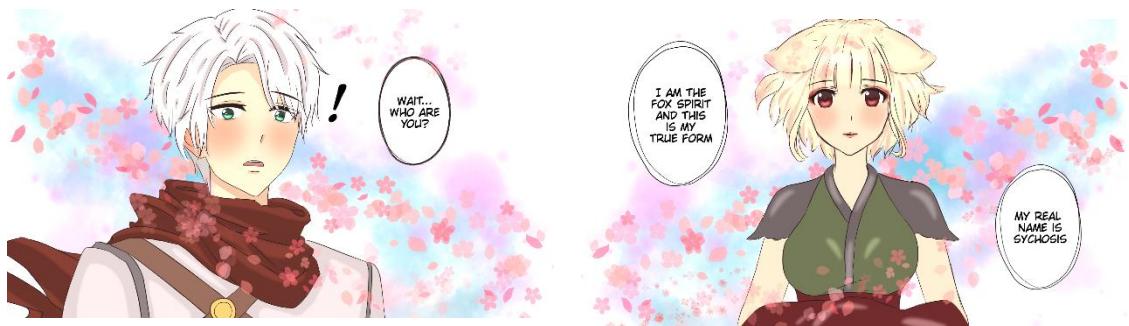
Cut Scene No. 2

Actors: Xavier and Sychosis

Description: Ending Scene - Aincralfheim

Storyboard:







Script:

- A glowing light shines from the Fox Spirit-

Sychosis: Thank you for saving me, Xavier.

Xavier: Wait. Who are you?

Sychosis: I am the Fox Spirit and this is my true form. My real name is Sychosis.

Xavier: Woah! I didn't know you're this beautiful.

Sychosis: For a hundred years, I was locked in my spirit form by metemp. Even my memories, have been erased by her.

Sychosis: Metemp is my twin sister.

Sychosis: Both of us ruled the Aincralfheim in peace and harmony.

Sychosis: But one day, Metemp, my sister became greedy in ruling this world. She fought me, sealed me in my spirit form, and sent me to the lower floor.

Xavier: That's really unfortunate.

Sychosis: Thank you, once again, Xavier. Savior of this world.

Xavier: You're welcome.

Sychosis: I want to offer you something.

Sychosis: Do you want to stay in this world and protect the citizens of alfheim? Or go back to your world?

**-Player will choose if he/she will stay in Aincralfheim
or go back to real world -**

Cut Scene No. 3

Actors: Xavier and Sychosis

Description: Finale 1 - Aincralfheim

Storyboard:



Script:

Xavier chose to stay-

Xavier: I chose to stay.

Sychosis: Well then, here's a fang necklace for you.

-Xavier obtained fang necklace-

Sychosis: Let's go and protect Aincralfheim.

-END-

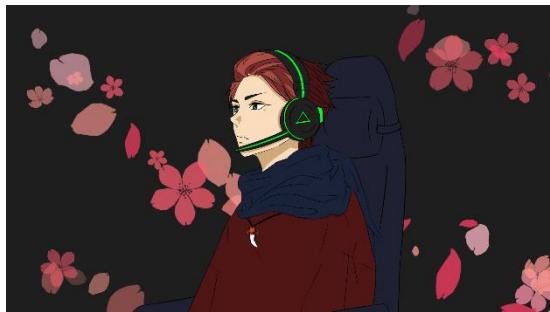
Cut Scene No. 4

Actors: Xavier and Sychosis

Description: Finale 2 - Aincralfheim

Storyboard:





Script:

-Xavier chose to go back to his world-

Xavier: I chose to go back to my world.

Xavier: I will go back to my World together with all my experience and knowledge I learned here, in order to become a better person.

Sychosis: Well then, if that is your decision,

Sychosis: Here's a fang necklace for you as a gift and protection in your world.

-Xavier obtained fang necklace-

Xavier: Thank you, Sychosis, for all the experience.

-Sychosis opens a portal to Xavier's world-

-Xavier enters the portal and says his farewell-

Xavier: Farewell.

