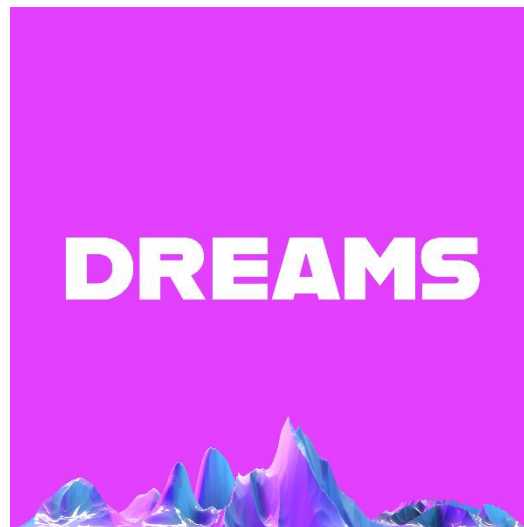
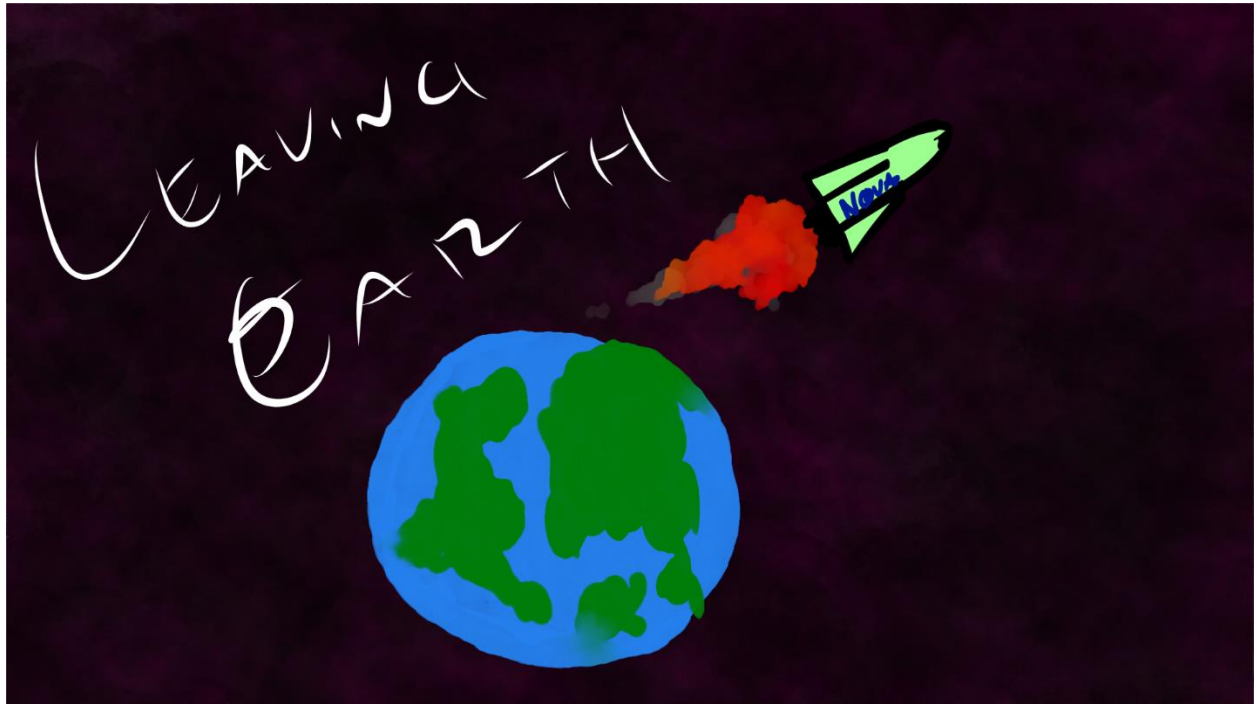


## Leaving Earth Game Design Document (GDD)



*'Lead us to safety Captain'*

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## Game Development Team Members

### PRODUCER

Marcos Elias

### PRODUCTION MANAGER

Marcos Elias

### PRODUCTION COORDINATOR

Marcos Elias

### GAME DESIGNERS

Marcos Elias

### SYSTEMS/IT COORDINATOR

Marcos Elias

### PROGRAMMERS

Marcos Elias

### TECHNICAL ARTISTS

Marcos Elias

### AUDIO ENGINEERS

Marcos Elias

### UX TESTERS

Marcos Elias

# 1 Game Overview

Title: Leaving Earth

Platform: PC Standalone

Genre: Side Scrolling

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 -30)

Release date: April, 2022

Publisher: Dreams

Description: This game is an endless scroller where the player is a spaceship leaving Earth. The name of the game is Leaving Earth as you play as a spaceship dodging asteroids trying your best to survive and get you and your passengers to safety in hopes of finding a new planet to live on. Your home planet Earth is no longer habitable and so you must leave your beloved home behind.

