

DEVELOPMENT OF INDONESIAN RARE PLANTS LEARNING MEDIA APPLICATIONS FOR PRIMARY SCHOOL STUDENTS USING ANDROID BASED AUGMENTED REALITY TECHNOLOGY

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ABSTRACT

Knowledge about rare Indonesian plants is starting to be forgotten by the younger generation. Many rare plants are starting to become endangered and the younger generation doesn't know about it. The absence of prevention efforts, especially against forest destruction or efforts to cultivate species that have been declared rare, has resulted in the loss of the endemic plants we have. There is a need for introduction and education about rare Indonesian plants from an early age, especially for elementary school students. Augmented Reality (AR) is a technology that combines three-dimensional (3D) graphics with the real world in real-time with the help of a smartphone camera device. In the field of education, AR can be used as a learning or educational medium to find out information about rare plants through markers. With AR, the information displayed will be more interactive for users. By using the image matching method, namely identifying an image (target image) and then displaying 3D plant and plant information that matches the identified image, AR can provide a new method as an information medium. The result of developing this application is a learning media that runs on an Android smartphone using interactive Augmented Reality technology. The application will later display three-dimensional (3D) objects of rare Indonesian plants, displaying information about rare plants and their scientific classification. Apart from that, the application can provide sound explanations and practice questions regarding rare Indonesian plants.

Keywords: *Learning, Plants, Rare, Indonesia, Augmented Reality, Android*