-END-

Game World

Area no. 1

General Description: Aincralfheim - Hollow Forest

Physical Characteristics: Forests, Trees, Bushes, and Dark Levees

Levels that use the area: Level 1

Connections to other areas: 1st Floor



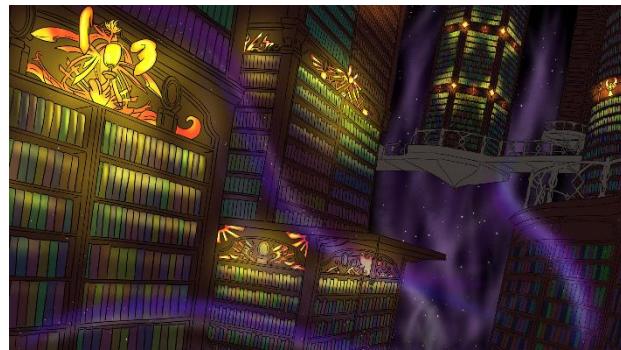
Area no. 2

General Description: Aincralfheim - Library

Physical Characteristics: Room containing collections of books, lots of chairs and tables.

Levels that use the area: Level 2

Connections to other areas: 2nd Floor



Area no. 3

General Description: Aincralfheim – Waterfall/Riverside

Physical Characteristic: Water, Rock, ,Grass, Fish

Levels that use the area: Level 3

Connections to other areas: 3rd Floor



Area no. 4

General description: Aincralfheim – Castle's Garden

Physical characteristics: Flowers and Bushes outside the Castle

Levels that use the area: Level 4

Connections to other areas: 4th Floor



Area no. 5

General description: Aincralfheim – Castle

Physical characteristics: The objects you could see in any castle would be cannons, banners, shields, weapons.

Levels that use the area: Boss Battle

Connections to other areas: 4th Floor

Characters



Protagonist:



Xavier



Personality:

Straight Forward

Appearance:

16 years old, Red haired/Silver

Sprites:



Abilities:

Key Sword Wielder

Relevance to the Story:

Main Character

Relationship to the Other Characters:

None

Deuteragonist:

Fox Spirit/ Sychosis



Personality:

Witty

Appearance:

A small white floating fox/A nine tail human fox

Sprites:



Abilities:

Relevance to the Story:

Relationship to the Other Characters:

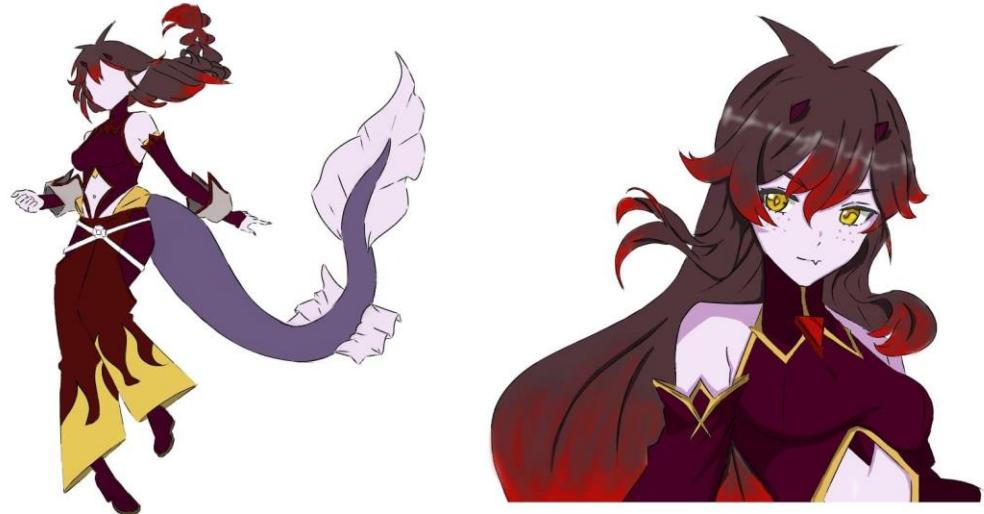
Hidden Abilities

Guide of Xavier

Sister of Metemp

Antagonist:

Dragon Spirit/Metemp



Personality:

Tsundere(is a Japanese term for a character development process that depicts a character with a personality who is initially cold)

Appearance:

Magical Woman

Sprites:



Abilities:

Ruler of the Alfheim

Relevance to the Story:

Antagonist

Relationship to the Other Characters:

Twin Sister of Sychosis

Minor Character:

Rene Descartes



Personality:

Resourceful

Appearance:

An old mathematician

Sprites:



Abilities:

None

Relevance to the Story:

Quest giver in Level 1

Relationship to the Other Characters:

Sister of Reign Descartes

Reign Descartes



Personality:

Resourceful

Appearance:

Teenage Girl wearing a Witch Hat

Sprites:



Abilities:

None

Relevance to the Story:

Quest in Level 1

Relationship to the Other Characters:

Daughter of Rene Descartes

William Shakespeare



Personality:

Lazy, Sleepy

Appearance:

A Noble no eyed librarian

Sprites:



Abilities:

Cast Magic Spells

Relevance to the Story:

Quest in Level 2

Relationship to the Other Characters:

None

Baden Powell



Personality: Childish, Optimistic, Honorful

Appearance: Pink haired camper

Sprites:



Abilities: Tree Hoping

Relevance to the Story: Quest in Level 3

Relationship to the Other Characters: None

Simoun



Personality:

Mysterious

Appearance:

Red caped with black hat

Sprites:



Abilities:

None

Relevance to the Story:

Quest in Level 4

Relationship to the Other Characters:

Friend of Isagani

Isagani



Personality:

Anxious

Appearance:

Yellow haired teenager

Sprites:



Abilities:

None

Relevance to the Story:

Quest in Level 4

Relationship to the Other Characters:

Friend of Simoun

CHAPTER 4: Game Levels

Levels

Level 1 –

Description:	Level 1 (Mathematical Maze)
Player's Objectives:	Find Reign Descartes and escape the maze
Reward:	Life Refill
Major Gameplay:	Maze
Enemies:	Corrupted Monsters

Level 2 –

Description:	Level 2 (Library Duel)
Player's Objectives:	Solve Shakespeare's Riddle
Reward:	Life Refill
Major Gameplay:	Click Game Quiz
Enemies:	William Shakespeare

Level 3 –

Description:	Level 3 (Scout's Riddle)
Player's Objectives:	Help Powell in finding the constellations in the sky
Reward:	Life Refill
Major Gameplay:	Click Game
Enemies:	None

Level 4 –

Description:	Level 4 (Castle Chase)
Player's Objectives:	Follow the scream while passing by the obstacles
Reward:	Life Refill
Major Gameplay:	Platform Game
Enemies:	Lava Obstacles

Boss Battle –

Description: Boss Battle (METEMP|SYCHOSIS)
Player's Objectives: Save Sychosis and Alfheim from the cruelty of Metemp
Reward: Fang Necklace
Major Gameplay: Hard Platform Text Array
Enemies: Metemp

CHAPTER 5: User Interface

Visual System

Marketing and Packaging Art



Splash Image



Icon



Graphic User Interface

Menus

The graphic of the game consists of a play and quit button.



Heads Up Display

Live/Hearts

The heads up display of the game is the character/player lives.



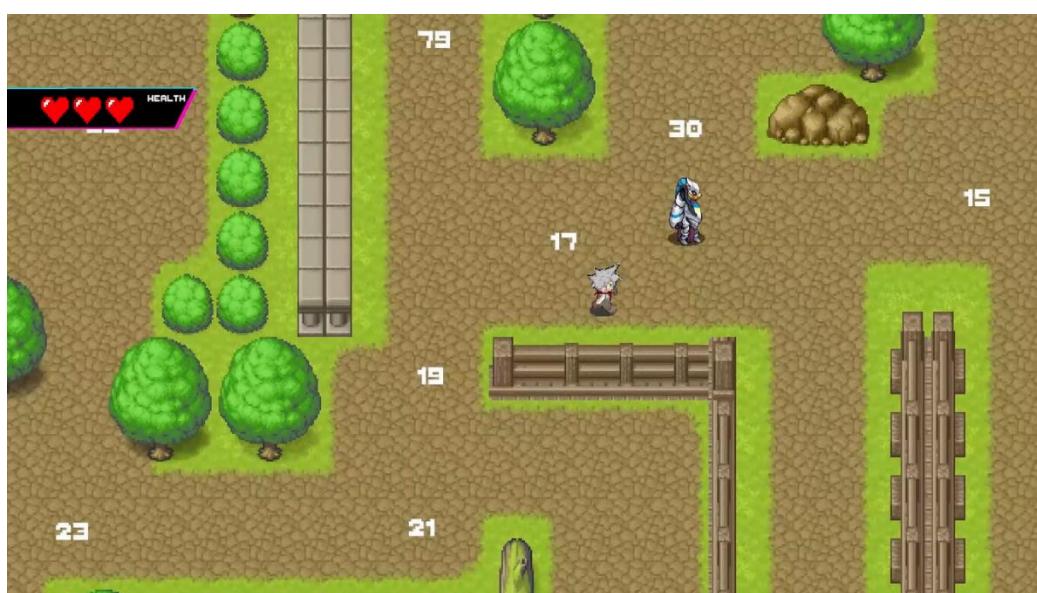
Camera Model

The camera model of the game are:

First Person View



Top View



Side View



Overview

Overview means how the player plays the game. You can play it by moving the character up, down, left, right, jump and left mouse click.

