PARKOUR AND CLIMBING SYSTEM

Our Parkour and Climbing system allows the player to traverse complex environments in the game using different parkour and climbing actions. The parkour system has predictive jumping that will automatically detect points to which the player can jump and execute precise jumps to reach them. The climbing system uses a mix of authored and procedural animations to adapt to dynamic climbing environments while looking realistic.

The asset comes with the complete C# code, so you can also modify it to suit your game.

Key Features

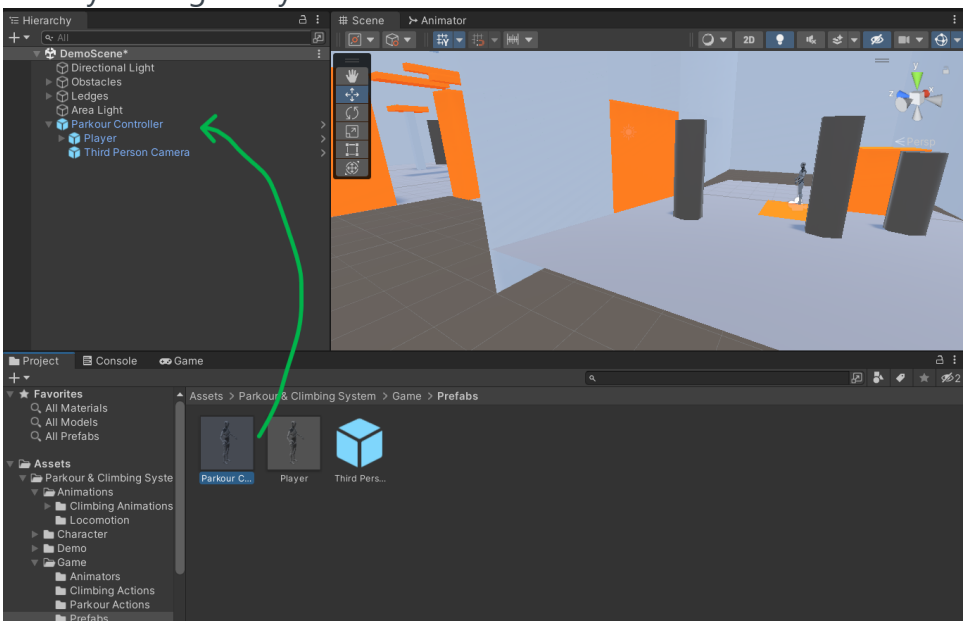
- Predictive Jumping: Automatically detect and jump to obstacles in front of the player.
- Hang on ledges and jump or shimmy between them based on their distance.
- Uses Inverse Kinematics (IK) to place the hands and feet dynamically while climbing.
- Supports Braced Hang and Free Hang climbs, and the player can transition between them seamlessly.
- Supports climbing on ledges placed at different angles.
- Automatically perform different parkour actions based on height and type of obstacle
- Bake climb points (points on which the player can climb) into your level with a single click.
- It contains 25 climbing animations and 13 Parkour animations

