

# MATGUMY

## In Canala

~Linette J.

# Game Design Document.



CS 583 San Diego State Project02 -  
By Linette Jaimes



Rocks are falling!

An acidic storm is approaching and  
Matsumy needs your help to survive  
the apocalyptic time of Canalu. -Linette J.



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## Game Development Team Members

### PRODUCER

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### PRODUCTION MANAGER

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### PRODUCTION COORDINATOR

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### GAME DESIGNERS

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### SYSTEMS/IT COORDINATOR

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### PROGRAMMERS

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### TECHNICAL ARTISTS

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### AUDIO ENGINEERS

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### UX TESTERS

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# GAME OVERVIEW

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**Title:** Matsumy In Canalu

**Platform:** PC, Mac & Linux Standalone

**Genre:** Casual Game

**Rating:** (10+) ESRB

**Target:** Casual gamer (aging from 8 - 30)

**Release date:** April, 2020

**Publisher:** L.J. Productions

**Description:** Matsumy In Canalu is a 2D casual survival game where the Player is an extraterrestrial being (human looking figure, of no gender) named Matsumy. The game takes place on a planet where every ten years there's an apocalyptic storm, where rocks and acidic rain fall from the sky. The goal of the player is to help Matsumy survive the apocalyptic storm, by avoiding the falling rocks and acidic rain.

## HIGH CONCEPT

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Matsumy In Canalu sets the player in the middle of an apocalyptic time on a planet named Canalu. The player becomes Matsumy, a brave non-gender extraterrestrial being who puts its dodging skills to the test. Avoid the falling enemies (rocks and acidic purple rain) to help Matsumy survive this dangerous time in Canalu!

## UNIQUE SELLING POINTS

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- Casual Game
- Unique Fun Story
- Family Friendly

# PLATFORM MINIMUM REQUIREMENTS

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PC, Mac & Linux Standalone:  
Any modern PC or Mac

# COMPETITORS / SIMILAR TITLES

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Any 2D survival game where the player dodges falling objects.

# SYNOPSIS

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It has been ten years since the last apocalyptic storm of Canalu, and you have been waiting to test your dodging skills. It is now time for you to go out into the fields of Canalu to avoid the apocalyptic rocks and the acidic rain! Careful this is not just for fun, you are not an immortal being!

# GAME OBJECTIVES

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The game objective is to survive different levels ( currently three levels available ) by avoiding the falling rocks and purple rain drops.

