Airship Pack

This package contains the art assets for making your own airship. There are some mostly complete base versions, but also lots of individual parts so you can assemble the ship as you want yourself. All parts have accurate collisions, letting you walk around on or inside of the ship in your game if you want. While designed as one initial ship, many parts are available with slight tweaks to allow for them to be put together in different ways if you want to help you make your own ships of more unique designs more easily without needing to rely on your own external 3D software as much.
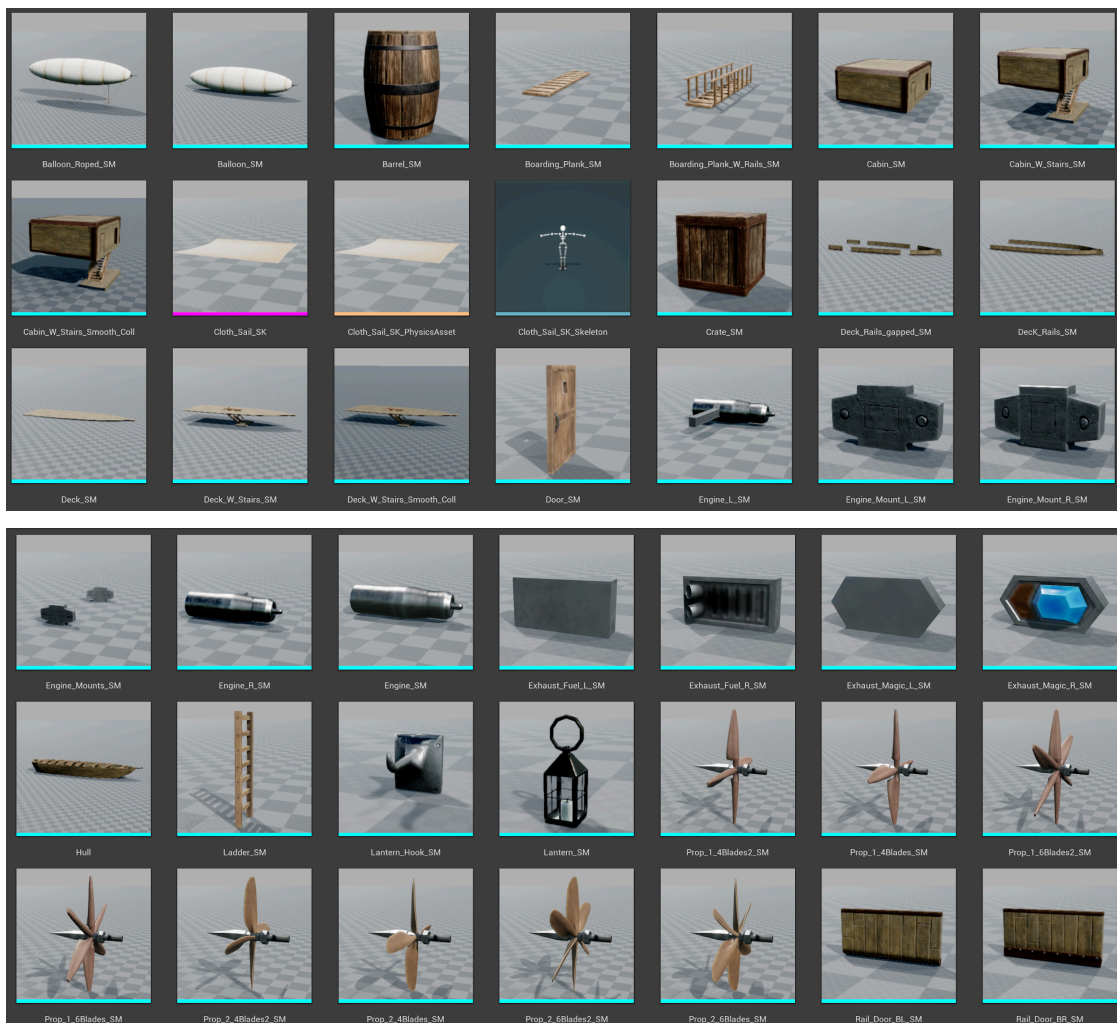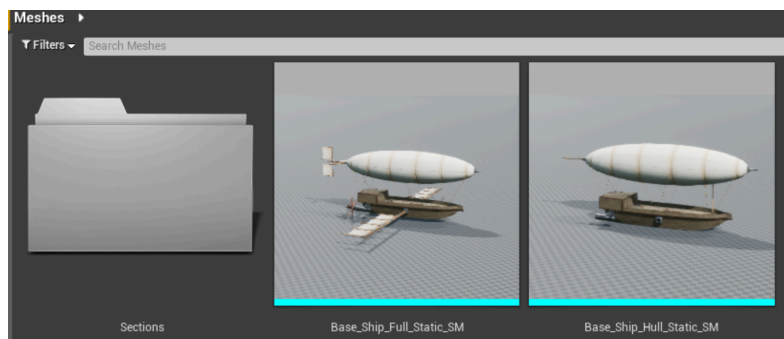
Included are also a few blueprints for demonstration purposes to show off ship parts in completion on visually functional airships including spinning propellers and animated sails. These can move around but are using simple add location and add local rotation nodes with the exception of one version that demonstrates some simple physics based movement, so you should expect to likely need to have a more complex movement system planned out for your game depending on its type and your specific projects purposes and needs. Most