ROCHESTER INSTITUTE OF TECHNOLOGY

PROJECT

**GAME DESIGN DOCUMENT**

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# Concept

## Project Scope

The work on the game started on February 9th, 2022, and it ended on April 28th, 2022, with many milestones in the between.

## Overview

The genre of this game is action, and its’ targeted audience is from three years old to onwards and it is for all genders. Visual Studio Code or some other code editor which supports Java is needed in order to play the game.

## Theme and Settings

Alien51 game set in a famous Area 51. People suspect that Aliens are kept there so this game made it all real. The player takes on the role of the Human and collecting coins he/she saves the world.

# Story

Humans can only guess if they are alone or not in this world. So, they assumed for a long time until the day came when aliens corrupted planet Earth. And where would they else occur first if not at Area 51, which has the most connections with Aliens or has it? Help humans save the planet Earth from those vile creatures once and for all!

A sign on a fence

Description automatically generated with medium confidence

# Gameplay

The goal of the game is that human in his/her car collects thirty coins while being chased by UFOs. If the UFOs catch the human, the player loses on of his/hers three lives that they get at the begging of the game. When the player loses his/hers all three lives then it is the end of the game.

## Game Progression

Every day was a new challenge wile working on this game. With more ideas came even more challenges that were crossed when faced. Unfortunately, the time was not on game maker’s side and because of that the game does not have everything that was initially planned to have.

## Objectives

# Mechanics (Physics)

## Movement

Movement for Ghosts is randomized and based off the yellow squares on the canvas map

## Objects

We have coin objects spread across the map, nitrous, and objects for pacman and ghosts.

## Actions

### Combat

Power-up

…

# Game Elements

This game represents one of today’s very famous themes and that is Alines. Characters and map are based on that exact theme. Because of that as characters we have Alien’s UFOs which are against humans. Players can only be humans and the game can be played in multiplayer with to players.

## Characters

Humans in cars are main characters in this game. The humans present a Packman from the game Packman and is played by the players. There are two types of a car as the game is multiplayer thus can be played by two players.

Alien’s UFOs are other characters in this game. They have a role of a ghosts from the game Packman and are non-player characters which instead manages PC. There is 4 UFOs, all in different colors.

## Location

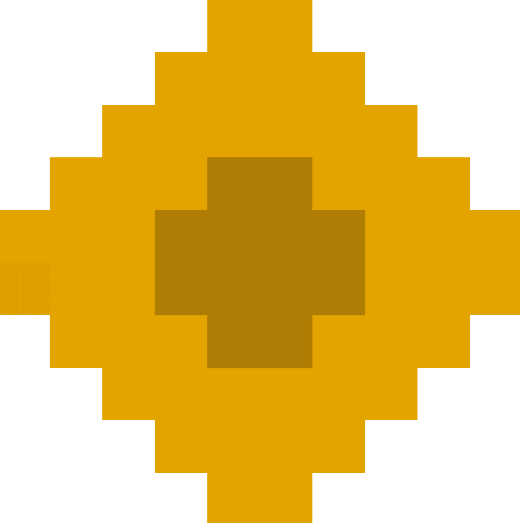
The location of the game is the map of a famous Area 51. The look of the game design is the most similar to the real looking Area 51 map.

## Level

This game is one level game with one map.

## Objects

The coins can be called objects in this game. By collecting coins humans gain points, one coin is one point. If the first fifteen coins are collected another round of fifteen coins will appear. When 30 objects are collected the player has finished and won the game.



*Picture of Coin*

# Assets

Assets used in this game are designed map and characters. Also, music for the main menu and game.

## Art

This is a 2D game, with high quality 2D sprites which are also made as gifs. The character design should resemble real cars and imaginary Alien’s UFOs. The games’ map design is similar to the real Area 51 map. To make the map more real, shades of different colors are used for dust effect that causes sand. All buildings have a shadow for better game experience. There are also gold coins on the road to collect. Cacti and flowers are made as a gif and put on the map to make it more alive.

### Location

The location of a game is the map of a famous Area 51.

|  |  |
| --- | --- |
| Original Area 51 Map  *Picture of Area 51* | Recreated Area 51 Map  *Picture of recreated Area 51 map for this game* |

### Characters

The main characters are two humans in their cars and there are also four Alien’s UFOs.

|  |  |
| --- | --- |
| A picture containing text, first-aid kit, clipart, vector graphics  Description automatically generated | A picture containing chart  Description automatically generated |

*Picture of human in its’ car and Alien’s UFO*

## Music

Just like the game design, the purpose of the music in the game is to make the most of the players’ experience. Not only the player can see what is happening in the game but also with music players will have better experience. This game has two music sounds of which one is played when player is in the main menu and other music sound is when the game is played.

## Animation

# References

Google. (n.d.). Google search. Retrieved April 29, 2022, from <https://www.google.com/search?q=area%2B51&amp;source=lnms&amp;tbm=isch&amp;sa=X&amp;ved=2ahUKEwiNq8_b47f3AhVDlYsKHcZUC-QQ_AUoAXoECAIQAw&amp;biw=958&amp;bih=951&amp;dpr=1#imgrc=7PuHzMGjaDzDqM>