

# 2D Game Design Document

**CS583** 

Prof. Price

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# Game Development Team Members

PRODUCER

**Matthew Hunter** 

PRODUCTION MANAGER

Matthew Hunter

PRODUCTION COORDINATOR

Matthew Hunter

GAME DESIGNERS

Matthew Hunter

SYSTEMS/IT COORDINATOR

Matthew Hunter

PROGRAMMERS

Matthew Hunter

TECHNICAL ARTISTS

Matthew Hunter

AUDIO ENGINEERS

Matthew Hunter

Michael Lorico

UX TESTERS

Matthew Hunter

# 1 Game Overview

**Title**: Sunset Chaser **Platform**: Mac OS

Genre: 2D Platform Endless Running

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Release date: December, 2017 Publisher: Mahchuchu Games

In this 2D Platform Endless Running game, Sunset Chaser, the Player is a cloud continuously running toward the setting sun. The Player must run as far as they can before falling to their death or touching an Evil Cloud to at which point would end the game and the journey for sunset-admiring cloud.

## 1.1 Game Genre

The 2D Platform Endless Running Game, in this case, involves a side scrolling camera following the Player along the X-axis, whilst the Player is jumping on random procedurally generated platforms, avoiding falling and enemies for as long as they are able to before the Player loses.

# 2 High Concept

In Sunset Chaser, the Player is set in a sunset sky environment where they immediately start running and jumping from cloud to cloud in order to catch the sunset. The Player can only touch and jump on the good, unbiased clouds; however, there are bad, dark clouds of thunder and lightning that will end the Player's life. Avoid these clouds and chase the sunset as long as you can without falling.

# 3 Synopsis

In Sunset Chaser, you are a Cloudian, a cloud citizen, fascinated by the disappearing sun submerging below the horizon, jumping from cloud to cloud, until you're satisfied from its overwhelming beauty; however, you cannot run on all clouds, there will be angry, merciless Evil Clouds that despise everything in existence for no apparent reason. Avoid them at all cost or you will become a part of them and your curious, sun-passionate self will cease to exist. Also, be careful to not fall off or you will die. You may be a cloud, but you're a heavy cloud.

# 4 Game Objectives

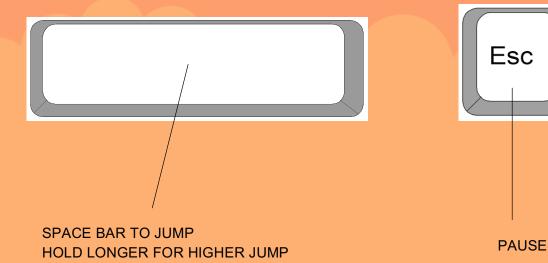
The objective of this game is to run and jump for as long as possible without falling or touching bad clouds, earning points for as long as you are in the game.

# 5 Game Rules

The game level is a scrolling 2D environment set in sunset sky environment where the Player is running and jumping from cloud to cloud, avoiding a falling death and evil clouds. The Player automatically runs and is able to jump when needed by pressing the space bar. All clouds (good and evil) are generated randomly well ahead of the Main Camera, so each game will be a different platform jumping challenge. The Player earns points for as long as they are still alive in the game and ends when the Player falls to their death or comes in contact with an evil cloud.

# 6 Game Play

### 6.1 Game Controls



## 6.2 Maps



This is the starting state of the Game and the only map in it, in which the Player will automatically begin running, jumping form randomly generated Cloud Platforms.

### 6.3 HUD

### **Start Game**

The HUD of the start of the game includes a Score in the top left corner and a High Score in the top right corner.



#### Pause Screen

The Pause Screen appears when the Player pauses by pressing the ESC button and contains three buttons to either resume the current game, restart from the beginning of the game, or quitting to the main menu.



#### Death Screen

The Death Screen appears when the player falls or touches an Evil Cloud and contains two buttons that either restart to the beginning of the game or quitting to the main menu.



# 7 Players

# 7.1 Characters

### Cloudian



A Cloudian, a cloud citizen, deeply obsessed with all that comes with a beautiful sunset and desires to make it last forever by chasing it.

### 7.2 Metrics

Speed: 8

**Gravity Scale: 5** 

Jump Force: 13

Jump Time: 0.2 seconds

## 7.3 States

The Cloudian only has one state that stays constant, even while jumping it's form does not change nor is animated.

# 8 NPC

## 8.1 Enemies

#### **Evil Cloud**



Evil Clouds are full of hatred and despise everything in existence so much that touching one destroys all lives and dreams, including the Cloudian.

# 8.1.1 Enemy States

The Evil Cloud has only one state, because they are lonely, hateful clouds.

# 8.1.2 Enemy Spawn Points

There are no specific spawn points for the Evil Cloud, as they are randomly generated ahead of the main camera.

### 8.2 Platforms

#### **Cloud Platform**



If there were "allies" in this game, this simple Cloud Platform would probably be one, as it's the only thing that keeps you in the sky and has no bad consequence whatsoever.

#### 8.2.1 Platform States

The Cloud Platform has basically only one state; however, as they are randomly generated, they can appear as 1 to 4 clouds long.

## 8.2.2 Platform Spawn Points

There are no specific spawn points for the Cloud Platforms, as they are randomly generated ahead of the main camera.

# 9 Art

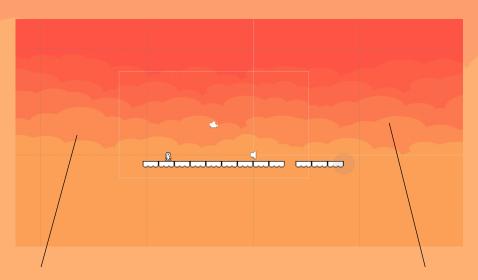
# 9.1 Setting



This is the sunset sky environment in which the Player will play the game. The skybox is credited to "Farland Skies" available freely in the Unity Assets Store.

# 9.2 Level Design

The Main Camera follows the Player (Cloudian) as he runs from the left to the right.



When the generated objects have passed the main camera, there is a point where they will be removed from the game.

Ahead of the camera will be generated Cloud Platforms and Evil Clouds, with varying heights as long as it is within the camera.

### 9.3 Audio

<u>NAME</u>	CATEGORY	DESCRIPTION
videogamemusic.mp3	BG Music	Plays during the Game
fall.wav	FX	When the Player falls
jump.wav	FX	When the Player jumps
thunder.wav	FX	When the Player touches an Evil Cloud

## 9.4 What you Developed

- All sprites including the Cloudian, Evil Cloud, and Cloud Platforms
  - o Piskelapp.com
- Background Music, with help from friend, Michael Lorico.

## 9.5 Credits

- Scripts with help from YouTube and docs.unity3d.com
  - o gamesplusjames
    - https://www.youtube.com/watch?v=GrQalFLtQT4&list=PLiyfvmtjWC\_Xmd YfXm2i1AQ3lKrEPgc9-
- "Karma Future" Font
  - o 1001freefonts.com
- Sprite Sounds including jump, fall, and thunder
  - o Freesound.org
- "Farland Skies" Background Skybox
  - o Unity Assets Store