likely you will end up needing to remake pretty much the entire blueprint for your own project to match with its specific needs. Some games might want simple spline based flight paths, others a high speed dynamic ramming and energetic type of feel, or perhaps a simple two dimensional top down movement around the top of a map on a more fixed grid or something. What's provided may prove a good reference, but should not be considered as able to do anything you'll need it to by any means, the blueprint sides is secondary with this product to the art assets.
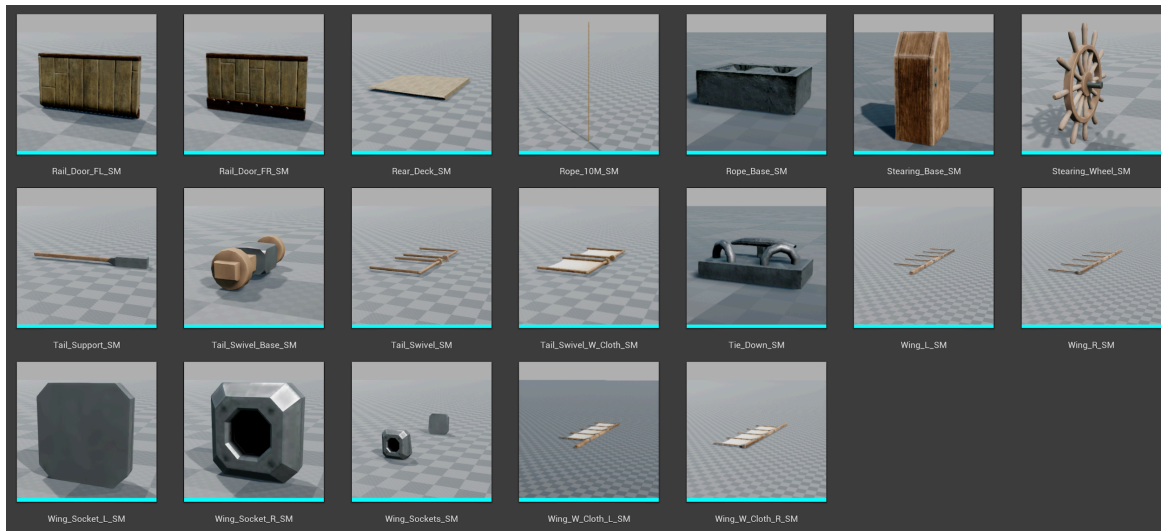
Also note that this was originally made in unreal engine 4.15.3 so it's available to as broad a range of unreal versions as possible. The demo video was recorded in 4.25 though, as in earlier versions the default character movement system could have some odd behavior when walking on moving objects like the airships when turning. So do keep in mind if using an earlier version like 4.15.3 that you may need to make tweaks to your characters in some cases to have them easily walk around a moving airship without any issues like in the demo video. Also it just looks a lot better in later versions lighting systems.

