

Modifications of 3Glasses Unreal SDK from BlackSmith

1. Perspective Projection Matrix

改善透視投影矩陣, 讓頭盔的影像更有立體感, 看起來更舒適

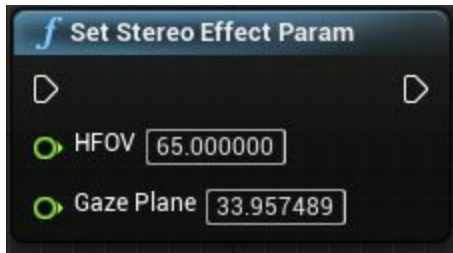
具體如下:

FOV改為65

增加GazePlane參數, 此設定影響矩陣的StereoOffset

提供BlueprintFunction讓使用者方便修改FOV&GazePlane參數

FOV預設值為65, GazePlane預設值為33.95749f.



2. Motion Prediction For D2頭盔

改善D2頭盔的延遲感, 讓頭盔的影像更流暢, 看起來更舒適

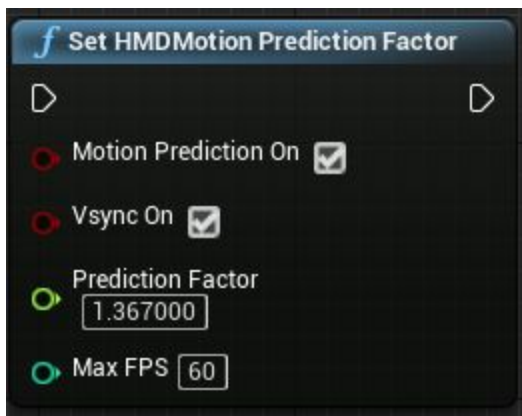
具體如下:

於PreRenderView_RenderThread跟PreRenderViewFamily_RenderThread中實做
Vsync功能必須打開

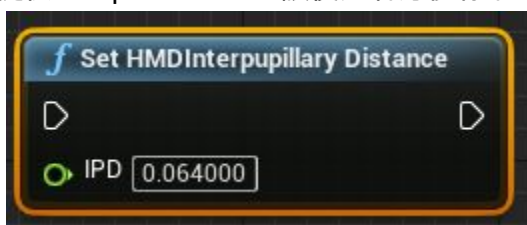
FPS鎖定在60

預設的預測值為1.367

提供BlueprintFunction讓使用者方便開關與修改MotionPrediction功能

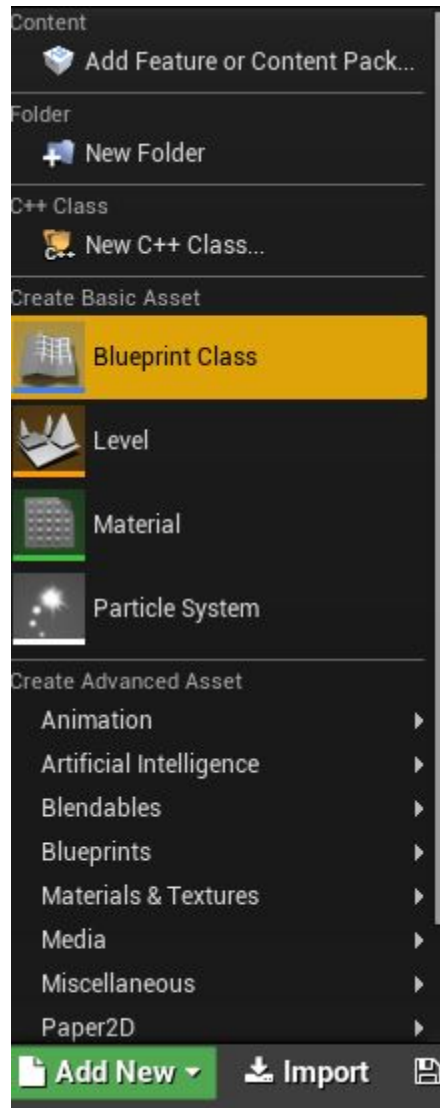


3. 提供BlueprintFunction讓使用者方便存取IPD



BlueprintFunction使用:

首先從Unreal編輯器的ContentBrowser中, 按下Add New按鈕, 新增Blueprint



開啟新增的Blueprint檔案,並切換到EventGraph介面
點擊滑鼠右鍵後輸入 Three Glasses VR
即可找到ThreeGlassHMD相關的BlueprintFunction





All Actions for this Blueprint

☒ Context Sensitive ▶

Three



Three Glasses VR

-  Get HMDInterpupillary Distance
-  Set HMDInterpupillary Distance
-  Set HMDMotion Prediction Factor
-  Set Stereo Effect Param