

FS Rope Swinging System

First, thank you for purchasing our **Rope Swinging System** asset!

Take your gameplay to new heights with a rope-swinging mechanic inspired by the Uncharted series! This system allows players to hook a rope onto specific objects and swing across gaps, opening up creative opportunities for level design. Create engaging challenges where players must master swinging and jumping to navigate different areas and reach new heights!

Key Features

- **Full Control While Swinging:** Players can steer the swing and change directions mid-air for precise traversal.
- **Customizable Swing Settings:** Adjust swing force, rotation speed, dampening, etc to fine-tune the swinging experience.
- **Procedural Rope Animation:** Customizable rope with procedural animation for smooth and dynamic movements.
- **Versatile Level Design Opportunities:** Perfect for creating challenging and engaging traversal challenges.
- **Seamless Integration With FS Systems:** Designed to work effortlessly with other FS systems like [FS Parkour and Climbing System](#) and [FS Melee Combat System](#).

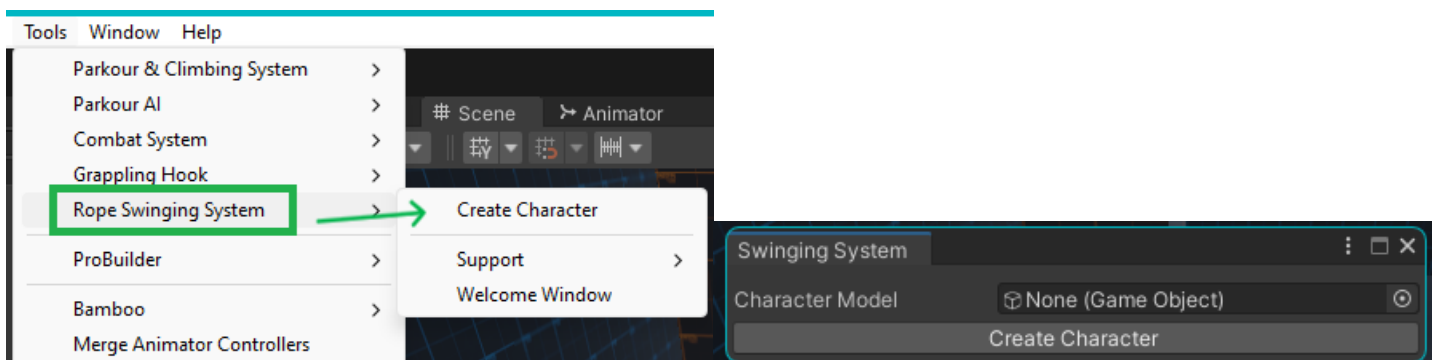
Quick Start



Create Character

To access the "Create Character" window, follow these steps:

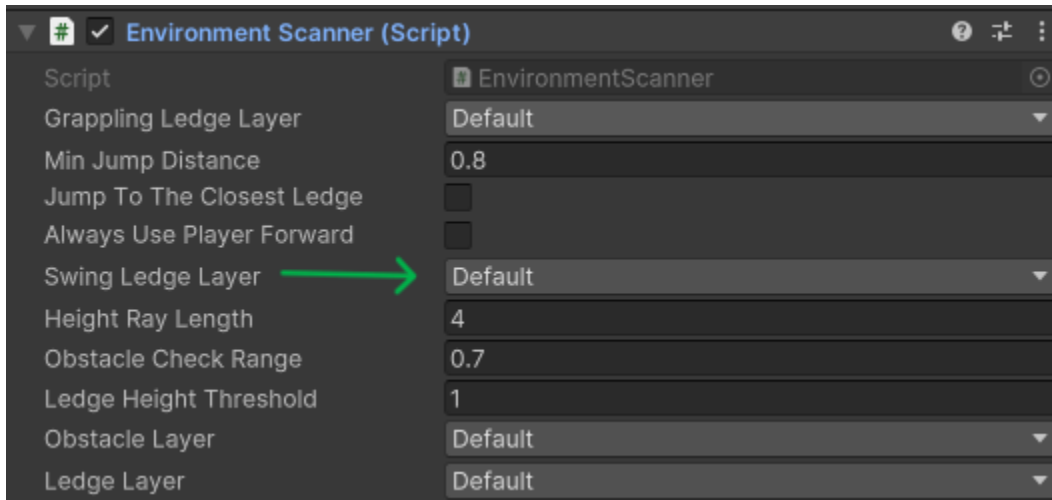
1. Navigate to the Tools menu.
2. Select the Rope Swinging System submenu.
3. Click on the Create Character menu item.