It is also now replicated, as of an update on 11/9/22. Movement, opening/closing of doors, and entering and exiting. While overall I still recommend replacing or modifying the provided movement/possession/interact systems with those set up in your own project, this will better offer a starting point for people whose needs match up more closely with what the basic movement and systems offer.

Meshes

Here are images with all meshes in them, as well as full details on two more complete airship meshes showing their total polycounts, etc... with all meshes to give you an idea on the final meshes cost. (Note these pics are still missing the new VR control meshes, a lever, and geared pulley mechanism).

Rail_Door_FL_SM | Rail_Door_FR_SM | Rear_Deck_SM | Rope_10M_SM | Rope_Base_SM | Stearing_Base_SM | Stearing_Wheel_SM

Tail_Support_SM | Tail_Swivel_Base_SM | Tail_Swivel_SM | Tail_Swivel_W_Cloth_SM | Tie_Down_SM | Wing_L_SM | Wing_R_SM

Wing_Socket_L_SM | Wing_Socket_R_SM | Wing_Sockets_SM | Wing_W_Cloth_L_SM | Wing_W_Cloth_R_SM

Base_Ship_Full_Static
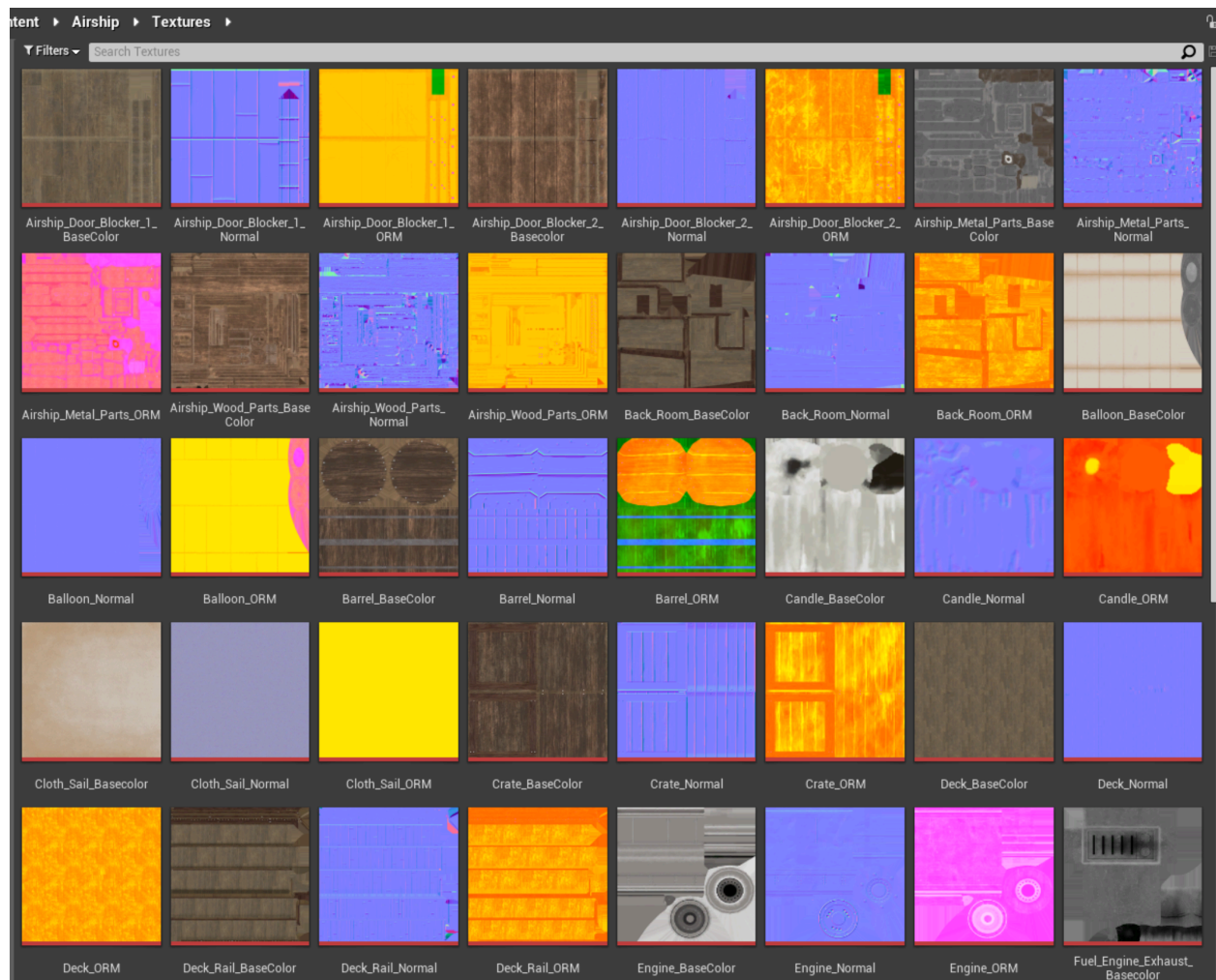24,186 Triangles
16 Materials
512 Collision Primitives

Base_Ship_Hull_Static
12,286 Triangles
14 Materials
350 Collision Primitives

Textures

There are 73 textures, ranging between 4k for some big main ship parts ones like the main hull, down to 128*128 for the lanterns candle textures. They come out to around 333MB in total size.

