

What if you wanted to play a VR game that would feel realistic? What if it was a VR game that has the weather change according to your area outside? Well, that's what my project does. Hi, my name is Irvin Ingram and my project name is Local Dynamic Weather Feature for VR. Local Dynamic Weather Feature is a video game feature that would make the weather in a video game be whatever it is in your local area. It will give gamers a more realistic feel of being in the game, especially in VR games. According to (99firms.com, 2023), 34% of people ages 16-34 are VR gamers and according to (globeNewswire.com, 2024) the VR gaming market is expected to grow at a CAGR (Compound Annual Growth Rate) of 32.75% over the forecast period of 2021-2026. My project will help these statistics grow. Here's the blueprint to my local dynamic weather feature. First I made the sky. The sky blueprint is Ultra Dynamic Sky. There are 2 parts to this coding. The first part starts with event beginplay and goes through seven groups of coding. They are initialize sky and clouds, periodic sky light capture, lights update period, wait for valid camera data to start inside fog, run update functions, and initialize UDW (Ultra Dynamic Weather). The other part starts with Event Tick and the coding goes through four groups and they are the day and night cycle, increment lunar phase, sunset and sunrise events, and refresh the sky. I also have coding for the Ultra Dynamic Weather. This coding starts with Event Initialize Weather and goes through seven groups which include create real Niagara systems (which is a Video effects primary tool in Unreal), make sure UDW (Ultra Dynamic Weather) has UDS (Ultra Dynamic Sky) reference on initialize, set random time offset, initialize random weather variation, initial setup, wait for camera data to start Niagara systems, and at the bottom by itself is event endplay. Ok, I leave you all with this for my conclusion of this presentation "When you playing any kind of game, or watching a movie, and you hear thunder outside, wouldn't it be great if it started raining in your game? Whether in VR or cards, let's bring the weather home.

Work Cited

Virtual reality statistics - 2023. 99firms. (2023, May 19).

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