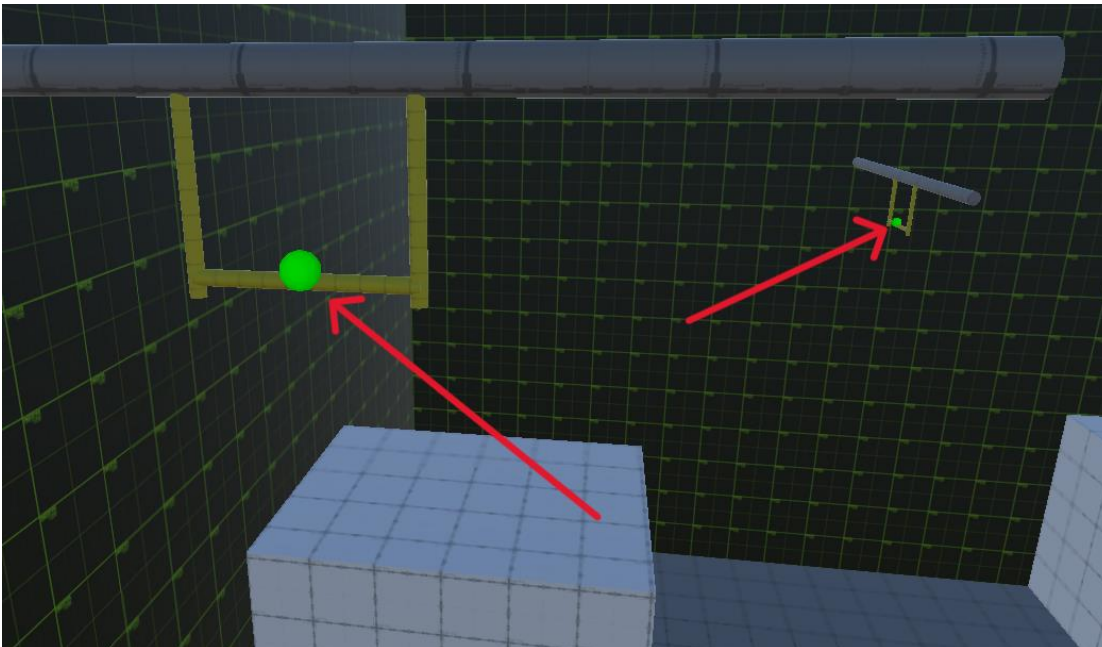
Next, you should assign the model to the "Character Model" field then click the "Create Character" button

Configure Swingable Ledges

In the **EnvironmentScanner** script, set up the **Swing Ledge Layer** to control where the player can attach the grappling hook. By default, this is set to "Default," meaning any point can be grappled. You can change this by assigning specific layers to the **Swing Ledge Layer**, which lets you choose exactly where the player can swing.

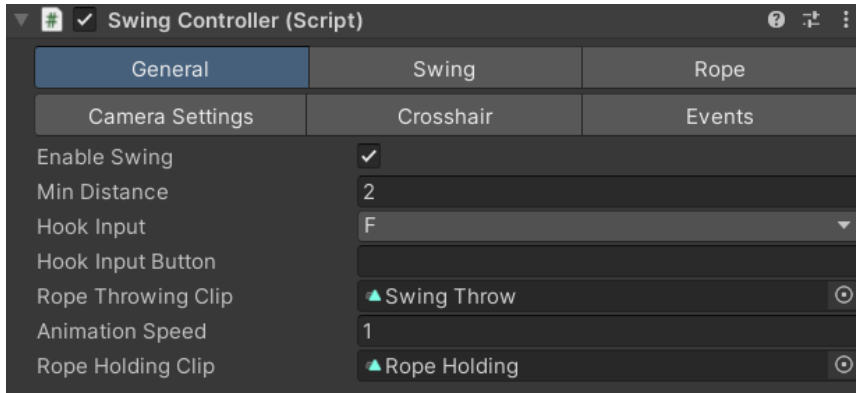


Then, add the **SwingLedge** script to any ledge you want the player to use for swinging. To set the hook point on the ledge, use the **green dot** (make sure Gizmos are enabled to see it in the editor). This dot shows where the hook will attach, helping you position it accurately for smooth gameplay.



