

# Project Proposal

Brandon Gutzmann  
Newton Hoac  
Brian Chu  
Benjamin Li  
Jung Yu Chang

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## Contents

<b>1</b>	<b>Overview</b>	<b>2</b>
<b>2</b>	<b>Storyline and Objective</b>	<b>2</b>
2.1	Summary . . . . .	2
2.2	Plot . . . . .	2
2.3	Setting . . . . .	2
2.3.1	Map Properties . . . . .	2
2.4	Objective . . . . .	3
2.4.1	Start . . . . .	3
2.4.2	Waves . . . . .	3
2.5	If 2-Ply dies . . . . .	3
2.6	How to win . . . . .	4
2.7	How to lose . . . . .	4
2.8	Outsourced Assets . . . . .	4
<b>3</b>	<b>Characters</b>	<b>4</b>
3.1	Enemies . . . . .	4
3.2	Player . . . . .	4
3.3	Items . . . . .	5
<b>4</b>	<b>Character-Character Interactions</b>	<b>5</b>
<b>5</b>	<b>Character-World Interactions</b>	<b>5</b>
5.1	Items . . . . .	5
5.2	Movement . . . . .	6
<b>6</b>	<b>Milestones</b>	<b>6</b>

<b>7</b>	<b>Checklist</b>	<b>7</b>
7.1	Models and Animation . . . . .	7
7.2	AI . . . . .	8
7.3	Player . . . . .	8
7.4	Waves . . . . .	9
7.5	Sound . . . . .	9
7.6	Game . . . . .	9

## 1 Overview

**Game Engine:** Blender Game Engine  
**Genre:** 3D Third-person Shooter Survival  
**Title:** Narwhals of Good Sleep

## 2 Storyline and Objective

### 2.1 Summary

The player is controlling 2-Ply the penguin. The main objective is to survive and/or protect the flag (2-Ply's egg). If the egg is destroyed, 2-Ply can still survive. However, 2-Ply failed as a parent and gets the “bad” ending. If 2-Ply manages to keep the egg safe he gets the “good” ending. Enemies come in waves and surround the player. 2-Ply has learned to equip weapons of various sorts to combat them.

### 2.2 Plot

2-Ply the Penguin must defend against the invading narwhal troops from the north pole. Due to the disappearance of the southpole, Gnar the narwhal's hoarde of narwhales are here to remove all the penguins and claim the north pole for themselves. With his hands full, 2-Ply must juggle between surviving the devilish attacks and caring for his egg. Armed with only the garbage littered around the land, 2-Ply must use his ingenuity to craft weapons to fight against the narwhals or get wiped off the sea floor.

### 2.3 Setting

#### 2.3.1 Map Properties

- Underwater theme
- Circular in shape
- It will take the player around 1 minute to cross or 30 seconds from the middle to an edge.

- Four main locations: Beach, Coral Reef, Sunken Ship, and Underwater Vents/Volcano.
- Items will spawn randomly around the map but weapons are unique to the region in which they are found.

## 2.4 Objective

### Protect the Flag and/or survive

#### 2.4.1 Start

The game starts with 2-Ply holding his egg at the center of the map. A random weapon will spawn in front of 2-Ply. Other weapons will spawn randomly around the map. 2-Ply will have around 60 seconds to collect weapons and set up the egg in a defensive position. 2-Ply can only hold one thing at a time, so he must juggle between weapons and the egg.

#### 2.4.2 Waves

There will be 5 waves: 4 normal waves plus the Boss wave. All waves will have enemies coming in from the edge of the map to attack 2-Ply and his egg. The first wave will only consist of one type of enemy the *Nightmare Narwhal*. The second wave will introduce the *Ranged Narwhal*. The third wave *Speedy Narwhal*. The fourth wave will not introduce any new characters, instead the narwhals will be stronger.

##### The Boss Wave

The boss is *Gnar the Narwhal king*. He will float down into the center of the map and will be around 10 times larger than 2-ply. He will have special attacks and a lot of health, but he can't move. The three previous types of narwhals will spawn in while the player is battling Gnar.

The player will have one minute to move the egg and gather weapons before the waves of enemies spawn. A predetermined amount of enemies of a set difficulty will spawn per wave. Each wave will last approximately 2-3 minutes. Enemies will attempt to kill the player or egg depending on which is closest and visible. If the player is holding the egg then the enemies will try to attack the player. If the player is damaged while holding the egg they drop it and can't pick it up for 1.5 seconds.

After the wave completes, the player will have 1 minute to move to another area and collect new weapons and ammunition before the next wave begins.

## 2.5 If 2-Ply dies

The game is over. There will either be a death animation and/or a cut scene. The game will restart to the beginning.

## 2.6 How to win

The player wins if he/she survives all 5 waves.

There are two possible endings.

1. 2-Ply and his egg both survive. The “good” ending is shown.
2. Only 2-Ply survives. The “bad” ending is shown.

## 2.7 How to lose

The player loses if 2-ply gets killed.