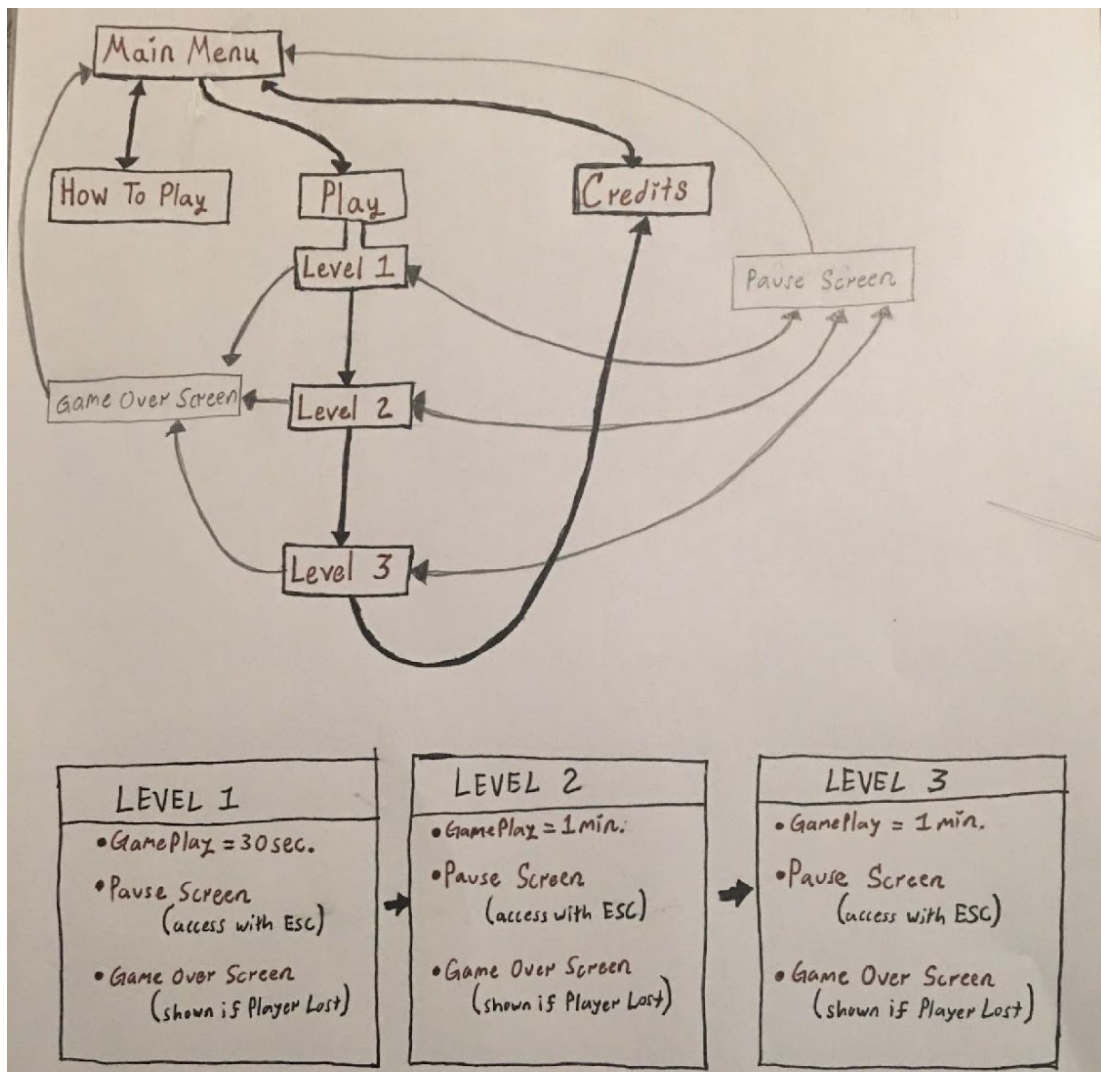
# GAME RULES

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Each game level ( currently three levels available ) is a closed 2D environment set in an outside field, where you can see the weather change throughout each level. The player can move right or left to avoid the randomly spawn enemies that fall from the sky. The goal is to survive each level without being killed. Each enemy causes a different amount of damage. Each time the player is damaged by an enemy their health will decrease and be updated on the player's health bar. The player receives a full health bar for each level.

# GAME STRUCTURE

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# GAME PLAY

## Game Controls

Pause Game



ESC Key

Move Left



Left Arrow  
Key

Move Right



Right Arrow  
Key

## Game Camera

The whole game is built using an orthographic camera for each scene. The camera stays central and still throughout each scene, so the movement of the character does not affect it.

## Hud

PLAYER DAMAGE:

Indicates the amount of health the player has.

TIMER:

Indicates the time left for current level.



# Maps

N/A

# PLAYER

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## Characters

Matsumy is a brave extraterrestrial being that lives in Canalu. Every ten years Matsumy applies its dodging skills to survive the apocalyptic events of its planet.



\*Character graphics developed with: sanderfrenken  
Character Generator

<https://sanderfrenken.github.io/Universal-LPC-Spritesheet-Character-Generator/>

## Metrics

### LEVEL 1

Speed: 5

Starting Health: 100

### LEVEL 2

Speed: 6

Starting Health: 100

### LEVEL 3

Speed: 5

Starting Health: 100

## States

Player only has one state (no animation) throughout the whole game. It is a forward facing sprite of the character, which can be moved side to side with player input.



# Weapons

N/A

## PLAYER LINE-UP

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Matsumy

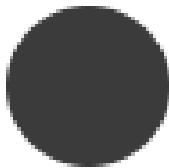
## NPC

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## Enemies

*\*All enemies created by Linette J.*

The enemies are randomly spawn on the top part of the scene, to make them fall from the sky. Each enemy has specific game levels where they are spawn throughout the whole time of those levels (Indicated below). If an enemy collides with the player, it damages its health by the given damage amount (Indicated by [ - ## ] on the following information).



