

README: Open World Forest Adventure

Welcome to the Open World Forest Adventure project in Unity! This README file provides an overview of the project setup, features, and instructions on how to toggle between rain and snow effects in the scene.

Project Overview

This project simulates a serene open-world forest environment complete with a tranquil lake and a cozy cabin. Users can explore this environment using a simple First-Person Controller (FPC) and interact with various elements. The scene includes dynamic weather effects such as rain and snow, which can be toggled on and off to enhance the immersive experience.

Features

- **Forest Environment:**
 - Detailed 3D forest with vegetation, trees, and foliage.
 - Realistic lake with reflective water surface.
 - Cabin modeled with interior and exterior details.
- **First-Person Controller (FPC):**
 - Basic navigation using arrow keys to move and explore the environment.
 - Allows interaction with objects and surroundings.
- **Visual Enhancements:**
 - Global post-processing effects:
 - Bloom effect for realistic lighting and glowing visuals.
 - Color grading to enhance mood and atmosphere.
- **Dynamic Weather System:**
 - Toggleable rain and snow effects:
 - Rain and snow particles adjust dynamically based on player movement.
 - Weather effects follow the player's camera position for realistic simulation.

Installation and Setup

1. **Clone the Repository:**
 - Clone this repository to your local machine using Git:

```
bash
Copy code
git clone <repository-url>
```
2. **Open in Unity:**
 - Open Unity Hub.
 - Click on Add and select the cloned project directory.
3. **Import Assets:**
 - Ensure that all necessary assets, including the Polygonal Low Poly Particle Pack, are imported into the project.

Usage Instructions

1. Post-Processing Setup:

- In the Unity Editor:
 - Right-click in the Hierarchy panel.
 - Select 3D Object -> Post-process Volume to create a new post-processing volume.
 - Configure the post-processing effects (bloom, color grading) as desired for visual enhancement.

2. Toggle Between Rain and Snow:

- Navigate to the Hierarchy panel in Unity.
- Locate the Effects container.
- Click on the Rain object within the Effects container.
- In the Inspector panel:
 - Uncheck the Enabled checkbox to disable rain.
- Click on the Snow object within the Effects container.
- In the Inspector panel:
 - Check the Enabled checkbox to enable snow.

3. Navigate and Explore:

- Press the Play button in Unity to start the scene.
- Use the arrow keys to navigate through the forest environment.
- Interact with the cabin and explore the surroundings.
- Observe the visual changes and effects based on the weather conditions (rain or snow).

Additional Notes

- **Optimization:** Adjust particle system settings and post-processing effects for optimal performance and visual quality.
- **Contribution:** Contributions and feedback are welcome via pull requests and issue submissions on GitHub.
- **License:** This project is licensed under the MIT License. See the LICENSE file for more details.

Acknowledgments

- This project was inspired by community requests for realistic open-world environments and dynamic weather effects in Unity.
- Special thanks to contributors and creators of assets used in this project.