## 2 High Concept / Genre

2.1 The genre of this game is an Endless Runner. This game is based on games like Jet Pack Joyride which is a popular smartphone app. Other similar games are Flappy Bird and Temple Run. All three of these games are very popular on mobile devices as they became famous on iOS and many people have played them. I like these games that are easy and simple for the users to learn how to play as they usually only have a few gestures to learn but yet those games are still very addicting even though they are simple. I think simple games like these can be very effective and have been very effective in terms of creating a "trend" as anyone can easily play those games and know how to play them. Furthermore, I wanted to use those ideas for my game. I like things relating to space and the future, and so I wanted to create a game that could very much be a life event in a couple of decades. Just like the above stated games, my game will have obstacles or enemies that the player will have to dodge in order to survive. I plan to keep the controls simple but yet try and make the game challenging for the player.

## 3 Unique Selling Points

The art for this game is made by myself. Sweet sound effects. Simple and Easy controls for a fun game.

## 4 Platform Minimum Requirements

PC, MAC, and Linux

The minimum requirements for this game is any modern desktop/laptop. Pretty much any laptop or computer with atleast an i5 processor and 4 gb of ram will run the game. You will also need a mouse and a keyboard for the user input in the game.

## 5 Competitors / Similar Titles

A couple of similar titles would be games like Flappy Bird which was a super popular game on mobile app stores. Another similar title would be Jet Pack Joyride which was and is a very popular game on mobile app stores.

## 6 Synopsis

This game is an endless scroller where the player is a spaceship leaving Earth. The name of the game is Leaving Earth as you play as a spaceship dodging asteroids trying your best to survive and get you and your passengers to safety in hopes of finding a new planet to live on. Your home planet Earth is no longer habitable and so you must leave your beloved home behind.

The user selects the color for their Player, the name of their player, and the difficulty for the game.

There are two controls for this game. Up arrow Key and Down Arrow Key. You move your player up and down to avoid Asteroids that do damage to your space ship. If you take enough damage, your Player will explode and the game will end.

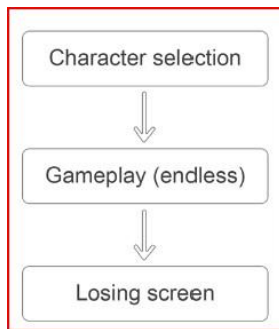
## 7 Game Objectives

The objective of this game is to avoid the Asteroids flying at you as you try to survive the asteroid belt. Survive for as long as you can so that your civilization can find a new planet to settle in and continue your lives. Move your player up and down with the arrow keys so that you can move your space ship away from the danger of the asteroids.

## 8 Game Rules

The rules of the game are that you can only move Up or Down, one movement at a time. You have a starting initial health value and those are your “lives” for the game. Avoid the asteroids flying at you, if an Asteroid hits your Player, than you lose one health point. If you lose all of your Health Points your Player will blow up and die and the game will end.

## 9 Game Structure



## 10 Game Play

### 10.1 Game Controls

There are two controls for this game.

Up Arrow Key:

Moves your Player position up

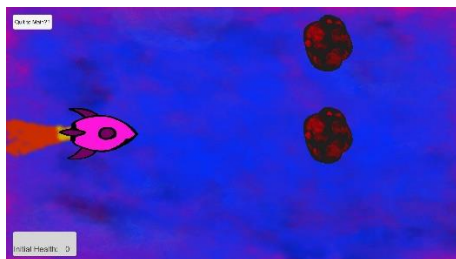
Down Arrow Key:

Moves your Player position down

### 10.2 Game Camera

The game camera is focused on the Player from the Z axis. The camera doesn't move or change position.

#### 10.2.1 HUD



On the top right corner, there is the Quit to Main Menu button which obviously takes you to Main Menu

On the Middle left corner, there is where the Player is located as you move up and down on the screen.

On the bottom left corner there is the Player Name and Initial Health.

To the right of the screen we see the incoming Asteroids that the Player must avoid to stay alive.

