

First Steps Unreal C++



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Agenda

- Introduction
- Software Requirements
- Project and Repository Creation
- Compilation
- Hello World!

Introduction

- Go through the setup to start an C++ Unreal Engine project.
- Take the first steps to write and compile your code.
- Understand the next steps after today.

Software Requirements

- Unreal Engine 5 (latest)
- Git client (recommended GitHub Desktop)
- Code IDE (recommended JetBrains Rider)

Project and Repository Creation

- Launch UE5
- Create a new project:
 - Pick a game template (First Person Shooter for this workshop)
 - Choose C++
 - Optional: No Starter Content
- Meanwhile, create a repository on GitHub
 - Pick a name different from your UE5 project name (I append -Repo)
 - Choose UnrealEngine as for gitignore
 - Clone it using your Git client
- After the project is created, close UE5
- Move your project (folder's content) to your local repository and commit
- Reopen the editor if you closed it

Compilation

- Inside UE5, Edit -> Editor Preferences -> Source Code: select Rider
- Double click any C++ class asset (I choose the character)
- After Rider opens, close Unreal Engine editor
- Pay attention to pop-ups and wait for background tasks to finish
- Build (**Ctrl + F9**)
- Run (**Shift + F10**)

Hello World!

- In Rider, use **Shift Shift** to find anything
- **F10** is the hotkey to toggle between header and source file
- Override **BeginPlay()** in the character's header file
- Write the following code in **BeginPlay()** to print HelloWorld!

- `GEngine->AddOnScreenDebugMessage(-1, 5, FColor::Red, "Hello World!");`

- Use **Ctrl + Alt + F11** to compile with Live Coding
- Run and see Hello World!

References

- <https://store.epicgames.com/en-US/download>
- <https://desktop.github.com/download/>
- <https://www.jetbrains.com/idea/download/>
- https://www.jetbrains.com/help/idea/Unreal_Engine_Before_You_Start.html