

**AUGMENTED REALITY MOBILE APPLICATION BASED ON  
LANDMARK OBJECTS AS A MEDIA FOR INTRODUCTION OF THE  
SPECIAL REGION OF YOGYAKARTA**

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**ABSTRACT**

*The Special Region of Yogyakarta has many tourist attractions which make it a unique and popular tourist destination for domestic and foreign visitors. However, there are some people and tourists who do not understand the information about DIY Province and its landmarks in terms of the history of buildings, cities and the location of tourist attractions. This is due to the limited information available and the lack of interesting information such as the presentation of information which is commonly carried out by many (mainstream) media. Therefore, an innovative mobile application is needed to introduce the Yogyakarta area. The proposed application uses Augmented Reality technology which is integrated with the website API to present the latest data using the AR marker based-tracking method. This research aims to introduce DIY through the development of interactive and informative AR mobile applications. Apart from that, this research also tested application performance through black-box testing and marker testing (distance & angle) to ensure accurate landmark object recognition, stability and overall application functionality. Test results show that the application is able to recognize markers with high accuracy and stable performance. The user must be at a distance of less than 70 cm and a viewing angle of more than 40 degrees from the marker for proper and correct detection. The Single Ease Question (SEQ) test results show a total score of 6.44, which exceeds the minimum score of the SEQ guidelines. Overall, this research was successfully used as a medium to introduce DIY through landmark objects through interactive and informative AR applications, with good performance.*

**Keywords:** *Augmented Reality, Landmark, Interactive Media, Yogyakarta Special Region Province, Android*