

**GAME 2023 GAME ENGINE II**

**Lab 8**

**DESCRIPTION:**

In this lab, we will be making use of Streaming Levels in C++ and re-create the functionality of Level Streaming Volumes.

**REQUIREMENTS:**

1. Start with a C++ First Person project.
2. Create a new level that will be streamed in and out (Loading and Visibility).
   1. Add several actors to this scene to demonstrate the loading/unloading of the scene.
3. In C++, Create a new AActor called LevelStreamingBox (this will have a UBoxComponent for collision).
4. Using the LoadStreamLevel and UnloadStream level functions, re-create the functionality of a level streaming volume on begin overlap/end overlap of the box component.
5. Apply your LevelStreamingBox to your level to load and unload your custom level.

***How-to:*** Follow instructions found on this page for an example of how to achieve this in C++: <https://docs.unrealengine.com/en-US/Engine/LevelStreaming/HowTo/StreamWithCPP/index.html>

**DUE DATE:**

Before the next lecture starts.

**DELIVERABLES:**

None; Show me in the next class when I come around to you.

**RECOMMENDED: REGULAR SOURCE CONTROL BACKUPS**

***IMPORTANT! READ THIS CAREFULLY. Be sure you’re not including large and unnecessary directories.***

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| **\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***  **IF submitting a C++ Project (not applicable to Blueprint only projects):**  **Close the editor and re-compile your project in visual studio**  **To clear out hot-reload dlls and to make the project usable without needing to recompile.**  **\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*** |

In P4V, mark **ONLY** the following files and folders for add:

* The .**uproject**
* The **Content directory**
  + Not the StarterContent directory
* The **Config directory**
* The **Source directory** *(if there is one)*
* Binaries/Win64/UE4Editor.modules *(if available)*
* Binaries/Win64/UE4Editor-ProjectName.dll *(if available)*

Submit the marked files and write a changelist description.

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| **\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***  **DO NOT Submit the following:**   * **.vs** folder * **intermediate** folder * **binary** folder content, other than the two files listed above * **saved** folder   **\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*** |