Commands

Commands means what are the keys the player needs to use to play the game. In our game, the only keys you need to use are arrow keys and left mouse click.

Sound and Music

Audio

The audio recording used in the game METEMP|SYCHOSIS are the character dialogue voice overs.

Music

The background music is composed and produced in Finale 2014 and FL Studio 20. The METEMP|SYCHOSIS OST consists of 13 tracks.

- 00 – Title Screen (Aincralfheim)
- 01 – Prologue (Am I okay?)
- 02 – Introduction (Walking with You)
- 03 – Level 1 (Hollow Forest)
- 04 – Level 2.1 (Bookshelves)
- 05 – Level 2.2 (Etude)
- 06 – Level 3.1 (Let's Go Camping)
- 07 – Level 3.2 (Counting Stars)
- 08 – Level 4.1 (Ginoo)
- 09 – Level 4.2 (Anxiety)
- 10 – Ending (Let Me Tell You A Secret)
- 11 – Finale (New Beginning)
- 12 – Title Screen (ver.2)

Sheet Music

[https://drive.google.com/file/d/1uBuROHd2czEWRBmsLaqQ1EJpwjXhwZeS/view?
usp=sharing](https://drive.google.com/file/d/1uBuROHd2czEWRBmsLaqQ1EJpwjXhwZeS/view?usp=sharing)

MP3

[https://drive.google.com/drive/folders/1_P8KLocjrRb-
GWm9Yi1_MKg78YOvIVzK?usp=sharing](https://drive.google.com/drive/folders/1_P8KLocjrRb-GWm9Yi1_MKg78YOvIVzK?usp=sharing)

Sound Effects

Button Sound

CHAPTER 6: Technical Specifications

Game Engine

In our game, the engine we used to do this was Adobe Flash CS6. We used the engine is Adobe Flash CS6 because of what we studied in our subject Computer Programming.

Platform

In our game the platform we used is Personal Computer also called PC.

Operating System

Windows 7,8,10 and MAC are the operating systems that can enable or play the METEMP|SYCHOSIS game.

External and Object Codes

Interface and HUD -menus, etc.

(Menu)

stop();

Mouse.hide();

myCursor.onEnterFrame = function(){

 myCursor._x= _xmouse;

 myCursor._y= _ymouse;

 updateAfterEvent();

}

play_btn.onRelease=function()

{

 gotoAndPlay(241);

}

quit_btn.onRelease=function()

```

{

fscommand("quit",true);

}

last_btn.onRelease=function()

{

gotoAndStop(5506);

}

```

Character's and Enemie's Movements and Interactions

```

onClipEvent(enterFrame)

{

speed=4;

bounce=4;

if(Key.isDown(Key.DOWN))

{

this.front_mc.play(1);

this._y+=speed;

}

if(Key.isDown(Key.UP))

{

this.back_mc.play(2);

this._y-=speed;

}

```

```

if(Key.isDown(Key.RIGHT))
{
    right_mc.play();
    this._x+=speed;
}

if(Key.isDown(Key.LEFT))
{
    this.left_mc.play();
    this._x-=speed;
}

if(Key.isDown(32))
{
    this.name_mc.play();
    this.background_sound=new Sound();
    this.background_sound.attachSound("hello_sound");
    this.background_sound.start(0,1);
}

if (Key.isDown(Key.LEFT))
{
    this.gotoAndStop("4");
}

else
{
    if (Key.isDown(Key.RIGHT))
    {
        this.gotoAndStop("3");
    }

    else
    {
        if(Key.isDown(Key.UP))

```

```

    {
        this.gotoAndStop("2");
    }
    else
    {
        if(Key.isDown(32))
        {
            this.gotoAndStop("5");
        }
        else
        {
            this.gotoAndStop("1");
        }
    }
}

if(_parent.wall1_mc.hitTest(getBounds(_parent).xMax,_y,true))

{
    this._x-=bounce;
}

if(_parent.wall1_mc.hitTest(getBounds(_parent).xMin,_y,true))

{

