Easy 2D Grappling Hook

Using the System

To use this package in your game, simply add the **GrapplingScript.cs** script to your player object and either use the **GrappleInputManager.cs** script or code your own input managing script using the easy to understand functions.

The system has three main requirements:

- Player needs to be on its own layer; this is to ensure the grappling hook does not attach to the player.
- The player objects needs a LineRenderer and Rigidbody2D attached.
- The objects the grappling hook can wrap around and collide with need to be marked static and have any variant of the Collider2D attached.

All variables can be edited using the easy to understand custom inspector, which have tooltips for extra information.

How it works

The system works by calculates the component of the players velocity in the direction of the rope, it then cancels out said velocity and adds velocity for reeling and paying out.

To attach the rope to a point, use the *AttachRope(Vector2 grapplePoint)* function, this starts the player swinging around the inputted rope. Once attached, use the following function to control reeling in and paying out;

- *SetReelingIn(bool currentReelingState)*
- *SetPayingOut(bool currentPayingState)*

To release the rope use the *ReleaseRope()* function.

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