

# Project Proposal

Brandon Gutzmann  
Newton Hoac  
Brian Chu  
Benjamin Li  
Jung Yu Chang

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# 1 Overview

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

## 2 Storyline and Objective

### 2.1 Outline

The player is a penguin who is trying to protect themselves from hungry narwhals. The player must also defend their egg (the flag). Unfortunately, the narwhals have surrounded the penguin and are closing in for their final four attacks. The player must survive these attacks in order to win the game. To defend itself the penguin has learned to use firearms and will shoot at the narwhals. Each gun will have its own ammunition. The player can hold an unlimited amount of ammunition.

### 2.2 Setting

#### 2.2.1 Map Properties

- Underwater theme (close to shoreline)
- 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.

### 2.3 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>

## **2.4 Objective**

### **Protect the Flag**

#### **2.4.1 Start**

The Player will spawn in the center of the map with the flag in front of them to defend. The player must find a weapon/weapons to defend him/herself with and to defend the flag. Certain weapons spawn in certain regions. The player can only carry the flag or a single weapon at a time.

#### **2.4.2 Waves**

The player will have one minute to move the flag 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 flag depending on which is closest and visible. If the player is holding the flag then the enemies will try to attack the player. If the player is damaged while holding the flag 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 the player dies**

If the player dies, their currently equipped weapon is dropped and they will respawn on top of the flag after 5 seconds with the default weapon.

## **2.6 How to win**

Survive 4 waves of 2-3 minute continuous spawns. Difficulty increases with each wave. Don't let the flag be destroyed (egg).

## **2.7 How to lose**

The flag (egg) is destroyed by the enemies.

# **3 Characters**

## **3.1 Enemies**

- Nightmare Narwhal

## **3.2 Player**

- Penguin

### 3.3 Items

- Penguin egg (The flag)
- Sweeping melee (sword)
- Long-ranged gun (Sniper)
- Medium-ranged gun (Rifle)
- Close-ranged gun (Shotgun)
- Explosive (Grenade)

## 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

### Milestone 1:

- Penguin Model : Picture
- Penguin Movement Animation : Video
- Egg Model : Picture
- Enemy Model (Narwhal) : Picture
- Enemy Movement Animation : Video
- Map (1 location) : Pictures

### Milestone 2:

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

### Milestone 3:

- Map (final location) : Pictures
- Fire weapons : Video
- Enemy Spawn : Video
- Enemy Attack : Video
- Damage : video

- Item pick up animation : video
- Item drop animation

#### **Milestone 4:**

- Game Menu : Picture / Video
- Game options : Picture
- Game start / First Wave : video
- Second Wave : Video

#### **Milestone 5:**

- Sound effects : Video
- Music : Video
- Third Wave : video
- Fourth Wave : Video

## **7 Checklist**

- ☐ notdone
- ☒ done
- ☐ Penguin Model
- ☐ Egg Model
- ☐ Narwhal Model
- ☐ Map Base
- ☐ Beach Model / Texture
- ☐ Coral Reef Model / Texture
- ☐ Sunken Ship Model
- ☐ Volcano Model
- ☐ Underwater Vent Model
- ☐ Weapon Models
- ☐ Player Movement
- ☐ Player Item pick Up
- ☐ Player spawn
- ☐ Player respawn

- ☐ Enemy Spawn animation
- ☐ Wave Start
- ☐ Wave End
- ☐ Wave 1 Design
- ☐ Wave 2 Design
- ☐ Wave 3 Design
- ☐ Wave 4 Design
- ☐ Enemy LOS
- ☐ Enemy Targeting
- ☐ Health Items
- ☐ Weapon upgrades
- ☐ Camera Positioning