

ABSTRACT

The world of technology is progressing, the rapid development of technology makes the Internet of Thing in demand and starting to be needed a lot. The research that will be made covers a smart building technology simulation program using the Unity 3D application. This study designed a simulation program where smart building technology is expected to be a solution in controlling the intensity of light in the room based on the measurement of light intensity (Lux). Light conditions can be said to be sufficient in a room when it reaches > 250 Lux for office work. In this study, the lecturer's room becomes a model in making simulations of controlling indoor light and is supported by the movement of window curtains that can affect the intensity of light in the room. This study uses the Event-Driven method which requires a trigger to run the simulation scenario and uses black box testing to test the scenario that is run. Based on the test results from the lecturer room simulation program that regulates the light intensity in the room, it can be concluded that the simulation test using the Black-Box Testing method was successfully carried out with 20x simulation trials with an average test success rate of 95%.

Keywords : *Smart Building, Internet of Things (IoT), Unity 3D, C#, Light intensity*