

UNREAL LYRA PROCESSES

EMPTY LYRA WORLD

Create Plugin

Create/Refresh Visual Studio solution files. Enable VS plugins. Edit > Plugins > Add > Game Features (with C++1) > Name your Plugin > click Create.
The Plugin is now available via Edit > Plugins > Game Features. Your plugin Game Features Data Asset will open. Save it.
For the moment, it will say „Error registering“ - that's fine for the moment.

Preparation

- Make sure to enable „Show Plugin Content“ on your Content Browser Settings
- Enter Editor Plugins > Your Plugin Name and create root folder „Maps“
- Click menu > File > New Level and select a new „Open World Level“
- Click menu > File > Save Current Level As... Into „Maps“ folder
- Click menu > Edit > Project Settings > Maps&Modes and set your new map as „Editor Startup“ and „Game Default Map“

Character Blueprint

- Right click in plugin root > Create Blueprint > „Character“. Enter
- Right click > Blueprint > Base on B_Hero_Default > name BP_XX_Hero, open and click „Event Graph“
- Add a B_MannequinPawnCosmetics component
- Copy code from <https://blueprintsinc.com/blueprint/rmckd37/> Insert into graph and compile

LyraPawnData

Right click in plugin root > Miscellaneous > DataAsset > base on LyraPawnData, name DA_XX_PawnData (X in your project short)

Open and change

- Pawn > Pawn Class: your new BP_XX_Hero
- Input > Input Config: InputData_Hero
- Camera > Default Camera Mode: CK, The Person, Save.

Lyra Controller Component - Character Parts

- Right click in Characters folder > Create Blueprint > base on LyraControllerComponent, CharacterParts, name BP_XX_CharParts
- Open, enter event Graph and add node „Add Character Part“ to Begin Play (or <https://blueprintsinc.com/blueprint/157fms/>)
- Right click on „New Part“ and choose „Split Struct Pin“
- Set „New Part Class“ to „B_Manny“, Compile and save.

LyraExperienceDefinition

Right click in plugin root > Create Blueprint > base on LyraExperienceDefinition, name BP_XX_ExpDef. Open

- Gameplay > Game Features To Enable: Add one element and type in your Plugin Name (same as plugin folder, minus „Content“)
- Gameplay > Default Pawn Data: Select above Pawn Data Asset
- Add one „Actions“ and select „Add Components“
- Add one item to Component List, with
 - Actor Class: Controller
 - Component Class: your BP_XX_CharParts
 - Client Component: unchecked, Server component: checked
- Save

GameFeatureData

Open the automatically created GameFeatureData Asset

Add one action, choose „Add Input Config“

Add one element to „Input Config“, expand and set to

- Config Pin: Default, 200

Type: Mouse and Keyboard

Add 2 items to Asset Manager > Primary Assets To Scan

LyraExperienceDefinition

- Primary Asset Type: Type „LyraExperienceDefinition“
- Asset Base Class: Select LyraExperienceDefinition
- Check „As Blueprint Class“

LyraUserFacingExperienceDefinition

- Primary Asset Type: Type LyraUserFacingExperienceDefinition
- Asset Base Class: Select LyraUserFacingExperienceDefinition
- Director: Add one entry and select your plugin folder

Map

- Primary Asset Type: Type „Map“
- Asset Base Class: Select World
- Director: Add one entry and select your Maps folder

Set to „Active“ and save

Set Experience for Map

Open Edit > Project Settings > Game > Asset Manager

Expand „Primary Asset Types to Scan“ - expand „LyraExperienceDefinition“

Expand „Director“ - Add your plugin directory here. Restart editor

Go to World Settings > Default Gameplay Experience > your BP_XX_ExpDef. Play.

FILE REFERENCES

APPEARANCES

Change from Manny to Quinn

- Open BP_XX_CharParts, Change node „Link Anim Class Layers“ pin „New Part Part Class“ to „B_Quinn“

Use a Marketplace Character: Paragon Feng Mao

- We use the tag on the Character Parts Actor to decide a feminine or masculine character. This defines the skeleton mesh to be used.
- Click „Class Defaults“
- Animation Mode: Use Animation BP
 - Anim Class: ABP_Mannequin_Base
- Click Component > Mesh, set Transform > Location > X to 48
- Compile, save and close BP

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MENUS

Frontend Menu and Startup Screen

- First, we create an asset to define our level to launch:
 - In your Plugin root, right click > Misc > Data Asset > Choose type „LyraUserFacingExperienceDefinition“, name „DA_XX_ExpDef“
- Open that asset and set
 - Map ID: Starter map from „Empty Lyra World“, step B
 - Experience ID: Tap Out from „Empty Lyra World“, step B
 - The title, subtitle and icon as you wish - we actually will not use this here in the first step - but Lyra will actually find this asset and will display it already
 - In Default Exp. Show in Frontend: Checked
 - Loading Screen: Leave empty, Save.
- Both Startup and Frontend screen are of type „LyraActivatableWidget“. We use copies of Lyra here:
 - Create a Plugin/UI folder
 - Copy into it from Lyra game directory
 - W_LyraStartup > Rename W_XX_Startup
 - W_LyraFrontend > Rename W_XX_Frontend
 - (Optional) Edit in W_XX_Startup:
 - copy „U_LyraExp_2K and modify to new mask
 - copy „M_UI_Loop_Crew_DefaultLoadingScreen and point „LoopMask“ to modified mask
 - point W_XX_Startup > Loop > image to new texture
 - Edit in W_XX_Frontend:
 - Open and click on „Play Lyra“ button. Change „Button Text“ to „Play XX“ - then open the Graph Input right
 - Add a new variable of type „Type Lyra User Facing Experience Definition“ variable called UfExp

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INSTALLATION

CREATE AN UNREAL LYRA-BASED GAME BLUEPRINTS ONLY - NO C++

INSTALLATION

Install Visual Studio

- Search for Visual Studio Community. Download, Open Install.
- Select as components:
 - .NET Desktop Development
 - Universal Windows Platform Development
 - Desktop Development with C++
 - Game Development with C++
- Make sure to manually select „Unreal-Engine Installer“ on the details panel here
- Uninstall and embedded development with C++

Install and do all updates that might be asked for

- Open Epic Games launcher
- Go to Unreal Engine Library and install latest Unreal Engine
- Get Lyra from Marketplace and Create Lyra Project from your Library
- Install UnrealV5 (Engine Path: Engine/Extras/UnrealV5)

Open Lyra

Go to Tools>Create Visual Studio Solution

Close Lyra, open the newly created solution from Lyra's install directory

Right top you find the „Solution Explorer“, right click on „Solution LyraEditorGame“, and choose

- Class Solution - should take some seconds and deletes all binaries
- Rebuild Solution - takes a couple of minutes while recompiling
- Start Lyra via the green arrow „Local Windows Debugger“ (or F5)

This sign shows that the tutorial is released and will point to the regarding video. All unsigned tutorials are work in progress and most probably will not work. Yet