Quickstart

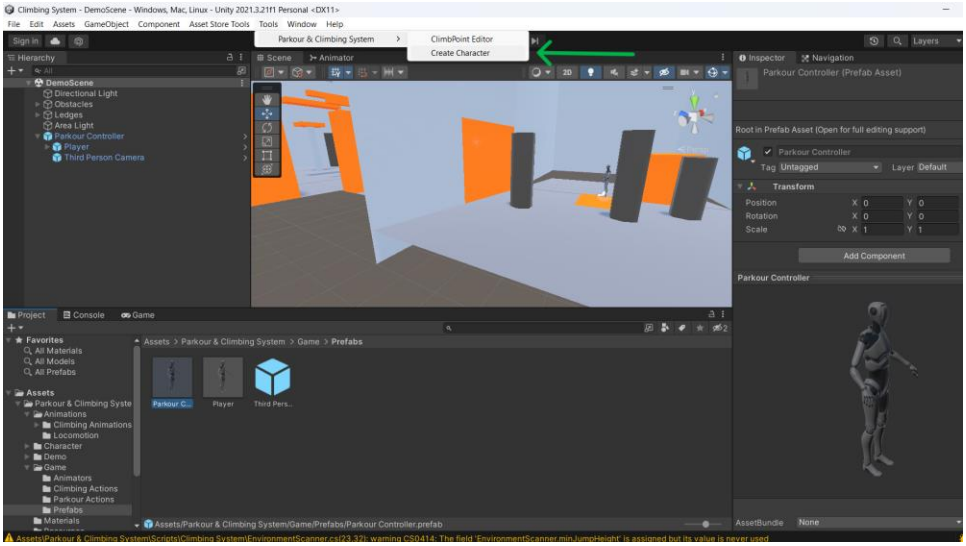
1. Character Setup

To get started, you can either **drag and drop the Parkour Controller prefab** into your scene or **create your own character using our character-creating window.**

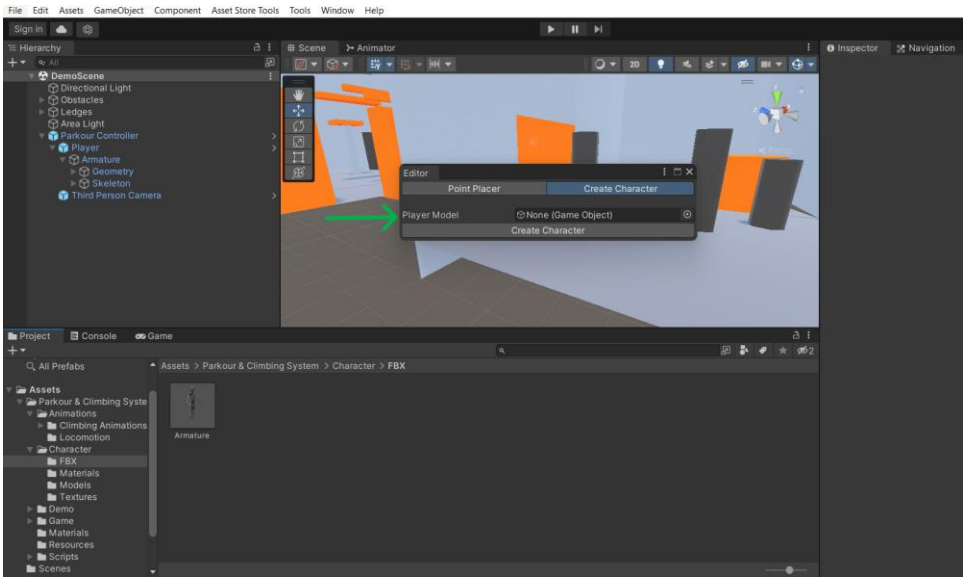
a. Drag and Drop Parkour Controller Prefab This is the easiest way to get started and test the parkour system. From the Assets\Parkour & Climbing System\ Game\ Prefab \ Parkour Controller folder, drag and drop the **Parkour Controller Prefab** into your scene and try testing it in your scene.



b. Create the Character using the Character-Creation Window Go to Tools > Parkour & Climbing System > Create Character to open the character creation window.



Drag and drop the fbx model of your player character to the Player Model field and click on the Create Character window. This will create the player game object in the scene with all the parkour and climbing scripts attached to it.



