

Sharpshooter Game - Task Breakdown

Task Log

Stage 1 - MVP

10/9: Planning

10/10-11: 1-7

10/13: 8-12

10/14: 13-16

10/15: 17-19

10/16: 20-22

10/19: 23-24

10/20: 25-27

Outcome: 8 Days, 27 Tasks, 3.375 Tasks/Day

Stage 2 - Weapon Complexity

10/21: Planning

10/22: 1-3

10/23: 4-5

10/26: 6-7

Outcome: 3 Days, 7 Tasks, 2.3 Tasks/Day

Package - Clean it Up

10/29: Planning

10/29: 1-8

Outcome: 1 Day, 9 Tasks, 9 Tasks/Day

Package - Github

11/4: Planning

11/6: 1-8

11/7: 9-13

11/12: 14-21

Stage 1 - MVP

Main Menu

- ✓ Task 1: Main Menu UI
 - ✓ Initial Created
- ✓ Task 2: Start Game UI
 - ✓ Initial Created
- ✓ Task 3: Exit Game Popup UI

World Setup

- ✓ Task 4: World Object Creation
- ✓ Task 5: Create world Ground Model, Material, and Collision
 - ✓ Initial Created
- ✓ Task 6: Create Player Shooting Stand Model, Material, and Collision
 - ✓ Initial Created
- ✓ Task 7: Create Red Line Model, Material, and Collision
 - ✓ Initial Created

Player Character Input, UI, and Basic setup

- ✓ Task 8: Create Player Character Actor
- ✓ Task 9: Create Player Character Inputs to be slotted into later
 - ✓ Pause Game
 - ✓ Fire Weapon
 - ✓ Zoom In
 - ✓ Zoom Out
 - ✓ Rotate Camera Pitch/Yaw
- ✓ Task 10: Connect Character Zoom and Rotation inputs to the camera
- ✓ Task 11: Create HUD UI's for the following:
 - ✓ Scope Sprite UI
 - ✓ Zoom Level UI
 - ✓ Targets Killed UI
 - ✓ Targets Remaining UI
 - ✓ Wave Number UI
- ✓ Task 12: Pause Game UI

Projectile Setup and Firing

- ✓ Task 13-1: Create Projectile and Add a model
- ✓ Task 13-2: Add Projectile Physics with gravity, velocity, and position
- ✓ Task 14: Projectile Firing from Camera when pressing the input
- ✓ Task 15: Projectile Collision Detection

Target Setup

- ✓ Task 16: Create a Target Actor
- ✓ Task 17: Create the Target Model, and Following Materials
 - ✓ Target White Material
 - ✓ Target Yellow Material
 - ✓ Target Red Material
- ✓ Task 18: Setup Target Health and Create/Plug in Target Hit Registration to Projectile Collision Detection
- ✓ Task 19: Setup Target Movement of a speed to a location

Game State and Player UI that interacts with it

- ✓ Task 20: Create a Game State system that will keep track of Actors, Wave stats, and Goals/Fail states
- ✓ Task 21: Create a Wave Spawn Stats Holder within the Game State to keep track of the following:
 - ✓ Wave Number
 - ✓ Speed of Targets for Current Wave
 - ✓ Number of Targets to Spawn for Current Wave
- ✓ Task 22: Track and create a way for keeping track of Targets left and starting a new turn after a timeframe when all targets are destroyed
- ✓ Task 23-1: Create a Player Wave Begin Popup UI
- ✓ Task 23-2: Create a Player Game Over Popup UI
- ✓ Task 23-3: Create a Player Target Hit Popup UI
- ✓ Task 24-1: Connect the already created Targets Killed UI in Player Character to the Game State
- ✓ Task 24-2: Connect the already created Targets Remaining UI in Player Character to the Game State
- ✓ Task 25: Create the Fail State of a Target Getting Past the Red Line within the Game State and connect the Game Over Popup

- ✓ ~~Task 26: Create Actor communications that tell the player the following~~
 - ✓ ~~The next wave has begun and activate the Wave Begin Popup UI~~
 - ✓ ~~The Target has been hit and where and activate the Player Target Hit Popup~~

Target Spawning System

- ✓ ~~Task 27: Determine a system for spawning the targets and increasing the Wave value each turn.~~

Stage 2 - Weapon Complexity

Weapon Recharge

- ✓ ~~Task 1: Implement Basic Variables for Weapon Recharge~~
 - ✓ ~~Fire Points~~
 - ✓ ~~Fire Points Per Shot~~
 - ✓ ~~Fire Point Recharge per Second~~
 - ✓ ~~Fire Point Max~~
- ✓ ~~Task 2: Remove Fire Points with each shot~~
- ✓ ~~Task 3-1: Create way for Fire Points to Recharge over time~~
- ✓ ~~Task 3-2: Fire Point UI~~