Fuel_Engine_Exhaust_Normal | Fuel_Engine_Exhaust_ORM | Gass_Normal | Glass_Back_BaseColor | Glass_Back_ORM | Glass_BaseColor | Glass_ORM | Hull_BaseColor

Hull_Normal | Hull_ORM | Ladder_BaseColor | Ladder_Normal | Ladder_ORM | Magic_Engine_Exhaust_BaseColor | Magic_Engine_Exhaust_Emissive | Magic_Engine_Exhaust_Normal

Magic_Engine_Exhaust_ORM | Prop_1_BaseColor | Prop_1_Normal | Prop_1_ORM | Prop_2_BaseColor | Prop_2_Normal | Prop_2_ORM | Rail_Ramp_BaseColor

Rail_Ramp_Normal | Rail_Ramp_ORM | Ramp_Rail_Glass_Glass_Back_Normal | Rope_BaseColor | Rope_Normal | Rope_ORM | Wing_Socket_BaseColor | Wing_Socket_Normal

Wing_Socket_ORM

Size map for 73 assets (73 total assets, 333.2 MB)

Airship_Wood_Parts_Normal Texture2D — 22.4 MB
Deck_Normal Texture2D — 22.4 MB
Airship_Metal_Parts_Base Texture2D — 11.2 MB
Airship_Metal_Parts_OF Texture2D — 11.2 MB
Deck_BaseColor Texture2D — 11.2 MB
Back_Room_BaseColor — 11.2 MB
Airship_Wood_Parts_OF Texture2D — 11.2 MB

Airship_Metal_Parts_Normal Texture2D — 22.4 MB
Deck_ORM Texture2D — 11.2 MB
Back_Room_ORM Texture2D — 11.2 MB
Engine_Normal Texture2D — 5.6 MB
Barrel_Normal Texture2D — 5.6 MB
Deck_Rail_Norma Texture2D — 5.6 MB
Balloon_ORM Texture2D — 5.6 MB

Hull_Normal Texture2D — 22.4 MB
Airship_Wood_Parts_Base Texture2D — 11.2 MB
Balloon_BaseCol Texture2D — 5.6 MB
Barrel_Base Texture2D 2.8 MB | Barrel_ORM Texture2D 2.8 MB | Cloth_Sail_N Texture2D 2.8 MB | Cloth_Sail_ Texture2D 2.8 MB

Back_Room_Normal Texture2D — 22.4 MB
Hull_BaseColor Texture2D — 11.2 MB
Cloth_Sail_OR Texture2D 2.8 MB | Deck_Rail_O Texture2D 2.8 MB | Engine_ORM Texture2D 2.8 MB | Rail_Ramp_E Texture2D 2.8 MB

Glass_Back_Bas Texture2D — 2.8 MB
Engine_BaseC Texture2D 2.8 MB | Airship_ Texture2D 1.4 MB | Ladder_C Texture2D 1.4 MB | Prop_1_E Texture2D 1.4 MB | Glass_Ba Texture2D 1.4 MB

Prop_1_Normal Texture2D — 2.8 MB
Ladder_Normal Texture2D — 2.8 MB
Deck_Rail_Ba Texture2D 2.8 MB | Airshi Texture | Prop_1 Texture | Airshi Texture | Airshi Texture

Hull_ORM Texture2D — 11.2 MB
Balloon_Normal Texture2D — 11.2 MB
Crate_N Texture2D 1.4 MB | Ladder Texture 1.4 MB | Airsl Textu | Crate Textu
Rail_Ramp_Normal Texture2D — 5.6 MB
Ramp_Rail_Glass Texture2D — 2.8 MB
Rail_Ramp_O Texture2D 2.8 MB | Wing_So Texture2D 1.4 MB | Rope_I Texture | Airsl Textu
Rope_ Texture | Airsl Textu | Fue Ma | Pro Pro