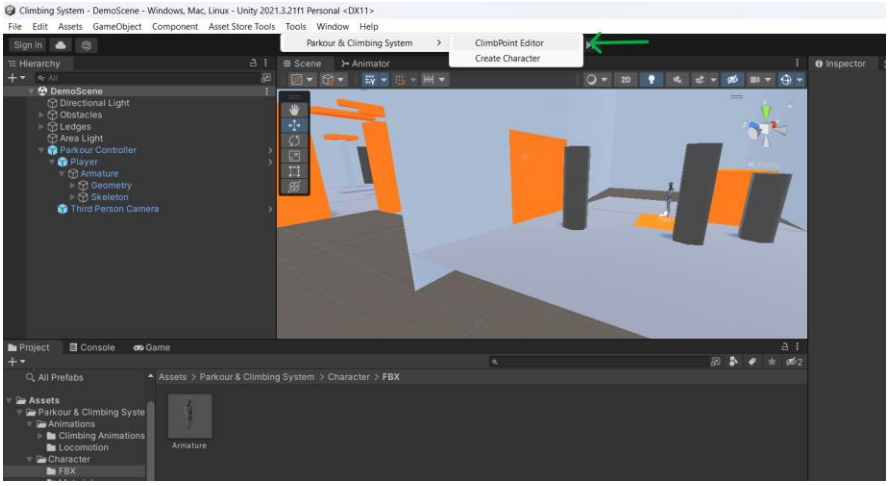
Once the character is set up, you'll be able to test the parkour actions and predictive jumping in your scene.

2. Climbing Setup

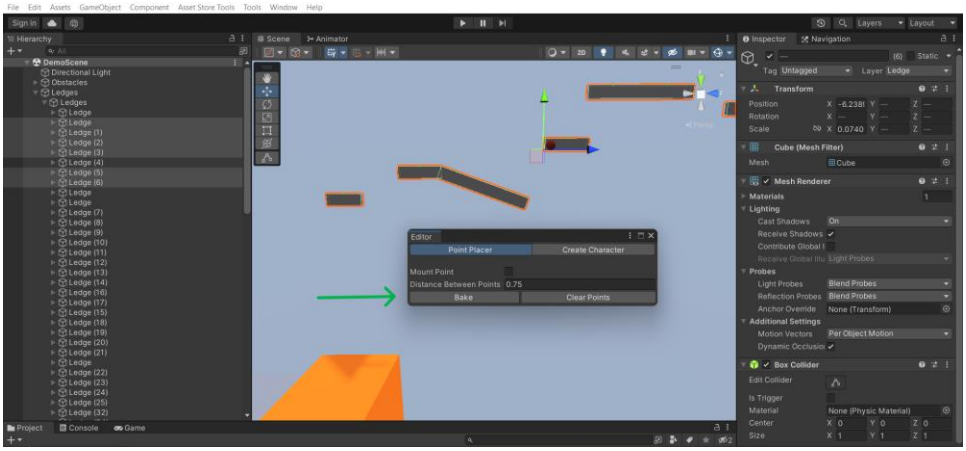
We **need to create climb points on the ledges for the character to be able to climb** on them. This asset comes with an editor tool with which you can create climb points on gameobjects with a single click. So you don't have to manually add the climb points one by one.

Creating Climb Points

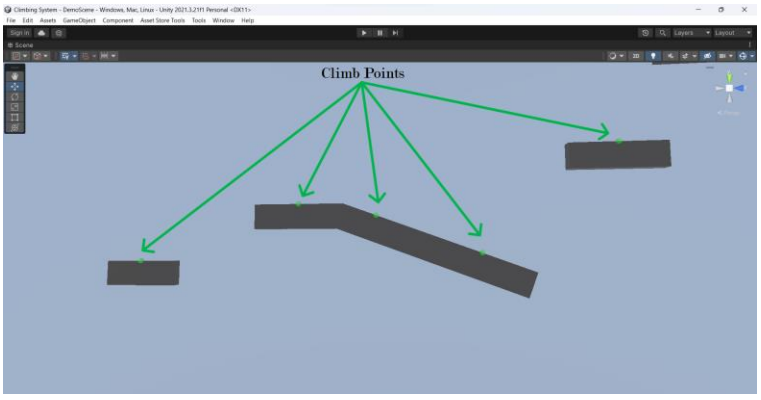
Go to Tools > Parkour & Climbing System > ClimbPoint Editor to open the climbpoint editor window.



