**Seneca College**

**Midterm Project**

**Paul Seung Kyung Kim**

**Brendan Yawney**

**Daniel Sirkovich**

**GAM537 Section NSA**

**George Kougioumtzoglou**

**October 23, 2020**

Contents

[Introduction 1](#_Toc54114809)

[Methods to Access Game 1](#_Toc54114810)

[The Game 2](#_Toc54114811)

[Controls 2](#_Toc54114812)

[Functional Requirements 4](#_Toc54114813)

[Requirement: Four well-designed levels 4](#_Toc54114814)

[Requirement: Ten Objects 4](#_Toc54114815)

[Requirement: Player Character 4](#_Toc54114816)

[Requirement: Lighting 4](#_Toc54114817)

[Requirement: UI 4](#_Toc54114818)

[Requirement: Terrain and Level Design 5](#_Toc54114819)

# Introduction

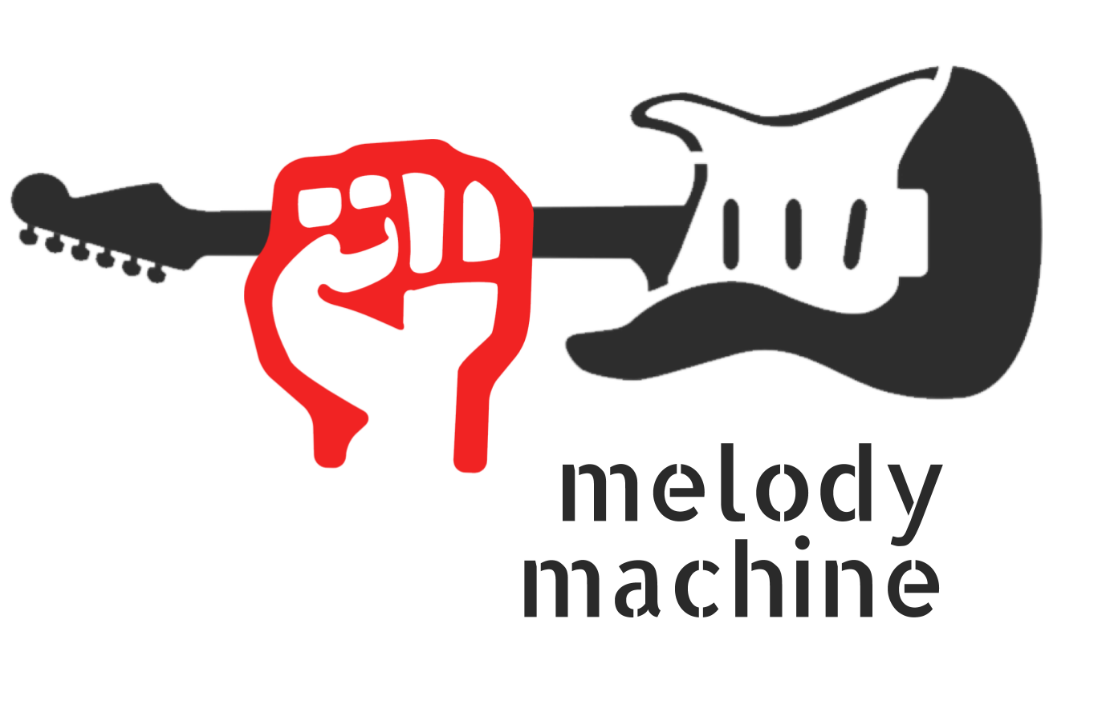
This document describes our video game Melody Machine and how it meets the functional requirements for the GAM537 Midterm Project.

## Methods to Access Game

GitHub: [https://github.com/paulkim26/gam537-platformer](https://github.com/paulkim26/gam537-platformer%20) (invitation sent to your GitHub ID: docie80)

YouTube: <\*TODO insert link here>

## The Game



Melody Machine is a 3D action platformer.

Alex - a 20-something millennial with a liberal arts degree and dreams of hitting it big as a rock star - seeks to escape an unhinged urban dystopia dreamscape armed with nothing but her trusty Fender Stratocaster.

Each level finds Alex jumping across moving platforms, collecting vinyl’s, and fending off monstrous manifestations of societal pressures.

The game draws inspiration from classic 3D platformer games including:

* Super Mario Sunshine (2002)
* Psychonauts (2005)
* A Hat in Time (2017)

### Controls

|  |  |
| --- | --- |
| **Input** | **Function** |
| Mouse | Camera Control |
| Left-click | Attack |
| W | Move forward |
| S | Move backward |
| A | Move left |
| D | Move right |
| Space bar | Jump |

# Functional Requirements

## Requirement: Four well-designed levels

**“At least 4 well-designed levels”**

<\*TODO Insert screenshot here>

## Requirement: Ten Objects

**“A number of 10 objects designed in the Editor or designed in any other application or imported by any source…All the game objects should be Blueprints (except the Volumes) with complex colliders, physics and well-designed.”**

<\*TODO Insert screenshot here>

## Requirement: Player Character

**“A 3D Character with fully working keys, key binding, camera, collision, at least 5 animations (e.g. idle, walk, run, jump, death), apply transitions to animations, a score system based on the character (e.g. number of pickups count), a life system (e.g. count remaining lives).”**

<\*TODO Insert screenshot here>

## Requirement: Lighting

**“Fully implemented lighting that includes at least a sky dome, a directional light, and a number of other lights (a exception could be an internal – underground world, where the sky dome – directional requirements are dropped). The lights should have some kind of functionality implemented with Blueprints.”**

<\*TODO Insert screenshot here>

## Requirement: UI

**“A well-designed User Interface that displays information about the level and the character (e.g. level name, number of lives etc).”**

<\*TODO Insert screenshot here>

## Requirement: Terrain and Level Design

**“Every level should include a terrain, with some kind of vegetation or multiple objects that create the impression of a real world, that can host a game level.”**

<\*TODO Insert screenshot here>