

ABSTRAK

Penelitian ini berjudul *Perancangan Virtual Tour Kampus Amikom Purwokerto Berbasis 3D Interaktif Menggunakan Game Engine Unity Sebagai Media Informasi*. Penelitian ini dilatarbelakangi oleh terbatasnya media informasi tata letak ruangan di Gedung 1 Universitas Amikom Purwokerto, yang hanya berupa papan nama ruangan tanpa denah visual maupun sistem navigasi, sehingga menyulitkan mahasiswa baru, calon mahasiswa, dan pengunjung dalam proses wayfinding. Tujuan penelitian ini adalah merancang dan membangun aplikasi *Virtual Tour* 3D interaktif Gedung 1 menggunakan Unity dan Blender sebagai media informasi tata letak ruangan, serta mengukur tingkat usability aplikasi menggunakan metode *System Usability Scale* (SUS) berdasarkan respons pengguna. Pengembangan aplikasi dilakukan dengan metode *Multimedia Development Life Cycle* (MDLC) yang terdiri dari enam tahap, yaitu *concept*, *design*, *material collecting*, *assembly*, *testing*, dan *distribution*. Aplikasi yang dihasilkan memiliki fitur penjelajahan bebas (*free roaming*), navigasi berbasis *waypoint* dengan *arrow indicator*, label nama ruangan otomatis, serta *pause* menu. Proses distribusi produk dikemas melalui pembuatan website publikasi khusus berbasis Blogspot sebagai *landing page* resmi yang memuat deskripsi aplikasi, galeri visual, video demonstrasi, halaman FAQ, serta tombol unduhan langsung yang terintegrasi dengan Google Drive. Hasil pengujian fungsionalitas terhadap 12 fitur menunjukkan seluruh fitur berjalan sesuai rancangan. Pengujian usability terhadap 30 responden menghasilkan skor rata-rata SUS sebesar 77,75 yang termasuk dalam kategori Good. Hasil ini menunjukkan bahwa aplikasi *Virtual Tour* 3D beserta website distribusi yang dikembangkan layak digunakan sebagai media pengenalan lingkungan kampus yang modern dan informatif.

Kata kunci: *Virtual Tour* , 3D interaktif, Unity, wayfinding, usability.

ABSTRACT

*This research is titled **Designing a 3D Interactive Virtual Tour of the Amikom Purwokerto Campus Using the Unity Game Engine as an Information Medium**. This study was motivated by the limited information media regarding room layouts in Building 1 of Amikom Purwokerto University, which currently consists only of a room name board without a visual floor plan or navigation system, making it difficult for new students, prospective students, and visitors during the wayfinding process. The objectives of this research are to design and build a 3D interactive Virtual Tour application of Building 1 using Unity and Blender as a room layout information medium, and to measure the application's usability level using the System Usability Scale (SUS) method based on user responses. The application was developed using the Multimedia Development Life Cycle (MDLC) method, which consists of six stages: concept, design, material collecting, assembly, testing, and distribution. The resulting application provides free roaming exploration, waypoint-based navigation with an arrow indicator, automatic room name labels, and a pause menu. The product distribution process is optimized through the creation of a dedicated publication website based on Blogspot as an official landing page, which features application descriptions, visual galleries, video demonstrations, an FAQ page, and direct download buttons integrated with Google Drive. Functionality testing of 12 features showed that all features worked according to the design. Usability testing involving 30 respondents resulted in an average SUS score of 77.75, which falls into the Good category. These results indicate that the developed 3D Virtual Tour application along with its online distribution website is highly suitable for use as a modern and informative campus orientation medium within the Amikom Purwokerto Campus environment.*

Keywords: Virtual Tour , interactive 3D, Unity, wayfinding, usability.