PROJECT STATUS REPORT

Project Name	Tank Savage	**Reporting Period**
Project Owner	Kaan Balcı	Dec 5, 2024 - Dec 15, 2024
Prepared by	Kaan Balcı	

HIGHLIGHTS

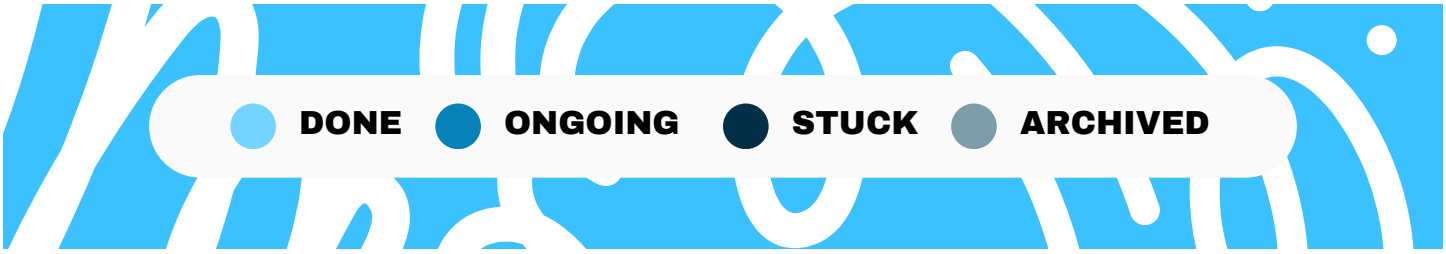
- **Creation of Enemy Entities**
- **Development of Combat Mechanics**
- **Project-Based Game Development Approach**
- **Health and Damage Management**
- **Dynamic User Interface (HUD)**
- **Integration of Special Effects**
- **Camera and Control Mechanics**
- **Start and End Game Mechanics**

CHALLENGES

- **Create a Tank:** Design a tank that can move freely within the game world.
- **Handle Input:** Add functionality for movement using WASD keys and interaction through mouse clicks.
- **Create an Enemy Turret Class:** Design an enemy turret class for the game.
- **Add Fire Functionality:** Develop a projectile shooting mechanic for both the tank and the turret.
- **Implement Health, Damage, and Destruction:** Create a system for health points, damage handling, and destruction mechanics in the game.
- **Integrate Special Effects:** Enhance the game with visual and auditory effects such as smoke, explosions, and sounds.
- **Add Winning/Losing Conditions:** Design elements in the user interface (HUD) to display winning and losing conditions.

STATUS UPDATES

Task or Deliverable	Task Owner	Status
Create a Tank	Kaan Balcı	DONE
Handle Input	Kaan Balcı	DONE
Create an Enemy Turret Class	Kaan Balcı	DONE
Add Fire Functionality	Kaan Balcı	DONE
Implement Health, Damage, and Destruction	Kaan Balcı	DONE
Integrate Special Effects	Kaan Balcı	DONE
Add Winning/Losing Conditions	Kaan Balcı	DONE



PROJECT FEATURES

Engine: Unreal Engine 5.4.4
Type: Third-Person Action Strategy Game

Game Mechanics

Objective: Players must use their mobile tanks to destroy enemy turrets, dodge incoming projectiles, and aim to beat their own high scores by achieving the highest possible points.

Demo Content: The current demo version includes a single level. Players can engage with enemy turrets and experience the combat mechanics. Future updates are planned to add more levels, advanced enemy behaviors, and additional gameplay features.

Game Overview

Tank Savage is a third-person action game developed using Unreal Engine 5.4.4 with C++ and Blueprints. The game integrates dynamic combat mechanics with enemy turrets, projectile detection, and collision systems. Players must control their tanks to battle enemies,

strategically position themselves, and complete levels as quickly as possible. A dynamic HUD and customizable effects provide an immersive gaming experience.

Acquired Skills and Learned Concepts

- **Enemy AI: Designed automatic targeting and firing mechanics for enemy turrets.**
- **Combat Mechanics: Developed systems for projectile creation, firing, damage calculation, and health management.**
- **C++ and Blueprint Integration: Coded core combat functions in C++ and managed them through Blueprints for a flexible structure.**
- **Dynamic User Interface: Designed HUD indicators to display winning/losing conditions and player performance.**
- **Special Effects and Sound: Integrated explosions, smoke, and sound effects to enhance player interactions and realism.**
- **Physics-Based Collisions: Implemented physics-based collision systems for projectiles and tank movements.**
- **Replayability: Encouraged players to surpass their own high scores through a competitive gameplay structure.**

Conclusion

Tank Savage represents a significant milestone in my game development journey, focusing on designing action and combat mechanics. In the future, I aim to enrich the game with more complex levels, powerful enemies, and additional game modes.