-**Alien Invasion**-

**2D**



Logo

Game Design Document Written by:

Andreev F. # 100842078 Andri A. # 100970401

October,2017

Revision: 0.0.1

Overview

Theme/Settings/Genre

Brief Gameplay Mechanics

Targeted platforms

Influences (Brief)

- Influence #1

- Influence #2

Project Description (Brief):

Project Description (Detailed)

What sets this project apart?

Core Gameplay Mechanics (Detailed)

- Core Gameplay Mechanic #1

- Core Gameplay Mechanic #2

- Core Gameplay Mechanic #3

Gameplay (Brief)

Gameplay (Detailed)

Assets

- 2D Textures e.t.c.

- Sound

- Code

- Animation

## **Theme / Setting / Genre**

Defense and Survival Game/Deserted City/Action-Adventure

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## **Brief Gameplay Mechanics**

Gameplay Mechanic **#1** - The Player

The first mechanic is about the player’s movement and how he interacts with the environment.

Gameplay Mechanic **#2** - The Enemy

It’s the exact same mechanic as the player except the A.I follows a pattern but the player’s movement are spontaneous. Also the A.I has endless respawns whereas the player only has 3 lives.

Gameplay Mechanic **#3** - Logic Board

The music dictates how fast the aliens move. And every level the speed increases. The aliens have to reach the bottom of the screen to win the game, even if it’s just one.

## **Targeted platforms**

- Personal Computer (Windows Operating Machine

- XBOX Consoles (All versions)

## **Influences (Brief)**

### **- <Influence #1>**

- <Medium> (Independence Day (1996))

The Independence Day movie is an influence because it’s about aliens invading a city and humanity is defending against an overwhelming force, hence, look at game with 1 artillery-artillery-artillery-tank against 20 alien-creatures.

### **- <Influence #2>**

- <Medium> (War movies)

Any movies made prior to this video game are an essential influence. This game is an essential duck and cover shoot-em-up action adventure game. In war movies you usually see soldiers taking cover and shooting projectiles at enemies. However, since you are not a soldier in ‘Alien Invasion’, but you are an artillery-tank driver, it’s practically the same thing.

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## **Project Description (Brief):**

A an action-adventure survival game that is endless and is mostly about obtaining a high score.

## **Project Description (Detailed)**

This is a game about survival. You are a player controlling an artillery-artillery-artillery-artillery-tank and your objective is to defend yourself at all cost from all aliens and destroy all of them. However, the game will never stop. As soon as you destroy the first wave of aliens, another one will appear. Although you are meant to survive, the real prize of this game is the ‘High Score’ that a player can achieve.

# **What sets this project apart?**

Most games are complicated and have a lot of different types of enemies, objects and goals but this game is very simple. This is because it only has the player, a wave of enemies, 4 bunkers, 1 mothership, a high score system, and 2-different-looking projectiles from the A.I enemies and the player and that’s it.

- You don’t need any instructions for this game.

Anyone who’s ever touched a PC video game knows that

the arrow keys and spacebar are the holy grail when

it comes to movement and shooting or jumping.

- Simple art that even the programmers can create

themselves.

## **Core Gameplay Mechanics (Detailed)**

### Gameplay Mechanic **#1** Player

Player is able to move the artillery-artillery-artillery-tank horizontally across the entire screen. Only one projectile at a time can be fired. The artillery-artillery-artillery-tank is able to hide behind the 4 green bunkers to prevent enemy projectiles from hitting it. If the player is hit, he disappears from the screen and he’s respawned. But he loses 1 life. If he loses all 3 lives, it’s game over.

### Gameplay Mechanic **#2** The Enemy (A.I)

All the Enemy A.I move in a single pattern as one huge block. No individual character acts alone besides shooting a projectile.

The entire A.I block moves pixel by pixel from left screen to the right. Afterwards, it moves down 3 pixels and returns pixel by pixel to the left-end screen. It repeats this pattern until the first line of enemy touches the bottom screen and then it’s game over.

The enemy A.I movement is in sync with the music. So when it moves by a pixel it matches the rhythm of the music being played.

### Gameplay Mechanic **#3** Logic Board

The green bunkers act like a buffer zone to give the player some cover to hide under. However, if any projectile hits the bunkers it deteroties a bit. The good thing is that the bunker only losses parts where it is hit. The music is pretty much the conductor if this was an opera. It dictates how fast the enemies will move and how often they will shoot. So if you hear the music increase in tempo, you will see that it will match the aliens, but the shooting will still be spontaneous but happening more often.

### If the player manages to destroy all aliens, the aliens all respawn and repeat the process over again. But this time they move faster and so does the music.

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## **Gameplay (Brief)**

Survive and destroy all enemies

## **Gameplay (Detailed)**

You control an artillery-tank. You are the last one left. You need to fire your single projectiles at the targets and destroy them all. Occasionally a mothership might appear, destroy it too. Use the last remnants of the bunkers left to defend yourself at all costs. The waves of alien creatures seem endless. Destroy as many as you can, run for cover, reappear because your ammunition seems to be endless too.

# **Assets**

## **- 2D**

- Textures

Player texture, Alien(1)T, Alien(2) T, Alien(3)

T, Mothership T, Projectile(1) T, Projectile(2) T, Bunker Texture, Player Death T, Alien Death Texture, and Mothership Death Texture.

- Environment Textures

Score Board Textures, Lives Textures

- Characters List

- Character #1 Player

- Character #2 Alien 1

- Character #3 Alien 2

- Character #3 Alien 3

- The only difference are the visuals

- Character #4 Mothership

- Environmental Art Lists

- Green Bunkers (4)

- Background (Solid Color)

- Score Board

- Live Counts

## **- Sound**

- Sound List

- Actors

- Player Projectile Sound

- Player Death Sound

- Player Hits Alien Sound

- Player Hits Mothership sound

- Background

- 16 Bit Music (Loop)

## **- Code**

- Music Script  
 Allows the music to play in the background

-Player Script

Allows the player to move and shoot.

-A.I Script

Allows the A.I to move at a certain pace (matches

the rhythm of the music)

-Background Script

Makes sure that score is being added after each

kill and keeps track of the player’s lives. So if

reaches 0, the game is over. Also keeps tracks of

the number of Alien ships to see if the player

progresses onto the next round. And keeps track

on whether the aliens reach the surface in order

to determine if the game is finally over or not.

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## **- Animation**

- Environment Animations

- Bunker’s Destruction

- Character Animations

- Player’s Destruction

- Alien’s Destruction

- Mother Ship's Destruction

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Special thanks to Alec Markarian

For letting us use their Game Design Document template