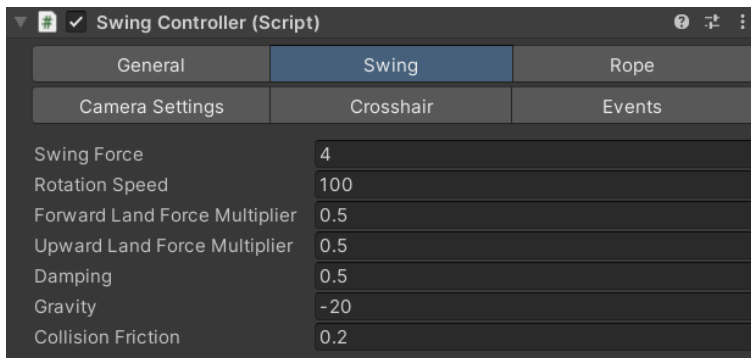
Swing Controller

General



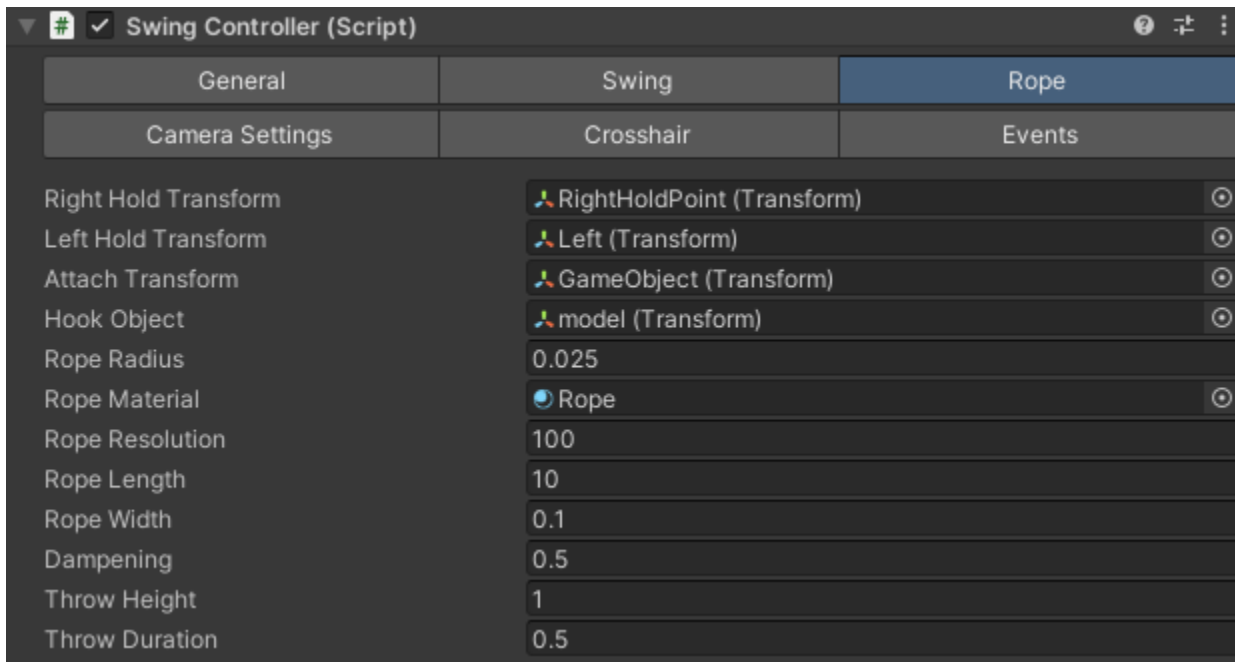
- **EnableSwing:** Turns the swing feature on or off.
- **MinDistance:** Minimum distance required to start swinging.
- **HookInput:** Key used to activate the swing.
- **HookInputButton:** Input button name to activate the swing.
- **RopeThrowingClip:** Animation clip for throwing the rope.
- **RopeHoldingClip:** Animation clip for holding the rope.
- **AnimationSpeed:** The speed at which the rope throwing animation plays.

Swing



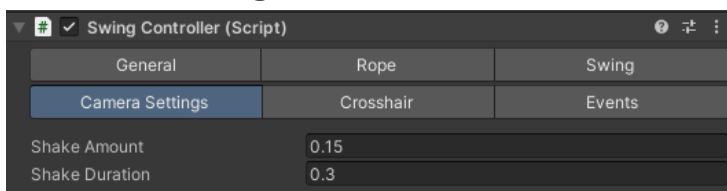
- **SwingForce:** Force applied to the player during swinging.
- **SwingRotation:** Speed of rotation while swinging.
- **ForwardLandForceMultiplier:** Multiplier for the forward force applied upon landing from a swing.
- **UpwardLandForceMultiplier:** Multiplier for the upward force applied upon landing from a swing.
- **Damping:** Damping effect during the swing.
- **Gravity:** Gravity force applied while swinging.
- **CollisionFriction:** Friction applied during collisions while swinging.

