

# **AR APPLICATION AS A PROMOTIONAL MEDIA AND INFORMATION ON THE AVAILABILITY OF BOARDING HOUSE FACILITIES**

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## ***ABSTRACT***

Developments in information technology are driving the use of Augmented Reality (AR) as a medium for delivering interactive and innovative information. One of the problems often encountered in the boarding house search process is the limited information on facilities and the requirement for prospective tenants to visit the location in person. This research aims to design and develop an Augmented Reality application as a promotional medium and information provider for boarding house facility availability, using the case study of Kost Putra Bu Tutik in Yogyakarta. The application was developed using Unity 3D as the game engine, Vuforia SDK as AR technology support, and Blender for 3D object modeling. The Augmented Reality method used is markerless with plane detection techniques, so 3D objects can be displayed on a flat surface without the need for special markers. The system is also integrated with the Supabase database to display informative content in the form of text, audio (voice-over), and video in real-time. The result of this research is an AR application that can display 3D visualizations of boarding houses and their facilities, provide detailed information through text, audio, and video, and make it easier for prospective tenants to obtain an overview of the condition of the boarding house without having to visit the location in person. Based on the results of functional testing using the Black Box method on three devices: the Poco X3 Pro, Poco M4 Pro, and Poco X7 Pro, all application features can run according to the needs and system design.

**Keywords:** Augmented Reality, Boarding House, Markerless, Unity, Supabase Database