```

```
this._x+=bounce;  
}  
  
if(_parent.wall1_mc.hitTest(_x,getBounds(_parent).yMax,true))  
  
{  
  
this._y-=bounce;  
}  
  
if(_parent.wall1_mc.hitTest(_x,getBounds(_parent).yMin,true))  
  
{  
  
this._y+=bounce;  
}  
  
if(_parent.portal_mc.hitTest(_x,getBounds(_parent).yMax,true))  
  
{
```

```
_parent.gotoAndStop(2079);

}

if(_parent.portal_mc.hitTest(_x,getBounds(_parent).yMin,true))

{

    _parent.gotoAndStop(2079);

}

if(_parent.portal_mc.hitTest(getBounds(_parent).xMax,_y,true))

{

    _parent.gotoAndStop(2079);

}

if(_parent.portal_mc.hitTest(getBounds(_parent).xMin,_y,true))

{

    _parent.gotoAndStop(2079);

}

if(_parent.enemy_mc.hitTest(_x,getBounds(_parent).yMax,true))
```

```
{  
  
    _parent.nextFrame();  
  
}  
  
if(_parent.enemy_mc.hitTest(_x,getBounds(_parent).yMin,true))  
  
{  
  
    _parent.nextFrame();  
  
}  
  
if(_parent.enemy_mc.hitTest(getBounds(_parent).xMax,_y,true))  
  
{  
  
    _parent.nextFrame();  
  
}  
  
if(_parent.enemy_mc.hitTest(getBounds(_parent).xMin,_y,true))  
  
{  
  
    _parent.nextFrame();  
  
}
```

```
}
```

Artificial Intelligence's Movements and Interactions

```
onClipEvent(enterFrame)
{
    speed=4;
    bounce=4;

    if(Key.isDown(Key.DOWN))
    {
        this.front_mc.play(1);
        this._y+=speed;
    }

    if(Key.isDown(Key.UP))
    {
        this.back_mc.play(2);
        this._y-=speed;
    }

    if(Key.isDown(Key.RIGHT))
    {
        right_mc.play();
        this._x+=speed;
    }

    if(Key.isDown(Key.LEFT))
    {
        left_mc.play();
        this._x-=speed;
    }

    if(Key.isDown(32))
    {
```

```

        this.name_mc.play();

        this.background_sound=new Sound();
        this.background_sound.attachSound("hello_sound");
        this.background_sound.start(0,1);

    }

    if (Key.isDown(Key.LEFT))

    {

        this.gotoAndStop("4");

    }

    else

    {

        if (Key.isDown(Key.RIGHT))

        {

            this.gotoAndStop("3");

        }

        else

        {

            if(Key.isDown(Key.UP))

            {

                this.gotoAndStop("2");

            }

            else

            {

                if(Key.isDown(32))

                {

                    this.gotoAndStop("5");

                }

                else

                {

                    this.gotoAndStop("1");

                }

            }

        }

    }

}

```

```
        }  
    }  
}  
}  
}
```

CHARACTER MOVEMENT // PLATFORM GAME

```
onClipEvent (load)  
{  
    var ground:MovieClip = _root.ground;  
    var grav:Number = 0;  
    var gravity:Number = 2;  
    var speed:Number = 10;  
    var maxJump:Number = -14;  
    var touchingGround:Boolean = false;  
}
```

```
onClipEvent (enterFrame)  
{  
  
    _y += grav;  
    grav += gravity;  
    while (ground.hitTest(_x, _y, true))  
    {  
        _y -= gravity;  
    }  
}
```

```

    grav = 0;
}

if (ground.hitTest(_x, _y+5, true))
{
    touchingGround = true;
}
else
{
    touchingGround = false;
}

if (Key.isDown(Key.RIGHT))
{
    this.right_walk.play(2);
    _x += speed;
}

if (Key.isDown(Key.LEFT))
{
    this.left_walk.play(3);
    _x -= speed;
}

if (Key.isDown(Key.UP) && touchingGround)
{
    grav = maxJump;
}

if (ground.hitTest(_x+(_width/2), _y-(_height/2), true))
{
    _x -= speed;
}

if (ground.hitTest(_x-(_width/2), _y-(_height/2), true))
{

