

PENGEMBANGAN MEDIA PENGENALAN BENDA SEJARAH MUSEUM BULELENG BERBASIS WEB-BASED AUGMENTED REALITY

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ABSTRAK

Penelitian ini bertujuan untuk mengembangkan media pengenalan benda sejarah Museum Buleleng berbasis Web-Based Augmented Reality (WebAR) sebagai solusi inovatif dalam memperkenalkan koleksi museum secara interaktif dan menarik. Metode penelitian yang digunakan adalah Research and Development (R&D) dengan model Multimedia Development Life Cycle (MDLC) yang terdiri dari enam tahap, yaitu Concept, Design, Material Collecting, Assembly, Testing, dan Distribution. Produk yang dihasilkan berupa website MuBuAR yang memungkinkan pengguna mengakses visualisasi tiga dimensi (3D) artefak sejarah yang dilengkapi dengan informasi berbasis teks dan audio tanpa perlu menginstal aplikasi tambahan. Hasil pengujian blackbox menunjukkan bahwa seluruh fungsi berjalan sesuai dengan rancangan, sementara uji validitas oleh ahli isi dan ahli media memperoleh kualifikasi “Sangat Tinggi” dengan kategori “Sangat Valid”. Uji respons pengguna menggunakan User Experience Questionnaire (UEQ) menghasilkan nilai “Excellent” pada seluruh aspek, dengan nilai tertinggi pada aspek daya tarik (Attractiveness), diikuti stimulasi, kejelasan, efisiensi, ketepatan, dan kebaruan. Berdasarkan hasil tersebut, media ini dinyatakan layak digunakan sebagai sarana edukasi sejarah serta dapat mendukung pelestarian nilai budaya lokal melalui pemanfaatan teknologi digital.

Kata kunci: Augmented Reality, Museum Buleleng, WebAR, MDLC, Media Edukasi

DEVELOPMENT OF WEB-BASED AUGMENTED REALITY MEDIA FOR INTRODUCING HISTORICAL OBJECTS AT THE BULELENG MUSEUM

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ABSTRACT

This research aims to develop a Web-Based Augmented Reality (WebAR) media for introducing historical objects at the Buleleng Museum as an innovative solution to present museum collections in a more interactive and engaging way. The research method applied was *Research and Development (R&D)* using the *Multimedia Development Life Cycle (MDLC)* model, which consists of six stages: *Concept, Design, Material Collecting, Assembly, Testing, and Distribution*. The final product is a website called MuBuAR that allows users to access three-dimensional (3D) visualizations of historical artifacts, accompanied by text and audio information, without the need to install additional applications. The results of the blackbox testing showed that all functions worked properly as designed. Validation tests by content experts and media experts indicated a “Very High” qualification and were categorized as “Highly Valid.” Furthermore, user response testing using the *User Experience Questionnaire (UEQ)* obtained “Excellent” scores across all aspects, with the highest rating in *Attractiveness*, followed by *Stimulation, Perspicuity, Efficiency, Dependability, and Novelty*. Based on these results, the developed media is considered feasible as an educational tool for history learning and supports the preservation of local cultural values through digital technology.

Keywords: Augmented Reality, Buleleng Museum, WebAR, MDLC, Educational Media