

ABSTRAK

Perkembangan teknologi *Augmented Reality* (AR) memberikan peluang dalam penyajian informasi budaya secara lebih interaktif dan visual. Penelitian ini bertujuan mengembangkan media interaktif berbasis *Augmented Reality* sebagai media informasi koleksi keris Banyumas. Metode pengembangan yang digunakan adalah *Multimedia Development Life Cycle* (MDLC) yang terdiri atas tahap *concept*, *design*, *material collecting*, *assembly*, *testing*, dan *distribution*. Data dan kebutuhan aplikasi diperoleh melalui studi pustaka, wawancara, dokumentasi, serta validasi ahli. Aplikasi dikembangkan pada platform Android menggunakan Unity dan Vuforia dengan pendekatan *marker-based Augmented Reality*. Aplikasi menampilkan tiga sampel keris Banyumas dalam bentuk objek tiga dimensi yang dapat diputar serta diperbesar atau diperkecil, disertai informasi berupa nama keris, deskripsi, sejarah singkat, filosofi, dan karakteristik. Pengujian fungsional dilakukan menggunakan *black-box testing* terhadap 12 skenario, sedangkan kelayakan aplikasi dinilai oleh satu orang empu sebagai ahli budaya keris melalui 10 butir pernyataan dengan skala Likert. Hasil pengujian *black-box* menunjukkan seluruh skenario berhasil dengan tingkat keberhasilan 100%. Validasi ahli memperoleh skor 46 dari skor maksimum 50 atau sebesar 92%, sehingga termasuk kategori sangat layak. Berdasarkan hasil tersebut, media interaktif berbasis *Augmented Reality* yang dikembangkan telah berfungsi sesuai rancangan dan sangat layak digunakan sebagai media informasi koleksi keris Banyumas.

Kata kunci: Android, *Augmented Reality*, keris Banyumas, media interaktif, MDLC.

ABSTRACT

The development of Augmented Reality (AR) technology provides opportunities to present cultural information in a more interactive and visual manner. This study aims to develop an Augmented Reality-based interactive medium as an information medium for the Banyumas keris collection. The Multimedia Development Life Cycle (MDLC), consisting of the concept, design, material collecting, assembly, testing, and distribution stages, was used as the development method. Application data and requirements were obtained through literature study, interviews, documentation, and expert validation. The application was developed for the Android platform using Unity and Vuforia with a marker-based Augmented Reality approach. It presents three samples of Banyumas keris as three-dimensional objects that can be rotated, zoomed in, and zoomed out, accompanied by information concerning their names, descriptions, brief histories, philosophies, and characteristics. Functional testing was conducted using black-box testing across 12 scenarios, while application feasibility was assessed by one empu as a keris cultural expert through 10 Likert-scale statements. The black-box testing results showed that all scenarios were successfully completed, resulting in a 100% success rate. Expert validation obtained a score of 46 out of a maximum score of 50, or 92%, which was classified as highly feasible. These results indicate that the developed Augmented Reality-based interactive medium functions according to its design and is highly feasible for use as an information medium for the Banyumas keris collection.

Keywords: Android, Augmented Reality, Banyumas keris, interactive media, MDLC.