```

```

        _x += speed;
    }

    if (ground.hitTest(_x, _y-(height), true))
    {
        grav = 3;

    }

    if(_parent.portal_mc.hitTest(_x,getBounds(_parent).yMax,true))
    {
        _parent.gotoAndStop(5508);

    }

    if(_parent.portal_mc.hitTest(_x,getBounds(_parent).yMin,true))
    {
        _parent.gotoAndStop(5508);

    }

    if(_parent.portal_mc.hitTest(getBounds(_parent).xMax,_y,true))
    {
        _parent.gotoAndStop(5508);

    }

    if(_parent.portal_mc.hitTest(getBounds(_parent).xMin,_y,true))
    {
        _parent.gotoAndStop(5508);

    }

}

onClipEvent (enterFrame)
{
    if (Key.isDown(Key.LEFT))
    {
        this.gotoAndStop("3");

    }
    else

```

```

    {
        if (Key.isDown(Key.RIGHT))
        {
            this.gotoAndStop("2");
        }
        else
        {
            this.gotoAndStop("1");
        }
    }
}

```

Game Environment and Interactive Objects

PORtal

```
if(_parent.reign_mc.hitTest(_x,getBounds(_parent).yMax,true))
```

```
{
```

```
_parent.nextFrame();
```

```
}
```

```
if(_parent.reign_mc.hitTest(_x,getBounds(_parent).yMin,true))
```

```
{
```

```
_parent.nextFrame();
```

```
    }

    if(_parent.reign_mc.hitTest(getBounds(_parent).xMax,_y,true))

    {

        _parent.nextFrame();

    }

    if(_parent.reign_mc.hitTest(getBounds(_parent).xMin,_y,true))

    {

        _parent.nextFrame();

    }

}
```

ENEMY // LAVA

```
onClipEvent (enterFrame)
```

```
{
```

```
if (_root.char.hitTest(this))  
  
{  
  
    _root.char._x = charX = 264.95  
  
    _root.char._y = charY = 1005.35  
  
    _parent.nextFrame();  
}  
  
}  
}
```

Interactive Sounds and Music

```
background_music=new Sound();

background_music.attachSound("titlescreen_sound");

background_music.start(1,99);

background_music=new Sound();

background_music.attachSound("titlescreen_sound");

background_music.stop();
```

CHAPTER 7: Production

Scope

Our project Scope includes the following:

1. Designing and Developing an Educational Flash Game on PC.
2. Game is to have a genre of Role-Playing Game.
3. To have a 4-level difficulty and different game forms.
4. Design each level with different assets and points of view.
5. Create music at each different pace of the game.
6. Creating a story that would suit the 4 level stages.
7. Designing Characters and Illustrating Cut-Scenes.
8. Recording voice over assets for each character.

Scheduling

Timeline/Deadlines						
MAY						
25	26	27	28	29	30 All Devs Meeting	1
2	3 Illustrations (Levels 1 - 2) Game Content (Levels 1 - 2)	4 Illustrations (Emmanuel) BGM (Level 2)	5	6	7 Final SWF (Levels 1 - 2)	8 Illustrations (Levels 3 - 4) Game Content (Levels 3 - 4) BGM (Level 3 - 4)
9	10	11 Illustrations (Ending) Illustrations (Logo and Buttons) BGM (Finale)	12 Final SWF (Levels 1 - 2 - 3 - 4)	13	14 Final SWF (Menu - Finale)	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Fig. No.1

Dependencies

The schedule and scope outlined in above sections can only be followed and fulfilled when the necessary assets are delivered by the client on schedule, below is an initial list of the necessary assets and times that we will be dependent upon:

Illustrations

Character Design – May 6, 2021
Cut Scenes – May 13, 2021
Other Illustration – May 11, 2021

Audio

Button Sound – April 30, 2021
Voice Over – May 19, 2021
Official Sound Track – May 13, 2021

Cost Estimated

Labor Price - 150,000PHP
Misc Expenses – 50,000PHP
= 200,000PHP

Game download price
200PHP – Per Download
1000 Downloads to meet 200,000PHP

APPENDICES

Appendix A - Evaluation Form



METEMP|SYCHOSIS: A ROLE-PLAYING GAME TO AID THE LEARNING OF GRADE 6 PUPILS

METEMP|SYCHOSIS is a game in 2Dimensional perspective with four levels. This runs floor by floor that represents the levels with different difficulties. Moreover, this game exhibits different modes of game (Puzzle, Mystery, and Quest Games) and covers four Elementary subjects/topics (English, Filipino, Math, and Science); all of these are connected in a game story.

