Documentation for 2D Procedural Landscape Asset:

Introduction:

The 2D Procedural Landscape asset is a tool that allows you to create and generate 2D mountains with various parameters. It offers a wide range of customization options, including the ability to add multiple layers of generation, and dynamically load mountains around the player. The asset also allows you to see the results of your changes in real-time, without the need to run the game.

Usage:

The 2D Procedural Landscape asset is easy to use. Simply click “GameObject -> 2D -> Landscape” in the menu and adjust the settings to your liking.

And then you can add or replace the GenerationLayers. By controlling the GenerationScale within each layer, you can create either high mountains or small hills. The VerticalPower allows you to control how tall the hills or mountains are for that specific layer. Then, by adding another layer with a smaller GenerationScale, you can add more detailed variations to the terrain.

The SpriteShapeInstance can also be replaced with a different. You can apply any texture that is more suitable for your game.

Settings:

The asset has several settings that you can adjust to customize your mountain. These include:

- GenerationSize: This setting controls the overall size of the mountain.
- GenerationLayers: This is an array of the different layers of the mountain. Each layer can be customized with different settings such as generation scale, vertical power, and region settings. Region settings allows you to create multiple types of terrain. Giving you the ability to create different types of landscapes that seamlessly transition from one to the other
- UpdateRuntimeInEditor: This setting controls whether the mountain will update in real-time as you make changes in the editor.
- GenerateOnStart: This setting controls whether the mountain will generate when the game starts.
- ChunksPreload: This setting controls how many chunks of the mountain will be preloaded.

- UseRandomSeed: This setting controls whether a random seed will be used for the mountain generation or not.
- SkipChunks: This is an array of chunks that you can manually replace.

The AdvancedSettings of the 2D Procedural Landscape asset provide additional control over the generation of the mountains. These settings include:

- smoothType: which allows you to choose different smoothing methods for the generated mountains.
- positionType: which allows you to choose the position type of the generated mountains.
- spawnPointOffset: spawnPoint is getting from the middle of the first chunk. So you can spawn you player on 0,0,0 and set spawnPointOffset to 0, -1, 0
- orderInLayerType: which allows you to choose how the mountain's order in layer will be set. From prefab or from value below
- orderInLayer: which allows you to set the mountain's order in layer value if you overriding this value
- colorModeType: which allows you to choose how the color of the mountain will be set. From prefab or from value below
- color: which allows you to set the color of the mountain if you overriding this value
- drawBottom: which allows you to choose will the bottom of the mountain be drawn.
- bottomOffset: which allows you to offset the bottom of the mountain.
- seed: which allows you to set a seed value for the random generator.
- chunkOverlapDistance: which allows you to set the distance that different chunks of the mountain will overlap each other, making the transition between them less noticeable.
- distanceBetweenPoints: which allows you to set the distance between points on the mountain's generation, the closer the points the higher the detail but the less performance
- pointsCountPerChunk: which allows you to set the number of points per chunk of the mountain, it is important to keep this number as low as possible to ensure good performance. It is important to note that the lower the point count per chunk, the lower the level of detail, and vice versa. The user should be aware of this trade-off and adjust the value accordingly.
- syncMode: which allows you to choose between sync/async mode in various situations.

Overall, the AdvancedSettings allow for fine-tuning and customizing the generated mountains to suit the specific needs of your project, giving you even more control over the final result.

Support:

If you have any questions or issues, please contact us for support. We are dedicated to ensuring that your experience with our asset is as seamless as possible.

Thank you for choosing the 2D Procedural Landscape! I hope that it makes your game development process more enjoyable and efficient.