Rope



- **RightHoldTransform:** Position for holding the rope with the right hand.
- **LeftHoldTransform:** Position for holding the rope with the left hand.
- **AttachTransform:** Attachment point for the rope on the player's body.
- **HookObject:** The grappling hook object.
- **RopeRadius:** Radius of the rope.
- **RopeMaterial:** Material used for the rope's appearance.
- **RopeResolution:** Number of segments for the rope's smoothness.
- **RopeLength:** Maximum length of the rope.
- **RopeWidth:** Width of the rope.
- **Dampening:** Dampening effect applied to rope movement.
- **SmoothingFactor:** Factor to smooth rope movement.
- **ThrowHeight:** Height of the rope throw.
- **ThrowDuration:** Duration of the rope throw animation.

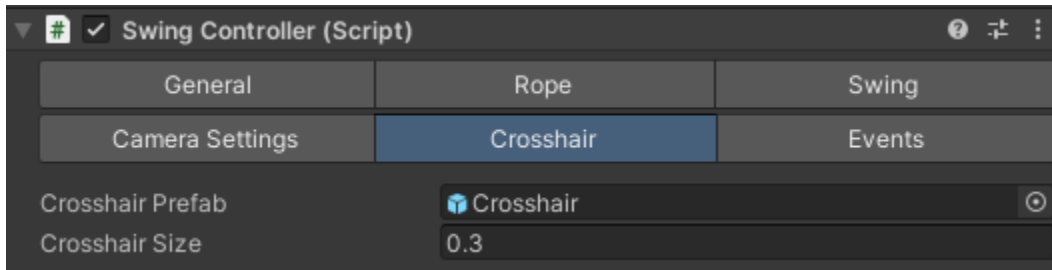
Camera Settings



- **CameraShakeAmount:** Intensity of camera shake when starting the swing.

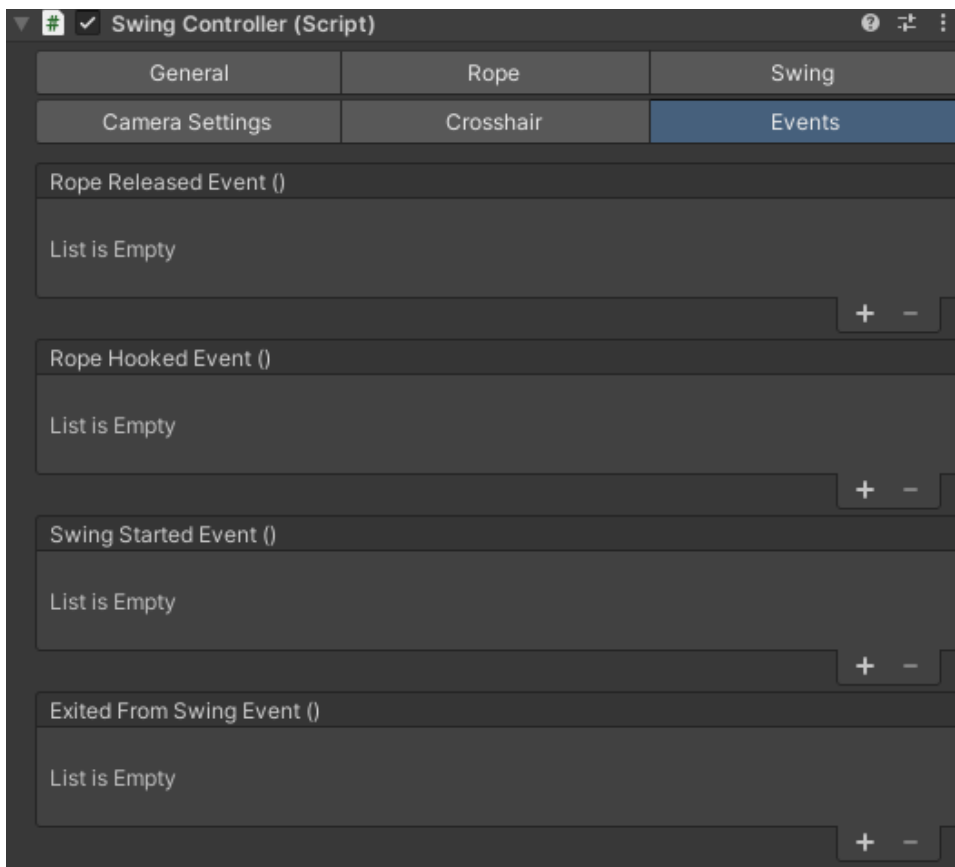
- **CameraShakeDuration:** Duration of the camera shake effect.

Crosshair



- **CrosshairPrefab:** Prefab for the crosshair when aiming.
- **CrosshairSize:** Size of the crosshair.

Events



- **RopeReleased:** Triggered when the rope is released.
- **RopeHooked:** Triggered when the rope hooked onto a point.
- **SwingStarted:** Triggered when the swing starts.

- **ExitedFromSwing:** Triggered when exiting the swing.

For more detailed documentation of **Rope Swinging System**, please check it out [here](#).