Weapon Sway

- ✓ ~~Task 4: Implement Basic Variables for Weapon Sway~~
 - ✓ ~~Weapon Sway Pitch Range (Min/Max)~~
 - ✓ ~~Weapon Sway Yaw Range (Min/Max)~~
 - ✓ ~~Sway Pitch/Yaw Speed~~
 - ✓ ~~Base Pitch/Yaw~~
 - ✓ ~~Current Goal Pitch/Yaw~~
 - ✓ ~~Current Modified Pitch/Yaw~~
- ✓ ~~Task 5: Calculate the way to do the following~~
 - ✓ ~~Modify Base Pitch/Yaw when the player inputs movement~~
 - ✓ ~~Select a new goal Pitch/Yaw~~
 - ✓ ~~If a Pitch/Yaw has been selected go at speed to the new modified pitch/Yaw~~
 - ✓ ~~Without moving Base Pitch/Yaw~~

Weapon Recoil

- ✓ Task 6: Implement Weapon Recoil Variables
 - ✓ Recoil Sway Pitch/Yaw Current
 - ✓ Recoil Sway Pitch/Yaw Goal
 - ✓ Recoil Pitch Range (Min/Max)
 - ✓ Recoil Yaw Range (Min/Max)
 - ✓ Recoil Base Jump Pitch Range (Min, Max)
 - ✓ Recoil Base Jump Yaw Range (Min, Max)
 - ✓ Recovery Speed Pitch/Yaw
- ✓ Task 7: Calculate the process for
 - ✓ Set new Recoil Goal Pitch/Yaw when weapon is fired
 - ✓ based on Recoil pitch/Yaw range
 - ✓ Adjust the Player Base pitch/yaw to the new jump pitch/yaw
 - ✓ Implement a recovery Speed for the player sway to quickly recover from recoil to base sway

Package - Clean it Up

Plan

- ✓ Task 0: Plan out the Cleanup

HUD Elements

- ✓ Task 1: Go Through and clean
- ✓ Task 2: Comment

Main Game

- ✓ Task 3: Go Through and clean
- ✓ Task 4: Comment

Menus

- ✓ Task 5: Go Through and clean
- ✓ Task 6: Comment

Popups

- ✓ Task 7: Go Through and clean
- ✓ Task 8: Comment

Package - Github

Plan

- ✓ ~~Plan out Github Updates~~

README - HUD Elements

- ✓ ~~Task 1: ScopeHUD~~
- ✓ ~~Task 2: ShotsRemainingHUD~~
- ✓ ~~Task 3: TargetsKilledHUD~~
- ✓ ~~Task 4: TargetsRemainingHUD~~
- ✓ ~~Task 5: WaveNumberHUD~~
- ✓ ~~Task 6: ZoomHUD~~
- ✓ ~~Task 7: Intro~~

README - Main Game

- ✓ ~~Task 8: Actors - Bullet~~
- ✓ ~~Task 9: Actors - Player~~
- ✓ ~~Task 10: Actors - Target~~
- ✓ ~~Task 11: GameState~~
- ✓ ~~Task 12: Materials~~
- ✓ ~~Task 13: Intro~~

README - Menus

- ✓ ~~Task 14: MainMenuScene~~
- ✓ ~~Task 15: PauseGameMenu~~
- ✓ ~~Task 16: Intro~~

README - Popups

- ✓ ~~Task 17: ExitConfirmationPopup~~
- ✓ ~~Task 18: GameOverPopup~~
- ✓ ~~Task 19: TargetHitPopup~~
- ✓ ~~Task 20: WaveBeginPopup~~
- ✓ ~~Task 21: Intro~~

README - Intro

☒ ~~Task 22: Quick write up about it~~

Github - Make Github Public

☒ ~~Made Public and cleaned up a few things~~

Github - Add Github to Website

☒ ~~Plan~~

Package - Blog Post - Postmortem

Plan

☐ Plan out the Blog Post

Package - Projects Page Update

Plan

☐ Plan out the Project Page Update

FUTURE - Particle Effect Pass

Base Hit Particle Effect

- ☐ Task 1 - Base Hit Particle Effect Actor
- ☐ Task 2 - Base Hit Particle Effect Particle
- ☐ Task 3 - Base Hit Particle Effect Material

Hit Particle Effects

- ☐ Task 4 - Projectile Ground Hit Particle Effect
 - ☐ Material
- ☐ Task 5 - Attach Ground Hit Particle Effect to Projectile
- ☐ Task 6 - Projectile Target White Hit Particle Effect
 - ☐ Material
- ☐ Task 7 - Projectile Target Yellow Hit Particle Effect
 - ☐ Material
- ☐ Task 8 - Projectile Target Red Hit Particle Effect
 - ☐ Material
- ☐ Task 9 - Attach Hit Particle Effects to Target

Target Spawn/Destroy Particle Effects

- ☐ Task 10 - Target Spawn Particle Effect
 - ☐ Material
- ☐ Task 11 - Attach Spawn Particle Effect to Target
- ☐ Task 12 - Target Destroy White Particle Effect
 - ☐ Material
- ☐ Task 13 - Target Destroy Yellow Particle Effect
 - ☐ Material
- ☐ Task 14 - Target Destroy Red Particle Effect
 - ☐ Material
- ☐ Task 15 - Attack Destroy Particle Effects to Target