

# PROJECT STATUS REPORT



Project Name	Warehouse War	Reporting Period
Project Owner	Kaan Balci	Oct 15, 2024 - Oct 31, 2024
Prepared by	Kaan Balci	

## HIGHLIGHTS

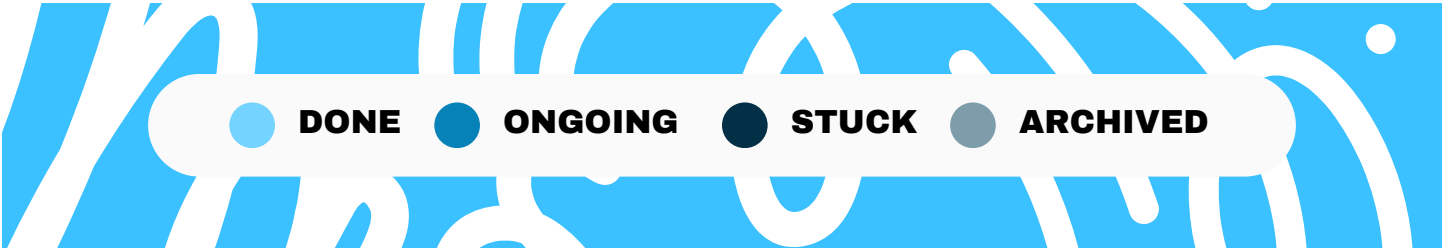
- **Blueprint basics:** nodes, pins
- **Programming basics:** variables, strings, references, functions
- **Unreal basics:** maps, actors, components, transforms, vectors
- **Object Oriented basics:** objects/structs, classes, member functions.

## CHALLENGES

- Playing with Physics
- Spawning projectiles
- Aiming the projectile
- Building a level
- Limiting ammo
- Reloading levels

## STATUS UPDATES

Task or Deliverable	Task Owner	Status
Playing with Physics	Kaan Balci	<div>DONE ▾</div>
Spawning projectiles	Kaan Balci	<div>DONE ▾</div>
Aiming the projectile	Kaan Balci	<div>DONE ▾</div>
Building a level	Kaan Balci	<div>DONE ▾</div>
Limiting ammo	Kaan Balci	<div>DONE ▾</div>
Reloading levels	Kaan Balci	<div>DONE ▾</div>



# PROJECT FEATURES

**Engine: Unreal Engine 5.4.4**

**Type: Physics-based Shooting Game**

**Game Mechanics**

- **Objective:** Knock down all crates using limited ammunition.
- **Ammunition:** The player has a total of 20 bullets.
- **Restart Mechanism:** Once the bullets are exhausted, there is a 5-second delay, after which the level automatically restarts.

**Gameplay Overview**

This game is a simple and enjoyable crate knockdown game where the player must shoot and topple crates within a limited ammo supply. It incorporates basic game design principles and physics to deliver an engaging experience. Players must strategize to knock down as many crates as possible before their ammunition runs out.

**Skills and Concepts Learned**

1. **Blueprints:**

- **Mastered Unreal Engine's Blueprint system for visual scripting, eliminating the need to write traditional code.**
- 2. **Object-Oriented Programming (OOP) Principles:**
  - **Applied OOP concepts to organize game logic and design effectively.**
- 3. **Level Design:**
  - **Designed and iterated a simple yet interactive game level focusing on player engagement.**
- 4. **Unreal Engine Fundamentals:**
  - **Developed a strong understanding of Unreal Engine 5, including key concepts like lighting, physics, and user interface.**
- 5. **Lighting and Positioning:**
  - **Enhanced the game's visual atmosphere through strategic lighting and realistic environment positioning.**
- 6. **Functions and Logic Flow:**
  - **Created custom functions to handle core game events, such as ammo depletion and automatic level restarts.**
- 7. **Physics and Vectors:**
  - **Implemented physics-based interactions and vector calculations to ensure realism in the gameplay mechanics.**

## **Conclusion**

**This project serves as the foundation of my game development journey. It has provided me with practical experience in designing and developing games. I look forward to expanding my skills further by exploring advanced features and techniques in future projects.**