To evaluate the METEMP|SYCHOSIS as a learning aid for Grade 6 pupils, we (the 12 ICT 2, Group 1 Researchers and Game Developers) would like to ask for your participation to answer this evaluation form.

Rest assured that the data that we will gather from you will be kept confidential and protected at all cost.

Attached to this form is the Game Demonstration (Video); kindly watch before you proceed on evaluating the game.

Thank you so much.

* Required

Email *

Your email

Next

Never submit passwords through Google Forms.

This form was created inside of New Era University. [Report Abuse](#)

Google Forms

METEMP|SYCHOSIS (DEMO VIDEO)

12 OCT 2 | GROUP 1

METEMP|SYCHOSIS



METEMP|SYCHOSIS



Watch later



Share



Watch on YouTube

DEMO VIDEO TIMESTAMPS

00:00 - Trailer
01:03 - Gameplay
01:11 - Main Menu
01:23 - Cut Scene 1
02:23 - Dialogue
05:23 - Level 1
11:09 - Level 2
14:03 - Level 3
16:53 - Level 4
19:04 - Boss Battle
21:00 - Cut Scene 2
22:07 - Ending 1
22:24 - Ending 2

Adobe Flash/SWF (Playable with Adobe Flash Player only)

<https://drive.google.com/file/d/1v7v8ug731fG1Davvd8t8aCZouPgVpQ/view?usp=sharing>

Back

Next

EVALUATION FORM

I. RESPONDENT INFORMATION

Kindly provide your information.

Name (Last Name, First Name M.I.) *

Your answer

Institutional Email *

Your answer

II. EVALUATION QUESTIONS (Adapted to evaluation form being used by

California State University, Sacramento (2004))

Please read and understand the instructions before rating the following criteria.

II. EVALUATION QUESTIONS (Adapted to evaluation form being used by California State University, Sacramento (2004))
Please read and understand the instructions before rating the following criteria.

Layout & Design *

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
-------------------	----------	---------	-------	----------------

The multiple graphic elements and variation in layout adhere to the needs of the pupils.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

The Design elements can assist the pupils in understanding concepts and ideas.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

The game provides multiple auditory, kinesthetic, textual and/or visual activities to enhance pupils learning.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Music *

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
----------------------	----------	---------	-------	-------------------

The background music is effective on delivering the mood and purpose of the game.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Interaction *

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
----------------------	----------	---------	-------	-------------------

Pupil-to-computer interactions can be clearly identified.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

The game is well organized and easy to navigate. Pupil can clearly understand where they are and where to go next.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Content/Topic *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
--	----------------------	----------	---------	-------	-------------------

The game provides multiple activities to help the pupils to increase their cognitive skills, such as analysis, synthesis and evaluation.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

The subject or topic of the game is clearly stated.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

The goals and rules are clearly stated and measure what pupils must know and be able to do to accomplish the game.

<input type="radio"/>				
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

III. Feedbacks

Comment down your feedbacks on the game.

Do you have any suggestion or comments on the game "METEMP(SYCHOSIS)"?
Kindly enumerate and explain. *

Your answer

Contact and Information

Description (optional)

Developer's Contact Info:

Noriel Achero
Contact Number: 09152446207
Email: noriel.achero@nu.edu.ph

Appendix B - Evaluation and Results

B-1 Final Defense

B-2 Exhibit

Appendix C - Curriculum Vitae

NAME : Noriel Achero

ADDRESS : 22B Don Jose St. DESHA, Holy Spirit, Quezon City.

CONTACT NUMBER : 09152446207

INSTITUTIONAL E-MAIL : noriel.achero@neu.edu.ph



PERSONAL DATA

Name : Noriel R. Achero

Age : 18

Birth Date : February 7, 2003

Birth Place : Sta. Cruz, Manila

Nationality : Filipino

Religion : Iglesia Ni Cristo

Civil Status : Single

Father's Name : Nolly D. Achero

Mother's Name : Marinela R. Achero

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : New Era University

JUNIOR HIGH SCHOOL : Gideon School of Quezon City

ELEMENTARY : Gideon School of Quezon City

NAME : Emmanuel E. Valenzuela

ADDRESS : 199 Pluto St Cleofas Compound Project 8 Q.C.