Big Rock  
[ -15 Health ]  
[Spawn: level 2, level 3]



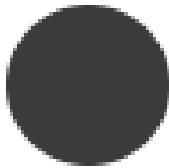
Small Rock  
[ -10 Health ]  
[Spawn: level 1, level 2, level 3]



Acidic Raindrop  
[ -5 Health ]  
[Spawn: level 3]

## Enemy States

All enemies have one state: they fall from the sky (the top part of the scene) according to their drag reacting to gravity force. Following, are the drags for each enemy (the drag stays the same for all levels) :



Big Rock  
Drag: 1.1



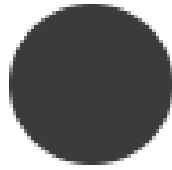


Small Rock  
Drag: 0.8



Acidic Raindrop  
Drag: 1.0

## Enemy Spawn Points

All enemies are spawn randomly in random locations across the top area of the scene (the sky). For each specific level, each enemy has a different amount of delay applied for spawning.

<u>ENEMY</u>	<u>DELAY IN LEVEL 1</u>	<u>DELAY IN LEVEL 2</u>	<u>DELAY IN LEVEL 3</u>
	N/A	0.2	0.7
	0.3	0.3	0.3
	N/A	N/A	0.3

## Allies / Companions

There is only one “ally” in the game, a blue raindrop. However, the raindrop does not affect the player / Matsumy in any way. It is just randomly spawn during level 3 to add to the effect of rain (Note: blue raindrops can cause the player to have some confusion when dodging the falling objects).



SPAWN: only on level 3

## Ally States

The blue raindrop has one state: it falls from the sky (the top part of the scene) according to a drag of 1.0 and gravity force.

## Ally Spawn Points

The blue raindrop is spawn randomly in random locations across the top area of the scene of level 3. It is repeatedly spawned with a delay of 0.2 .

# ART

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\*All art was made by Linette J. using pixlr x, except the character Matsumy. Matsumy was produced by sanderfrenken's character generator.

## Setting

The game takes place in Canalu, a planet where every ten years there's an apocalyptic storm. Rocks of different sizes fall, and acidic purple rain hurt the residents of Canalu including Matsumy.

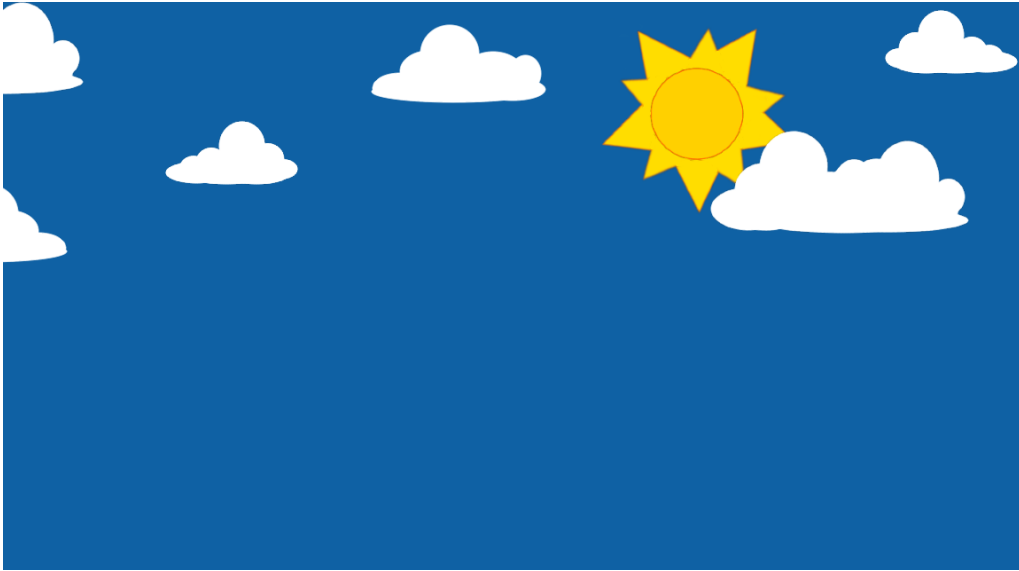
## Backgrounds

\*All backgrounds were designed and created using pixlr x by Linette J.

