

ABSTRACT

Modern photobooths increasingly incorporate Augmented Reality (AR) technology to enhance user interaction and visual engagement. However, most AR-based photobooths still rely on depth-sensing cameras, which are costly and less flexible for general deployment. This study aims to develop an AR photobooth application named JELITA (Jepretan Lincah Augmented Tanpa Sensor Kedalaman), designed to operate without a depth-sensing camera, thereby offering a more accessible and easily deployable solution across various devices. The application was developed using the MediaPipe framework and Kotlin programming language and tested using standard smartphone cameras as a practical and flexible approach for cross-device evaluation. Core features implemented include real-time pose tracking, virtual clothing filter selection, and automatic photo capture and storage. Functional testing demonstrated that all major features operated reliably and as designed. Furthermore, user testing indicated high usability and positive reception toward the concept of an AR photobooth without the need for additional hardware. These findings suggest that JELITA not only reduces dependency on external devices, but also demonstrates infrastructural efficiency by requiring fewer hardware components while maintaining performance. Therefore, the application presents a cost-effective, efficient, and scalable AR photobooth solution suitable for various public event settings.

Keywords: Photobooth, Augmented Reality, MediaPipe, Smartphone Camera, Interactive Experience.