

Music Technology Learning Report from Aleksei Komasa

My initial idea for the project at the beginning of the semester was to create an advanced sound system in Unreal Engine using MetaSounds. I had previous experience using Unity in combination with FMOD. These days, MetaSounds are becoming more and more popular, and more projects decide to use them. So that was the reason why I wanted to learn more in this domain – to improve my technical sound design skills.

Throughout the process, however, I encountered complications and had to rethink many things. I had a specific in-development game in mind, built in Unreal Engine 4, and needed to upgrade it to version 5, because MetaSounds are only available there. That said, it did not work due to many syntax differences between version 4 and version 5.

So I took the Lyra game – the example game for Unreal 5 – and started learning MetaSounds. Quite quickly, I realized that MetaSounds cannot be considered a full replacement for middleware, due to several issues: a complicated workflow, a lack of modules for implementation, and the absence of a package manager to download other people's functions and modules.

Still, it is very good for specific cases where sound material has to be synthesized instead of working with samples. It is also good for procedural music/soundscapes. That is what I eventually focused on – creating self-generative music that reacts to actions in the game.

So I created a musical track in an orchestral style, where musical parts combined randomly with each other. The soundtrack had three parts – low, medium, and high intensity. In other words, the more epic and intense the gameplay was, the more intense the music played.

In this course, I significantly improved my skills working with MetaSounds and Unreal. I also defined the strong and weak sides of MetaSounds and understood what the use cases for this technology are at this stage.