

ABSTRACT

Augmented reality-based personal computer learning device application especially in the CPU is used to help students of Telkom Telkom Bandung to understand CPU raft learning materials, because the learning system is still using conventional methods, students need a new invention to support the learning process that can increase interest learning by using interactive learning media such as AR technology-based learning media.

AR-based CPU applications are designed using the Unity application and for 3D objects using applications namely Sketchup and Photoshop. The workings of this application are when the user directs the android camera to the target image in the form of a marker, then the user's android screen will display a 3D object, and when the user presses the 3D view then the 3D object information table appears..

From the results of tests conducted, the angle, light and distance in the room and outside the room. In obtaining the results of a delay in testing the angle, light and distance outside the camera the optimum distance to the marker is 80o and 20 cm, and the intensity of the light 8500 lux is 0.16 seconds during the day, the camera so that the maximum tracking with maximum light, and the results of testing the delay in the room, the optimal camera to the marker is 80o and a distance of 20 cm and 534 lux light intensity is 0.36s. and based on the results of subjective testing of students obtained results above 4, from a scale of 1 to 5 included in either category. So it can be concluded that this CPU application can be used as a learning medium for the introduction of PC devices, especially in the CPU device parts and some components contained in the CPU device.

Keywords: PC, Augmented Reality, CPU