Design and Implementation of Virtual Piano Application Using Leap Motion Controller

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ABSTRACT

One of the breakthrough in information and communication technology that related to virtual reality is the invention of motion censor detecting technology called Leap Motion. This technology has been created to detect, sense and do interaction with computer that requiring no hand contact or touching in close range. Leap Motion let user use and interact with computer in a whole new way with high precision, affordable price and simple design.

In this final project, we build some application that simulate playing piano with the original tone according in the piano and customize with detection range of Leap Motion. Made with a game development ecosystem called Unity and coupled it with Leap Controller, product that we create expected to capable of resembling or at least similar to the original piano both sound, design and gameplay. So that application can give enough a new sensation to play piano in a new way.

This application then will be tested for it functionally to ensure that this application running properly and correctly. Testing will be running through some scenario that reflect the features of the application. Beside that application can be other alternatives to play piano in more interesting way.

Keyword: education, Leap Motion, simulation, virtual, Unity.