Notes Regarding Sebs branch.

* Some of the movements and grappling hooks physics are a bit different from the original. Right click to shoot the grapple then right click again to release it. Hold shift while attached to something to reel towards it.
* Made my own game mode for the HUD overlay and changed the default character to my character.
* All animations are not coded, because I can’t reference the AB from code and splitting montages and AB animations is a bad idea.
* I had to make my own IAs and IMCs for testing and had to disable all IA calls through the Character movement controller because the overlap was causing issues.
* There is no interaction between the AI and the player since I didn’t have time to code the AI in addition to the player. Although coded player logic can be used through written blueprint callable functions like “TokDamage” that applies damage to the player automatically, but not much else.
* I had no idea how to implement the mini map through code, nor could I replicate the bp side, so it’s not functioning.
* Grapple Head collision is the mesh itself, so be aware of that when changing the mesh.
* Have not implemented UI like menus, saving, exiting or gamemaster controls like changing levels and settings.
* Die stops player controls only.
* The character does not work in the main map because of conflicting input sources I believe. I have no idea how to sort out blueprint work so I couldn’t fix it then and there.

BP-able

* In the player BP all functions should be Bp callable as well as all constants. The categories used for organization are as follows.
  + “1-InputSystem” – all IA references.
  + “2-SubObjects” – All sub class references.
  + “3-Constants” – All constants that change in game actions.
  + “4-Bools” – Bools to disable/enable functions and misc things like Debug mode.
* There are math functions that can be used, these are for the player/grapple physics which needed to be coded by hand.

Bugs

* The only known bug is impulse nullification when reaching max tether distance. This is too that when changing from max distance to anything else the clamp will release without the engine’s physics system throwing the player to the void. Working on the solution but not sure how to fix it yet considering it’s an inner system bug. But will keep trying.
* All items that the grapple needs to connect with has to have “generate overlap events” enabled otherwise it will pass through event though the HUD will show that you can grapple.

Code

* Character class manages most other classes,
  + StateControll.h is a global class to remember states.
  + GrapplingHookHead.h is referenced through bp to the character class in order to directly spawn the grappling hook.
  + A screen shot of a computer program

    Description automatically generatedIf the WPB\_Playeroverlay is to work then all elements that are referenced in code must have the exact same name.
  + The BP\_MainHud contains the refrence to the WBP\_PlayerOverlay and is refrenced through the character controller and is not directly cast.