

ABSTRAK
IMPLEMENTASI *VIRTUAL TOUR* 3D BERBASIS WEB
DI MUSEUM MONPERA PALEMBANG SEBAGAI MEDIA INFORMASI
DAN EDUKASI SEJARAH

(Desky Alfarezi, 2026, 130 Halaman)

Museum Monumen Perjuangan Rakyat (Monpera) Palembang merupakan museum bersejarah yang menyimpan koleksi perjuangan rakyat Sumatera Selatan, namun tingkat kunjungan masyarakat masih rendah akibat keterbatasan akses dan minimnya media promosi. Penelitian ini bertujuan mengimplementasikan *Virtual Tour* 3D berbasis web di Museum Monpera Palembang sebagai media informasi dan edukasi sejarah, serta mengukur tingkat kelayakan fungsionalitas dan penerimaan pengguna terhadap sistem. Sistem dikembangkan menggunakan metode *Multimedia Development Life Cycle* (MDLC) dengan teknologi Three.js dan WebGL, kemudian diuji menggunakan *Black Box Testing* dan *Technology Acceptance Model* (TAM). Hasil pengujian Black Box Testing terhadap 41 skenario menunjukkan persentase validitas sebesar 97,56%, dengan satu skenario tidak valid pada fitur fullscreen di perangkat iOS. Hasil pengujian TAM terhadap 50 responden menggunakan SmartPLS menunjukkan lima dari enam hipotesis diterima, sedangkan pengaruh *Perceived Usefulness* terhadap Behavioral Intention ditolak. Hasil tersebut menunjukkan bahwa website Virtual Tour 3D Museum Monpera Palembang layak digunakan secara fungsional dan memperoleh penerimaan pengguna yang positif, sehingga dapat menjadi media alternatif untuk memperkenalkan dan melestarikan sejarah Museum Monpera Palembang kepada masyarakat.

Kata kunci: *Virtual Tour* 3D, Museum Monpera, MDLC, Three.js, WebGL, *Black Box Testing*, *Technology Acceptance Model*

ABSTRACT

IMPLEMENTATION OF A WEB-BASED 3D VIRTUAL TOUR AT THE MONPERA MUSEUM PALEMBANG AS A MEDIUM FOR HISTORICAL INFORMATION AND EDUCATION

(Desky Alfarezi, 2026, 130 Pages)

*The Monumen Perjuangan Rakyat (Monpera) Museum in Palembang is a historical museum that preserves collections documenting the struggle of the people of South Sumatra. However, the number of visitors remains relatively low due to limited accessibility and the lack of effective promotional media. This study aims to implement a web-based 3D Virtual Tour for the Monpera Museum Palembang as a medium for historical information and education, as well as to evaluate the system's functional feasibility and user acceptance. The system was developed using the **Multimedia Development Life Cycle (MDLC)** method and implemented with **Three.js** and **WebGL** technologies. System evaluation was conducted through **Black Box Testing** and the **Technology Acceptance Model (TAM)**. The Black Box Testing results, based on 41 test scenarios, achieved a validity rate of **97.56%**, with only one invalid scenario related to the fullscreen feature on iOS devices. Meanwhile, the TAM evaluation involving 50 respondents and analyzed using **SmartPLS** indicated that five out of six hypotheses were accepted, while the effect of **Perceived Usefulness** on **Behavioral Intention** was rejected. These findings demonstrate that the web-based 3D Virtual Tour of the Monpera Museum Palembang is functionally feasible and has received positive user acceptance. Therefore, the system can serve as an effective alternative medium for introducing and preserving the historical heritage of the Monpera Museum Palembang for the wider community.*

Keywords: 3D Virtual Tour, Monpera Museum, MDLC, Three.js, WebGL, Black Box Testing, Technology Acceptance Model.