

ABSTRACT

The Smart Mannequin and Smart Weapon Rack research projects are initiatives by COE STAS-RG that utilize Internet of Things (IoT) technology to enhance user comfort and military weapon inventory security. A major challenge faced is the unavailability of physical devices during maintenance periods, which hinders the dissemination of information to external parties. This research aims to develop a Virtual Reality (VR) application based on Unity 6 to present information about the Smart Mannequin and Smart Weapon Rack in a flexible and interactive manner. The VR application is designed using Multimedia Development Life Cycle (MDLC) methodology, which consists of six stages: concept, design, material collecting, assembly, testing, and distribution. By leveraging the Meta Quest 2 VR Headset, the application creates an immersive experience, enabling users to access information about the both projects through accurate digital representations and an informative interface.

Keywords: Unity, Virtual Reality, MDLC, IoT, Smart Mannequin, Smart Weapon Rack