## ANDROID BASED AUGMENTED REALITY APPLICATION FOR INTRODUCING CAR MANUAL TRANSMISSION COMPONENTS (Case Study: State Vocational School 3 Yogyakarta)

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## ABSTRACT

Practical learning in the automotive field, such as Light Vehicle Engineering (TKR), requires several practical tools, especially car and motorbike components at the Vocational High School level. The limited amount of equipment causes the practicum to be less efficient because students have to queue, resulting in a lack of student interest in learning. It is hoped that the use of learning media technology can increase students' enthusiasm in taking lessons, one of which is in introducing car manual transmission components. To overcome this problem, an interactive and innovative learning application for introducing car manual transmission components was built, so that students can be more enthusiastic in studying manual transmission components and their functions. The method applied in this application uses Marker Based Augmented Reality to display 3-dimensional objects from manual transmission components in cars. Apart from being able to display 3dimensional objects from manual transmission components, this application is also equipped with a component description panel and sound features to explain the function of the components displayed.

Keywords: Learning Media, Augmented Reality, Marker Based, Vuforia, Manual transmission.