Main Menu & How To Play Scene Background:



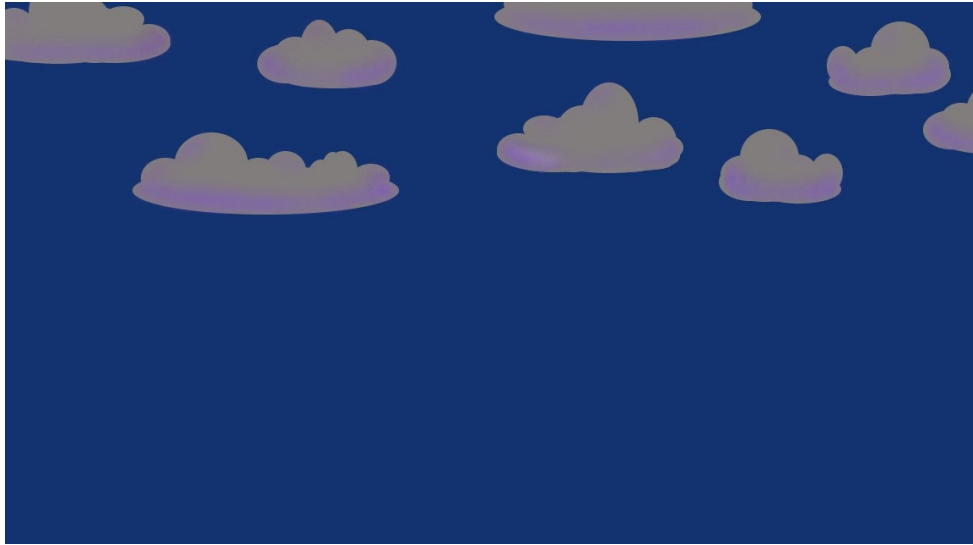
Level 1 Background:



Level 2 Background:



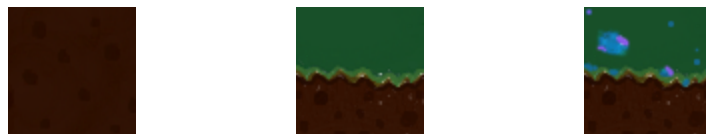
Level 3 Background:



## Tiles

\*All tiles were designed and created using pixlr x by Linette J.

The tiles were used to create the ground throughout the game.



## Level Design

All levels have the same design, they are all a still outside scene where the background displays the current weather in Canalu. The scene parameters are set with restrictions so the player cannot go out of the current scene frame. There are different types of enemies spawning according to each level (Look under NPC → Enemies for further information).

# AUDIO

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\*Current audio was obtained from OpenGameArt.Org

Background Music on all levels and scenes:

Author: Snabisch (2015, May 31)

Link: <https://opengameart.org/content/the-happy-bride>

# PROCEDURALLY GENERATED CONTENT

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\*There is no procedurally generated content in this game apart from random numbers for spawning enemies.

N/A

# MINIMUM VIABLE PRODUCT ( MVP )

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- A modern PC or MAC
- One Level of difficulty

# WISH LIST

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## ADD MORE LEVELS:

Add more levels for the player to enjoy, and to be able to further develop the game story.

## ADD HELPING ITEMS & INVENTORY:

- 1) Spawn a few random umbrella objects that will also fall during the non-raining levels. If Player catches an umbrella it'll be added to their inventory. Player can then use it to protect Matsumy from acidic rain for a certain amount of seconds.
- 2) Randomly spawn hearts on the ground which can increase Matsumy's health.

## ADD A POINT SYSTEM:

Add some sort of object that the player can collect by catching it. This object will count as a point, and after collecting a certain amount of points the player can unlock an umbrella or something to temporarily protect them from enemies.

## ADD MORE DIFFICULTY TO FURTHER LEVELS:

Spawn mushrooms (either on ground or falling from the sky) that if caught it'll increase Matsumy size. Making the dodging of objects more difficult.



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[https://www.youtube.com/watch?v=ao\\_BZMORqQw](https://www.youtube.com/watch?v=ao_BZMORqQw)

*2D Sprite always behind background*. (2016, August 02). Unity Forums. Retrieved April 09, 2020, from <https://forum.unity.com/threads/2d-sprite-always-behind-background.421276/>

#### Other Websites used

Website used for creating art:

<https://pixlr.com/x/>

Website used for generating character:

<https://sanderfrenken.github.io/Universal-LPC-Spritesheet-Character-Generator/>