Materials

There are 27 materials and material instances, 2 materials are simply master materials, not directly used themselves. Then there is one Cloth_Sail_M material as the cloth sail uses its own material specific to it. Then 24 material instances for the materials that go on the various different meshes. Some materials like Ship_Parts_Metal_MI are general materials that many different parts of the ship may make use of rather than one specific part of the ship or asset.
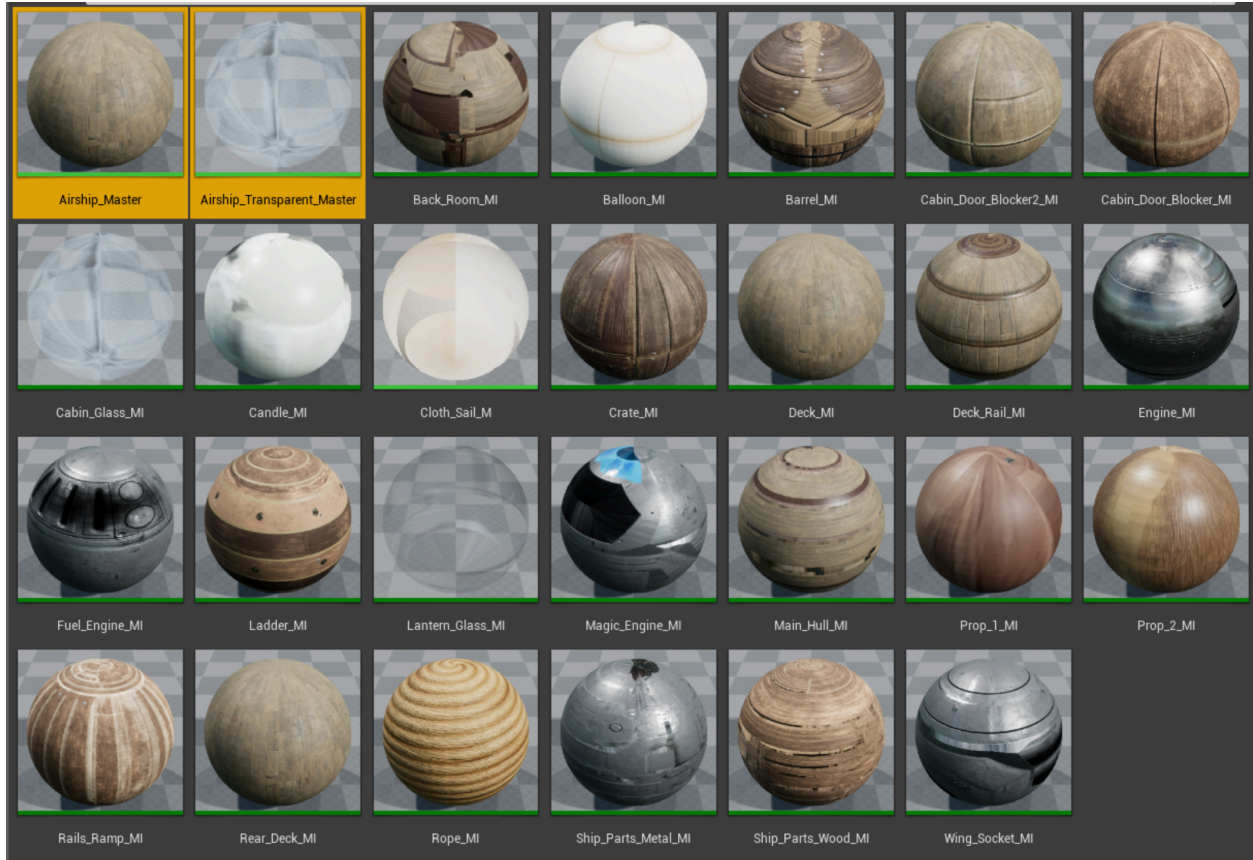
Animations

There are 4 unique animations, all cut out of one master animation for the cloth sail. These 4 are used in one 2D blendspace. This is plugged into an animation blueprint that has variables for forward and vertical movement. Using this you can get some flutter and billowing in the sails on the airship.
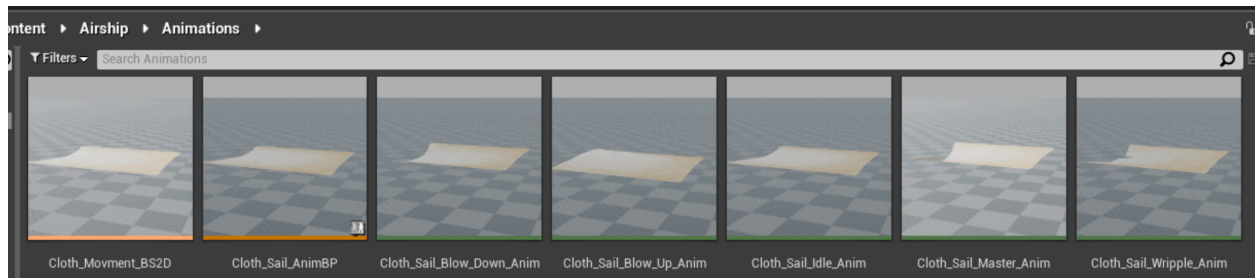
Contact Info

Contact me at Pineconedemon@gmail.com or go to my discord channel where you can chat with others or ask me questions. https://discord.gg/d7paEng.