## 2.8 Outsourced Assets

- Rocks <https://assetstore.unity.com/packages/3d/props/exterior/low-poly-styled-rocks-43486>
- Ship <https://assetstore.unity.com/packages/3d/vehicles/sea/free-ships-104215>
- Sword <https://assetstore.unity.com/packages/3d/props/weapons/rpg-swords-7056>
- Sniper <https://assetstore.unity.com/packages/3d/props/guns/ksvk-russian-sniper-rifle-722>
- Rifle <https://assetstore.unity.com/packages/3d/props/guns/modern-russian-assault-rifle-4>

# 3 Characters

## 3.1 Enemies

- Nightmare Narwhal (attacks with his horn)
- Ranged Narwhal (fires his horn)
- Speedy Narwhal (moves fast, knocks player back)
- Gnarl the Narwhal King (Boss)
  - Shoots lasers from its horn.

## 3.2 Player

- 2-Ply the Penguin

### 3.3 Items

- Penguin egg (The flag)
- Sweeping melee (Egg)
- Long-ranged gun (Sniper)
- Medium-ranged gun (Rifle)
- Close-ranged gun (Shotgun)
- Explosive (Grenade)
- Health Pack
- Ammo Pack (Different Types)

## 4 Character-Character Interactions

- Enemies can attack the player
- The player can attack enemies
- Enemies can “detect” the player
- Enemies can attack the flag

## 5 Character-World Interactions

### 5.1 Items

Items will spawn randomly in the map.

Different weapons will spawn in different regions on the map.

When the player drops a weapon or the flag, it will drop a few meters away. This allows the player to “juggle” multiple weapons if they want to and raises the skill cap of the game.

- The player can defend him/herself with the flag. It will provide a knock back affect to enemies and do a little bit of damage.
- The player can pick up the flag (egg)
- The player can drop the flag (egg)
- The player can pick up a weapon
- The player can drop a weapon
- The player can collect ammunition

## 5.2 Movement

- The player can aim / Move the camera with the mouse.
- The player can walk in 4 directions (wasd)
- The player can sprint by holding down a key (shift)
- The player can jump (space) and can't jump again until they touch the ground
- The player can duck (ctrl)
- The player can attack (left mouse button)
- The player can aim down his weapon sights (right mouse button)
- The enemies can walk

## 6 Milestones

### • *What is complete : Type of proof*

#### Milestone 1:

- **Final Checklist** : updated project proposal
- **Final Proposal** : update project proposal
- Penguin Model : Picture
- Penguin Movement Animation : Video
- Egg Model : Picture
- Enemy Model (Nightmare Narwhal) : Picture
- Enemy Movement Animation : Video

#### Milestone 2:

- Player Movement : Video
- Player Aiming : Video
- Map (2 locations) : Pictures
- Item Spawn : Video
- Item pickup/ drop : Video
- Enemy Movement : Video
- Enemy LOS : Video

#### Milestone 3:

- Map (2 locations) : Pictures
- Fire weapons : Video
- Enemy Spawn : Video

- Enemy Attack : Video
- Damage : video
- Item pick up animation : video
- Item drop animation : Video
- Gnar model : Picture

#### **Milestone 4:**

- Gnar animation : Video
- Gnar attacks : Video
- Game Menu : Picture / Video
- Game options : Picture
- Game start / First Wave : video
- Second Wave : Video
- Third Wave : video

#### **Milestone 5:**

- Sound effects : Video
- Music : Video
- Fourth Wave : Video
- Final Wave : Video

## **7 Checklist**

### **7.1 Models and Animation**

- ☒ 2-Ply
- ☒ Egg
- ☐ Egg Attack Animation
- ☐ Nightmare Narwhal
- ☐ Nightmare Narwhal attack animation
- ☐ Nightmare Narwhal movement animation
- ☐ Ranged Narwhal
- ☐ Ranged Narwhal attack Animation
- ☐ Ranged Narwhal movement Animation
- ☐ Speedy Narwhal
- ☐ Speedy Narwhal Attack Animation

- ☐ Speedy Narwhal movement Animation
- ☐ Gnar
- ☐ Gnar Attack Animation(s)
- ☐ Sunken Ship (location 1)
- ☐ Volcano (location 2)
- ☐ Underwater Vent (location 2)
- ☐ Coral Reef (location 3)
- ☐ Beach (location 4)
- ☐ Sniper
- ☐ Rifle
- ☐ Shotgun
- ☐ Grenade Launcher
- ☐ Health Pack
- ☐ Ammo Pack
- ☐ 2-Ply Movement Animation

## **7.2 AI**

- ☐ Enemy LOS
- ☐ Enemy Targeting
- ☐ Enemy Damage
- ☐ Gnar Attacks
- ☐ Enemy Spawn

## **7.3 Player**

- ☐ 2-Ply Shoot Gun
- ☐ 2-Ply Item pick up
- ☐ 2-Ply Item drop
- ☐ 2-Ply Movement
- ☐ 2-Ply Aim
- ☐ 2-Ply look down sights
- ☐ 2-Ply Spawn



## **7.4 Waves**

- ☐ Wave 1
- ☐ Wave 2
- ☐ Wave 3
- ☐ Wave 4
- ☐ Wave 5
- ☐ Wave start
- ☐ Wave end detection

## **7.5 Sound**

- ☐ Sniper
- ☐ Rifle
- ☐ Grenade Launcher
- ☐ Shotgun
- ☐ Egg
- ☐ 2-Ply damage
- ☐ Enemy damage
- ☐ Egg damage
- ☐ Background

## **7.6 Game**

- ☐ Game menu
- ☐ Game Start
- ☐ Game End