

Ultimate Farming Documentation

Hello,

We are thrilled to present CropCraft Studios' first asset pack, "Ultimate Farming" We have prepared our documentation in detail to provide you with answers to your questions and ensure you have a seamless experience. Additionally, we will be in touch via our Discord server to offer support as soon as possible.

If you have any questions, requests, or needs, please don't hesitate to reach out to us. We are here to guide and assist you throughout your game development journey.

Welcome to the CropCraft Studios family, and we hope you have a successful game development experience using "Ultimate Farming"!

Best regards, CropCraft Studios Team 😊

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Package Included

Our package includes 42 types of farming plants, with each plant having 4 different variations. Among these variations, 3 represent the appearance of fully grown and harvest-ready plants, while the remaining one depicts the early growth stage. Furthermore, we have provided seedling stages for all plants, representing the initial sprouting time from the seeds, which you can utilize for all the plants in the package.



Note: There is no blueprint system included in the package. The growth stages of the plants are provided as meshes.

Furthermore, the design of the greenhouse building included in the package is a reference to the early 1800s, and it is specifically crafted to align with the architectural style of the Mediterranean region. Small props designed for incorporation into the building are provided separately from the main building mesh in the content. This way, you have the freedom to customize both the small props and the building according to your design preferences.

Material System

In the material distribution of the plants, 3 separate material instances are used for the stems, leaves, and fruits. This allows you to have ample maneuverability in creating different scenarios. For example, when making a plant turn yellow, you can first yellow the stem, then the leaves, and finally the fruits. Alternatively, you can use different colors for each part of the plant.

Our customizable material system provides you with the ability to adjust various settings for each instance, such as Roughness, Brightness, Desaturation, Specular, SSS (Subsurface Scattering), Normal Strength, various color adjustments, and wind reaction settings. This allows you to have full control over the appearance and behavior of the materials in your project.

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Use Color Blend

When you wish to make color changes to a plant's leaf, you can open the material instance of that specific plant. First, click on the "Use Color Blend" checkbox, and then click on the adjacent box to open the "Color" tab. From this tab, you can adjust the desired color.



Use Color Variations

Furthermore, if you open the "Use Color Variations" tab, you will find two color options that can be adjusted, along with their brightness settings. This tab enables you to introduce two additional colors while retaining the original color of the leaf. Once this option is activated and color adjustments are made, if you add the plant to your landscape through the foliage mode, you will have three different leaf colors in total. These colors consist of the original plant tone, variations color 01, and variations color 02.

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Wind

The wind system we utilize is recommended by Unreal Engine and works in conjunction with Vertex Paint, similar to how it is employed in certain Megascans packages. This system provides you the ability to make global adjustments to the wind's direction, intensity, and various other nuanced settings. Moreover, it operates through a material parameter collection, allowing for swift integration with your software and facilitating real-time modifications.

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"The "wind" tab on material instances is specifically where you adjust the plant's reactions to the wind. Resetting the settings on this tab ensures that the plant won't respond to the wind. In other words, the wind's effect on the plant will be nullified, and the plant will remain static.

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Player Interaction

The M_Foliage and M_Fruits master materials contain player interaction functionality. However, we are providing the package without enabling this functionality by default. The reason for this is that the integration of player interaction code depends on the specific player controller software being used, which can vary from person to person. If you wish to activate this feature, you can open the M_Foliage and M_Fruits master materials, make the connections as shown in the visuals, and then introduce the "player location" tab from the material parameter collection in the package into your character controller software.



Technical Details & Recommended Usage

- The package is ideal for Unreal Engine users who aim to develop realistic farm-themed games.
- With the variety of 38 different farming plants and their material variations, you can provide players with a rich gaming experience.
- The wind system and color variations create a natural and realistic look for the plants.
- The greenhouse allows players to create their own farming areas and adds a visually appealing atmosphere to the game.
- The easy customization of colors, shapes, and reactions allows players to have a personalized experience.
- The player interaction functionality enhances the game experience by enabling players to interact with the plants in the game world.

Note: The recommended usage can be subject to change according to your own creativity and objectives during the game development process.

Plants' triangle counts

- Lowest triangle count: 490 (Arugula)
- Highest triangle count: 67781 (Grape)
- Average triangle count: 3200

Note: All objects in the package utilize Nanite, When using this package with Unreal Engine 5.2 and above, it is strongly recommended to utilize the Nanite and Lumen systems.

https://docs.unrealengine.com/5.0/en-US/lumen-global-illumination-and-reflections-in -unreal-engine/