PENGEMBANGAN MEDIA EDUKASI BERBASIS *AUGMENTED REALITY* PENGENALAN KOLEKSI DI MUSEUM SEMARAJAYA KLUNGKUNG

Oleh

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ABSTRAK

Museum Semarajaya Klungkung menyimpan berbagai koleksi mulai dari peninggalan Kerajaan Klungkung, peralatan masyarakat hingga koleksi budaya yang sangat bernilai. Ditemukannya kendala berupa keterbatasan media informasi yang masih bersifat konvensional dan statis menyebabkan berkurangnya interaktivitas antara pengunjung dengan koleksi museum. Penelitian ini bertujuan mengembangkan media edukasi berbasis *augmented reality* (AR) sebagai sarana pengenalan media informasi koleksi Museum Semarajaya yang interaktif dan inovatif, serta ingin mengetahui respon pengguna terhadap produk yang dikembangkan. Penelitian ini menggunakan jenis penelitian *Research and Development (R&D)* dengan model pengembangan *Multimedia Development Life Cycle* (*MDLC*) yang memiliki kelebihan dimana memungkinkan perbaikan dalam setiap tahapannya sesuai dengan kebutuhan pengembang. MDLC terdiri dari 6 tahapan, yaitu *Concept*, *Design*, *Material Collecting*, *Assembly*, *Testing*, dan *Distribution.* Produk yang dikembangkan menggunakan Unity Engine dan Vuforia Engine dengan visualisasi objek tiga dimensi (3D), beberapa fitur yang dimiliki produk ini meliputi fitur *zoom in/out*, rotasi, *backsound*, panel informasi, audio narasi dan fitur bahasa. Pengujian produk ini dilakukan dengan uji ahli isi, uji ahli media, dan uji respon pengguna yang melibatkan 30 responden dengan menggunakan Skala Likert. Hasil penelitian ini menunjukkan bahwa uji ahli isi memperoleh koefesien validasi sebesar 1,00 dengan kategori <Sangat Valid=, dan uji ahli media memperoleh koefesien 1,00 dengan kategori <Sangat Tinggi=, uji mendapatkan hasil dengan jumlah skor total 1.508 dan skor rata-rata 50,26 dengan kualifikasi <Sangat Positif=. Dengan demikian hasil tersebut menunjukkan bahwa *augmented reality* yang dikembangkan layak digunakan sebagai Media Edukasi Pengenalan Koleksi Di Museum Semarajaya Klungkung.

Kata Kunci: *Augmented Reality*, Media Edukasi, *Interaktivitas*, Museum Semarajaya Klungkung, *Multimedia Development Life Cycle*

DEVELOPMENT OF AUGMENTED REALITY-BASED EDUCATIONAL MEDIA FOR COLLECTION INTRODUCTION AT THE SEMARAJAYA KLUNGKUNG MUSEUM

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ABSTRACT

The Semarajaya Klungkung Museum houses various collections, ranging from relics of the Klungkung Kingdom and traditional community tools to highly valuable cultural artifacts. A constraint was identified in the form of limited information media that remains conventional and static, leading to decreased interactivity between visitors and the museum's collections. This study aims to develop an educational media based on Augmented Reality (AR) as a means of introducing information about the collections of the Semarajaya Museum in an interactive and innovative manner, as well as to determine user responses to the developed product. This study employs the Research and Development (R&D) method with the Multimedia Development Life Cycle (MDLC) development model, which has the advantage of allowing improvements at every stage according to the developer's needs. MDLC consists of six stages: Concept, Design, Material Collecting, Assembly, Testing, and Distribution. The product was developed using the Unity Engine and Vuforia Engine with three-dimensional (3D) object visualization. Several features of this product include zoom in/out, rotation, background music, an information panel, audio narration, and a language feature. Product testing was conducted through content expert validation, media expert validation, and user response testing involving 30 respondents using a Likert scale. The results of this study indicate that the content expert validation obtained a validity coefficient of 1.00 with the "Very Valid" category, and the media expert validation obtained a coefficient of 1.00 with the "Very High" category. The user response test yielded a total score of 1,508 with an average score of 50.26, categorized as "Very Positive." Thus, these results indicate that the developed Augmented Reality is feasible to be used as an Educational Media for Introducing Collections at the Semarajaya Klungkung Museum.

***Keywords**: Augmented Reality, Educational Media, Interactivity, Semarajaya Klungkung Museum, Multimedia Development Life Cycle*