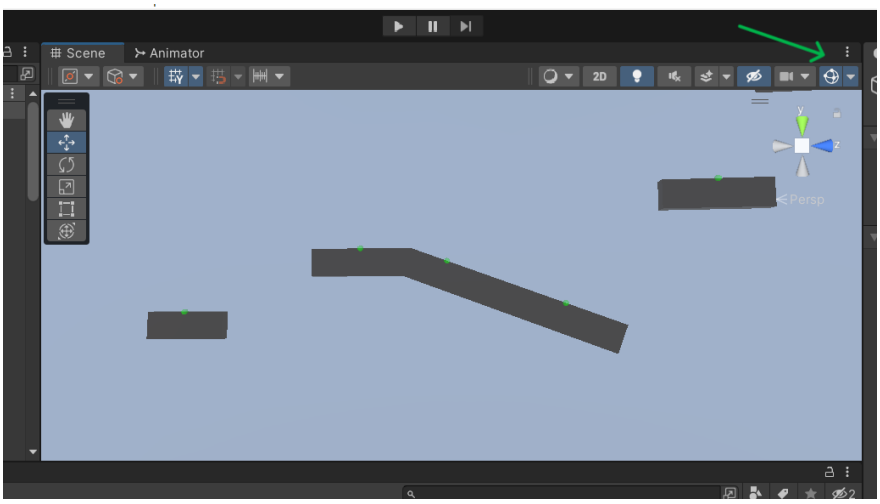
Now, select the ledges in the scene on which you want the character to climb and click on the **Bake button** in the ClimbPoint Editor window. This will create climb points on all selected ledges.



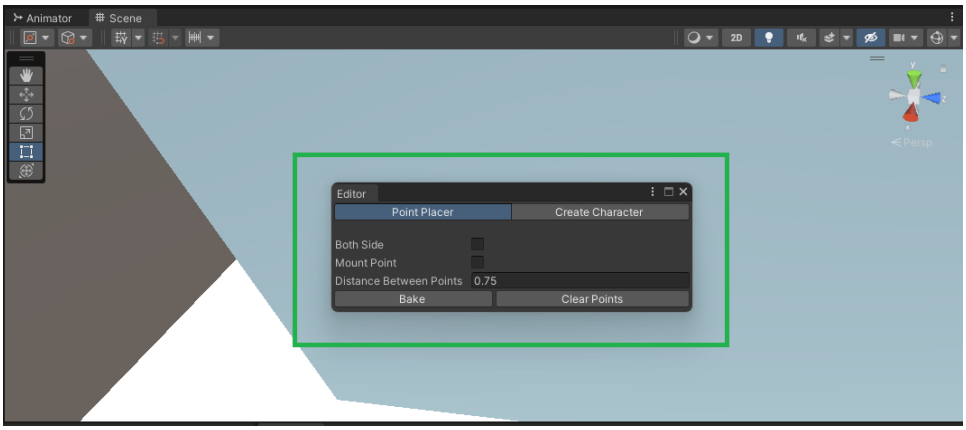
Once the climb points are created, you'll be able to see them on the ledge as small green points as shown in the image below. You can manually reposition the generated climb points if needed.



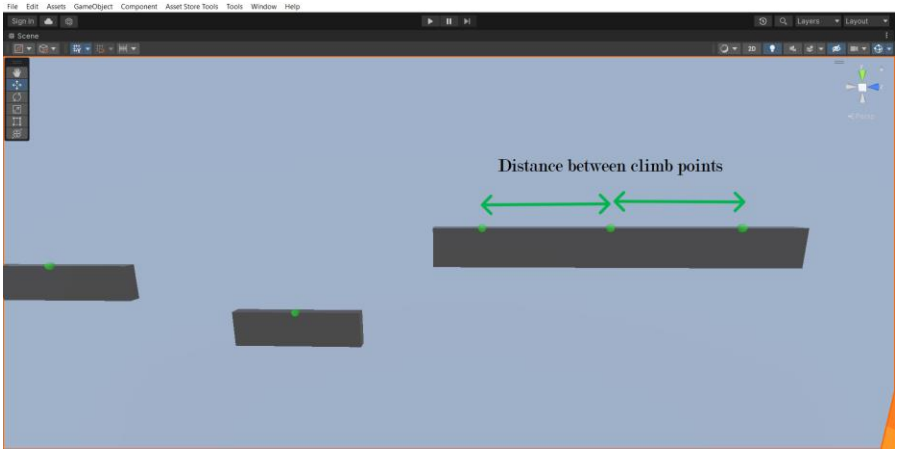
Note: If you can't see the climb points, make sure the gizmos are enabled by pressing the toggle button on the top right corner of the scene as shown in the image below.



