

ABSTRAK

IMPLEMENTASI 3D *VIRTUAL EXHIBITION* MEGALITIKUM PASEMAH MULTIMEDIA INTERAKTIF PADA PLATFORM *WEBSITE*

(Sharfina Khairunnisa, 2026: 87 halaman)

Peninggalan megalitik di Kawasan Pasemah, Sumatera Selatan merupakan warisan budaya prasejarah bernilai penting, namun kondisi fisiknya kian memprihatinkan akibat faktor alam dan aktivitas manusia, sementara penyajian informasinya masih terbatas pada media buku dan pameran fisik yang sulit dijangkau masyarakat luas karena kendala jarak dan waktu. Penelitian ini bertujuan untuk merancang dan mengimplementasikan *virtual exhibition* megalitikum pasemah berbasis multimedia interaktif pada platform *website* sebagai media alternatif dokumentasi dan penyajian informasi budaya secara visual, informatif, dan mudah diakses. Sistem dikembangkan menggunakan metode Multimedia Development Life Cycle (MDLC) yang terdiri dari enam tahap, yaitu *concept, design, obtaining content material, assembly, testing, dan distribution*. Ruang pameran *virtual* 3D dibangun menggunakan Blender untuk pemodelan dan Unity dengan teknologi WebGL untuk fitur interaktifnya, sedangkan aplikasi *website* dikembangkan menggunakan PHP, CSS, JavaScript, dan basis data MySQL. Pengujian sistem dilakukan melalui dua metode, yaitu *black box testing* dan validasi ahli media. Hasil *black box testing* menunjukkan seluruh fitur dan fungsi sistem berjalan sesuai yang diharapkan dengan tingkat keberhasilan 100%. Hasil validasi ahli media menunjukkan persentase kelayakan sebesar 93,33% dari ahli media 1 dan 89,33% dari ahli media 2, keduanya berada dalam kategori "Sangat Layak". Dengan demikian, *virtual exhibition* megalitikum pasemah dinyatakan layak digunakan sebagai media pameran *virtual* yang mampu menyajikan informasi budaya secara interaktif serta mendukung upaya pelestarian dan dokumentasi digital warisan megalitikum pasemah.

Kata kunci: *virtual Exhibition*, Megalitikum Pasemah, 3D, Multimedia Interaktif, Unity, Blender, *Website*, WebGL, MDLC.

ABSTRACT

IMPLEMENTATION OF 3D VIRTUAL EXHIBITION MEGALITIKUM PASEMAH INTERACTIVE MULTIMEDIA ON A WEBSITE PLATFORM

(Sharfina Khairunnisa, 2026: 87 pages)

The megalithic remains in the Pasemah Region, South Sumatra, represent a significant prehistoric cultural heritage, yet their physical condition is increasingly concerning due to natural factors and human activity, while the presentation of information about them is still limited to books and physical exhibitions that are difficult for the wider public to access due to distance and time constraints. This research aims to design and implement the megalitikum pasemah *virtual* exhibition based on interactive multimedia on a website platform as an alternative medium for the documentation and presentation of cultural information that is visual, informative, and easily accessible. The system was developed using the Multimedia Development Life Cycle (MDLC) method, consisting of six stages: concept, design, obtaining content material, assembly, testing, and distribution. The 3D *virtual* exhibition space was built using Blender for modeling and Unity with WebGL technology for its interactive features, while the website application was developed using PHP, CSS, JavaScript, and a MySQL database. System testing was carried out using two methods, namely black box testing and media expert validation. The black box testing results showed that all system features and functions ran as expected, with a success rate of 100%. The media expert validation results showed a feasibility percentage of 93.33% from media expert 1 and 89.33% from media expert 2, both falling into the "Highly Feasible" category. Based on these results, the megalitikum pasemah *virtual* exhibition is considered feasible for use as a *virtual* exhibition medium capable of presenting cultural information interactively, while also supporting the preservation and digital documentation of the megalitikum pasemah heritage.

Keywords: *virtual* Exhibition, Megalitikum Pasemah, 3D, Interactive Multimedia, Unity, Blender, Website, WebGL, MDLC.