CONTACT NUMBER : 09236977147

INSTITUTIONAL E-MAIL : Emmanuel.valenzuela@neu.edu.ph



PERSONAL DATA

Name : Emmanuel E. Valenzuela

Age : 19 Years Old

Birth Date : May 28 2002

Birth Place : Quezon City

Nationality : Filipino

Religion : INC

Civil Status : Single

Father's Name : Pompio P. Valenzuela Jr.

Mother's Name : Maria Susana E. Valenzuela

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : New Era University

JUNIOR HIGH SCHOOL : Colegio De San Lorenzo

ELEMENTARY : Ste. Anne De Beupre

NAME : Geydel L. Casupanan

ADDRESS : BLK2 LT20-B U.P Arboretum Diliman, Quezon City.

CONTACT NUMBER : 09982575908

INSTITUTIONAL E-MAIL : geydel.casupanan@neu.edu.ph



PERSONAL DATA

Name : Geydel L. Casupanan

Age : 18 Years Old

Birth Date : September 9, 2002.

Birth Place : Tarlac Provincial Hospital.

Nationality : Filipino

Religion : Iglesia Ni Cristo

Civil Status : Single

Father's Name : Nelson I. Casupanan

Mother's Name : Marlene L. Casupanan

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : New Era University

JUNIOR HIGH SCHOOL : New Era High School

ELEMENTARY : New Era Elementary School

NAME : Mary Grace Lakanilao

ADDRESS : BLK 2 LOT22A UP ARBORETUM DILIMAN Q.C.

CONTACT NUMBER : 09453389770

INSTITUTIONAL E-MAIL : mary.lakanilao@neu.edu.ph



PERSONAL DATA

Name : Mary Grace Lakanilao

Age : 18 years old

Birth Date : Nov 24, 2002

Birth Place : QMMC

Nationality : Filipino

Religion : Catholic

Civil Status : Single

Father's Name : Gregorio C Repalda

Mother's Name : Mary Jane L Repalda

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : NEW ERA UNIVERSITY

JUNIOR HIGH SCHOOL : NEW ERA HIGHSCHOOL

ELEMENTARY : NEW ERA ELEMENTARY SCHOOL

NAME : Deguzman Karl Dexter D.

ADDRESS : 54-16 Tagumpay INC HSG Rodriguez, Rizal.

CONTACT NUMBER : 09187327580

INSTITUTIONAL E-MAIL : karl.deguzman@neu.edu.ph



PERSONAL DATA

Name : Karl Dexter Deguzman

Age : 18

Birth Date : Feb 16, 2003

Birth Place : Montalban

Nationality : Filipino

Religion : INC

Civil Status : Single

Father's Name : Dennis Deguzman

Mother's Name : Maricel Deguzman

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : New Era University

JUNIOR HIGH SCHOOL : Tagumpay National High School

ELEMENTARY : Tagumpay Elementary School

NAME : Justin M. Gaspado

ADDRESS : 95 St. John Pingkian 1 Brgy. Pasong Tamo, Q.C

CONTACT NUMBER : 09569222823

INSTITUTIONAL E-MAIL : justin.gaspado@neu.edu.ph



PERSONAL DATA

Name : Justin M. Gaspado

Age : 18

Birth Date : December 8 2002

Birth Place : Quezon city

Nationality : Filipino

Religion : Catholic

Civil Status : Single

Father's Name : Rosendo Gaspado

Mother's Name : Glenda Gaspado

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : New Era University

JUNIOR HIGH SCHOOL : New Era Highschool

ELEMENTARY : Pasong Tamo Elementary School

NAME : Bryan Jay T Aquino

ADDRESS : 50 Diego Silang St. Veterans Village, Pasong Tamo Q.C.

CONTACT NUMBER : 09481486986

INSTITUTIONAL E-MAIL : bryan.aquino@neu.edu.ph



PERSONAL DATA

Name : Bryan Jay T Aquino

Age : 18

Birth Date : March 8, 2003.

Birth Place : Quezon city

Nationality : Filipino

Religion : INC

Civil Status : Single

Father's Name : Roberto Aquino

Mother's Name : Sienna Lou Tolentino

EDUCATIONAL BACKGROUND

SENIOR HIGH SCHOOL : New Era University

JUNIOR HIGH SCHOOL : New Era High School

ELEMENTARY : Shalom Academic School

