Introduction

Cobra Assemblies is a tool designed to optimize the performance of your Unity project. It enables the generation of assembly definition files with ease, significantly organizing and compartmentalizing your code and assets into focused assemblies.

What is an Assembly Definition File?

An assembly definition file is crucial for Unity project performance. It is a file that groups scripts and assets to be compiled into a single assembly. By organizing into smaller assemblies, your project's load and compile times are reduced, which is vital for large and complex projects.

The Challenge of Manual Assembly Definition

It is important to note that not all asset developers utilize assembly definitions, potentially slowing down compilation. Moreover, Unity's requirement to recompile everything upon any change in an assembly definition adds to the complexity and time consumption of manual creation.

Using Cobra Assemblies

To use Cobra Assemblies:

1. Open the editor window: `Tools -> Byte Cobra -> Assemblies`.
2. (Optional) Add directories to exclude.
3. Click the "Create Assemblies" button.

The tool generates assembly definition files for all directories within the assets folder, excluding any specified directories. This process allows for compartmentalization without the need to recompile the entire project for each change.

Generating Assemblies for Specific Folders

1. Open the Project context menu (right-click on any folder).
2. Select `Byte Cobra -> Assemblies -> Create Module`.

This feature facilitates a semi-automatic workflow, enabling selective optimization of project areas without manual assembly creation.

Restoring Assemblies

This tool additionally offers functionality for cleaning up the generated assemblies. This means you can easily revert your project to its original state, ensuring a smooth and flexible workflow. You can do this either from the context menu or the tools menu.

Global Assembly Definitions

Creating assembly definitions for your entire Unity project is easy with Cobra Assemblies. Follow these simple steps to generate assemblies for your project:

1. Open the Cobra Assemblies editor window by going to Tools -> Cobra Assemblies in the top menu of Unity.
2. (Optional) Enter the path of a directory that you want to exclude from the assembly definition process.
3. Click on "Generate Project Assemblies" in the editor window to generate assemblies for the entire Unity project.
4. Click on "Clear Project Assemblies" to restore everything to its original state.

It's that simple! With Cobra Assemblies, you can save yourself hours of tedious manual work and improve the performance of your Unity project at the same time. Try it out today and see the difference it can make for your workflow.

Please note that while Cobra Assemblies is a powerful tool for optimizing the performance of your Unity project, it may not always be able to fully resolve all dependencies.

In the event that you encounter errors during the assembly definition generation process, a potential workaround would be to try generating assembly definitions for individual folders that are causing errors, rather than generating them for the entire project at once. This way, you can isolate and address any issues that may arise, and still take advantage of the benefits of improved performance and organization provided by Cobra Assemblies.

Folder Assembly Definitions

Creating individual assembly definitions for specific folders in your Unity project is easy with Cobra Assemblies.

Follow these simple steps to create a module for a selected folder:

1. Open the Project view in Unity and navigate to the folder where you want to generate the assembly definitions.
2. Right-click on the folder to open the context menu.
3. Select "Cobra Assemblies" and then "Create Module" to generate assembly definitions for the selected folder.
4. Assembly definitions and assembly references will be generated for the folder and all its subfolders.
5. Two types of assembly definitions will be created, one for runtime and one for editor scripts. If a subfolder is named "Editor", it and all its subfolders will be included in the Editor assembly definitions.
6. To clean up the folder, Select "Cobra Assemblies" and then "Clean Up Folder" to restore the folder to its original state.

By using this feature, you can selectively optimize specific areas of your project without the need for manual assembly creation, saving you time and effort while still providing the benefits of improved performance and organization.