## 11 Players

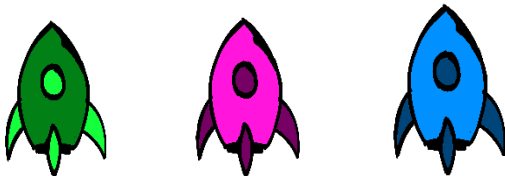
### 11.1 Characters

There are three characters:

Blue Rocket

Green Rocket

Purple Rocket



### 11.2 Character Metrics

Player Health is equal to either 5, 3, or 1.

This is determined by what Difficulty the user selects.

### 11.3 Character States

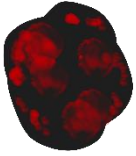
Idle: The Player floats around with an animation that makes it look like that Rocket is moving a little.

Moving: The Player moves Up or Down on the screen and there is an Audio Clip of spaceship sound effects that get played when you move or down.

Dead: The Player sprite changes to an image of an explosion when the Player dies and then an Audio Clip of an explosion plays.

# 13 NPC

## 13.1 Enemies



The enemies in this game are Asteroids. They fly at the Player across the screen and cause damage to the Player.

### 13.1.1 Enemy States

Moving:

The enemy Asteroid moves towards the Player from the right side of the screen towards the left side of the screen.

Destroyed:

Once the Asteroid hits the Player, the Asteroid then gets “destroyed” and deleted from the scene.

### 13.1.2 Enemy Spawn Points

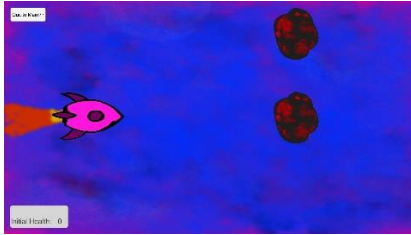
The enemy spawn points are off to the right side of the screen just outside the canvas. The Spawner spawns enemy Asteroids from the right side of the screen and the Asteroids move across to the left side of the screen. The enemy spawn points randomly spawn Asteroids at different positions on the right side of the screen.

# 14 Art

## 14.1 Setting

The setting for this game . The player is “Leaving Earth” so obviously the setting would be outer space where you can see Asteroids flying at you and space dust in the background.

## 14.2 Level Design



There is only one level.

I designed the level to look like you are in space. I added animations and Particle Effects so that the Player and Asteroids look more alive and fun.

I took some ideas from games I have played before like Jet Pack Joyride and Flappy Bird, where the UI is simple and the controls are simple but still make a fun game.

## 14.3 Audio

The sound effects in this game I downloaded from two free websites for audio.

Epidemicsound.com

Uppbeat.com

There are sound effects when the Player moves up and down and when the Player dies.

Folwar, S. (n.d.). *Free music for creators*. Free Music For YouTube Videos & Creators • Uppbeat. Retrieved April 30, 2022, from <https://uppbeat.io/track/simon-folwar/neon-signs>

*Playlists: Epidemic sound*. Premium Music for Content Creators. (n.d.). Retrieved May 1, 2022, from <https://www.epidemicsound.com/my-music/playlists/11174847/>

# 15 Procedurally Generated Content

## 15.1 Environment

## 15.2 Levels

## 15.5 Audio



## 16 Wish List

I would like to add more sound effects in the future, so that the game feels more alive.  
I would also like to add more of my own art to the game to GameObjects like the menu buttons.  
I feel that I can make the buttons a lot better and design them a lot better.  
I would also like to add a Distance and Scoring system to the Play Scene.

## 17 Bibliography

All of the art/sprites for this game I made myself with Adobe Fresco. I made the rockets, background, and asteroid using Adobe Fresco

The song in the background I downloaed from a website called Uppbeat. Here is the credit for the song:

Music from Uppbeat (free for Creators!):

<https://uppbeat.io/t/simon-folwar/neon-signs>

License code: L8B45JPENU6SYF4V

The audio clips for the death explosion and Rocket sound, I dowloaded from edidemicsound.com

I watched videos on Youtube to learn how to make this game. The channels I watched were:

Imphenzia

Reso Coder

Blackthornprod

Brackeys

Folwar, S. (n.d.). *Free music for creators*. Free Music For YouTube Videos & Creators • Uppbeat. Retrieved April 30, 2022, from <https://uppbeat.io/track/simon-folwar/neon-signs>

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Reso Coder. (2017, March 24). *Singletons in unity - simple tutorial for Beginners*. YouTube. Retrieved May 1, 2022, from <https://youtu.be/CPKAgyp8cno>

Imphenzia. (2020, July 24). *Learn unity - the most basic tutorial I'll ever make*. YouTube. Retrieved May 1, 2022, from <https://youtu.be/pwZpJzpE2lQ>