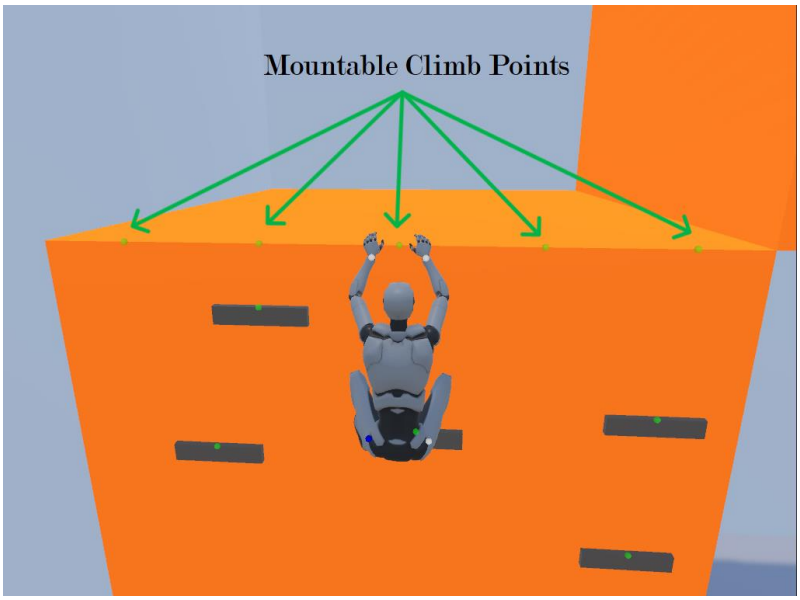
There are two settings you need to know about when placing climb points



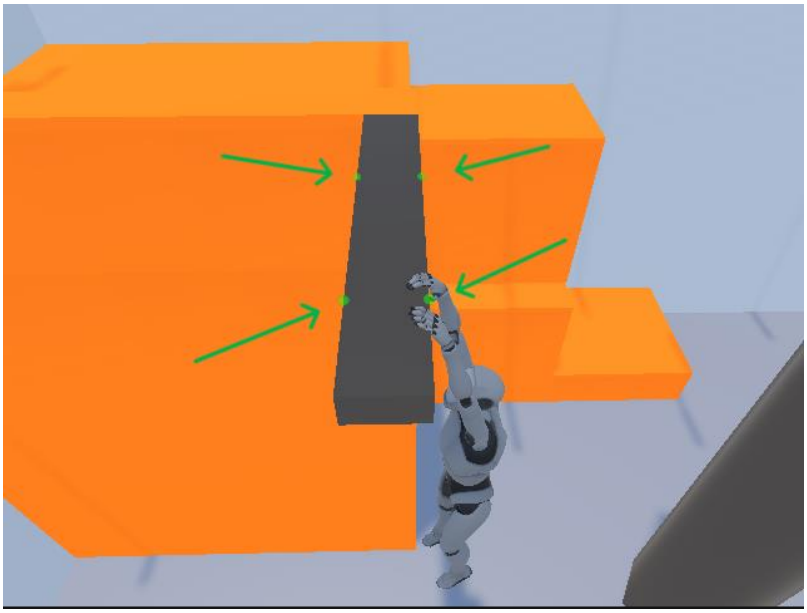
Distance Between Points - Defines the distance between climb points on the ledges. This distance will determine how far the character moves while shimmying from one point to another on a single ledge.



Mount Point - This should be set to true for all climb points from which the player can climb onto an obstacle as shown in the image below.



Both Side - This will create points on both sides of the ledge as shown in the image below.



Once you generate the climb points, the player will be able to climb on it when you test the game.

This guide just explains how to get started using the system. For a more detailed guide that explains how to customize the system, check out the [online documentation here.]