

ABSTRACT

PIANO LEARNING APPLICATION USING AUGMENTED REALITY-BASED VIRTUAL BUTTON ON ANDROID

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Today has been a lot of aspects of life that is inserted by computer technology one of which is music. One computer technology at the moment is augmented reality technology. Many applications still play piano using touch screen technology that sometimes makes it uncomfortable for the user because the size of the keys that do not match the size of the finger that is owned by the user plus piano expensive prices and low mobility. Therefore it will be built a piano application using augmented reality-based virtual button. Virtual button is a new technology that still needs development. The method used in this study was Markerless augmented reality so that the marker used need not be boxy black. System development methodology used is the waterfall method. Construction of the system is done by using the tools unity 3D, mono develop, as well as vuforia SDK and Android SDK. System modeling is done by using UML-based visual. Tests conducted by the method of black box, white box, and statistical testing. The result is a virtual piano application that contain piano chord learning method with augmented reality based virtual button on android.

Key Word : Piano Learning, Virtual Button, Augmented Reality, Markerless, Unity 3D, Android