Assignment 3 - Scriptable Objects/Editor Tools

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Part 1 – Intro to Scriptable Objects

As it stands, the Quest Manager uses “Race.cs”, which itself uses “TimedWaypoints.cs” to define what each different race contains. The idea here will be to keep “TimedWaypoints.cs” as a reference for Race, but turn Race itself into a scriptable object, that way we can create and save different races without needing to use an object or prefab of any sort. “TimedWaypoints.cs” does not need to be a scriptable object as it will never be in the scene at all, only used as a reference in our asset folder.

Step 1: Create a “RaceData.cs” script. This will create a new item in the asset menu that will make a scriptable “race” object for us, filename “Race”, MenuName “Data/Race”

Step 2: After creating and filling in all 3 races, change “QuestManager.cs” to reference “RaceData.cs” instead of the “Race.cs” script.

Step 3: Creating 2 new features. The first feature will be to add health to the player. If a bullet hits the player, they lose some health, and fail the race if all health is lost. The scriptable object will keep track of how much damage a bullet does each level. Second, we will give the player a boost option. While right mouse button is held, the player will move faster. The scriptable object will hold how much available boost the player has each level and how fast it replenishes.