Updates

4/6/21: Added some new meshes, and blueprints. The meshes consist of a lever mechanism, and a pulley mechanism. These are meant to be usable meshes for the pilot to control an airship.
The added blueprints consist of a new Airship blueprint (basicly the winged one), a steering wheel blueprint, a lever blueprint, and two blueprints that make up the pulley mechanism. All of these were made with VR support in mind, and while you'll have to replace the input grab/release custom events for the ones you use in your project for VR, and possibly make some other changes like what objects you can teleport/move onto (default VR setups only use World Static objects, not movable ones like an airship), the controls are set up so you can grab

and spin the wheel, push/pull the lever, and raise/lower the pulley mechanism in order to control the airships movement. This is still mainly intended to be an art package, but the blueprints do offer the basic functionality required to be set up fairly easily into your projects. As a heads up, you'll likely want to limit movement for the airship to add location methods like I set up on the demo airship. Using a physics simulating method for its movement can get VERY expensive for VR and result in issues so you shouldn't expect the airship to work well while simulating physics, not without doing something to majorly simplify them yourself at least.

I'll likely submit another update soon with an actor for the door when I have the free time to add that. In the meantime you can jury rig one pretty quickly from the steering wheel actor by just rotating some key parts and replacing the wheel mesh with a door mesh though (or so is my expectation/plan for when I get to it myself).

    4/8/21:

    Added a door actor for VR, and did some polish on tooltips and stuff for the blueprints. Probably the last addition for a while, no more immediate plans for stuff for it, and no suggestions were submitted on the impromptu inquiry on the discord for anything else either. I'll likely have a basic video showing how to plug in the airship sometime within a week or so.

    Video tutorial on using it here: https://www.youtube.com/watch?v=rV2h04Sj2zQ

    11/9/22:

    Set up proper replication on the demo airships. Note at this time it doesn't include the VR airship, though you can probably just copy/paste the differences in their main event graph over for it, since I can't use my VR setup well right now I could not test and confirm if changes to the VR blueprints would work, so I haven't included them in this update.

Q and A:

Q: If in a published game, clients are not all able to control the airship properly or it starts behaving weird, most likely in UE 5 newer versions. The following was a fix in one case this was reported.

A: First, add this branch node so it won't write the info on multicast if locally controlled where it updates movement values in the main event graph.
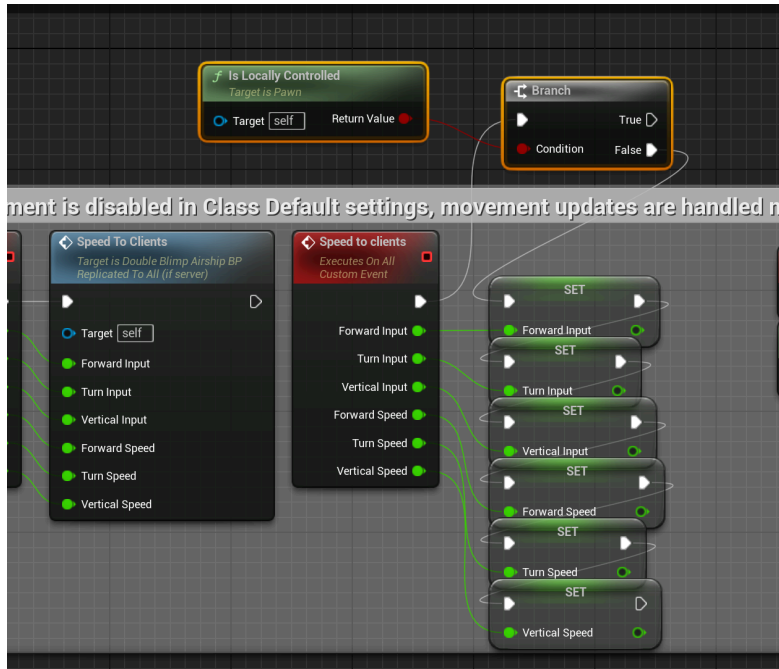
And just down to the right of it, instead of using the tick event, try replacing it with a 3 second delay node instead to trigger the above code.