ABSTRACT

Learning media is one of the things that influences student learning outcomes. The learning media applied at SMKN, especially learning media for the Light Vehicle Engineering major, is still in the old way, which makes it difficult for students to understand the lessons and tends to get bored quickly because it is too complex and each component used for teaching material is often missing or damaged. Seeing this, the idea arose to develop learning media for the introduction of gasoline engine components by utilizing Android-based augmented reality technology. Making applications using Unity 3D software and using Vuforia as a plugin and programming with C# language in creating Augmented reality. Meanwhile, to create the user interface using Figma. The result of this research is that an application for recognizing gasoline engine components is able to help students overcome the difficulty of understanding teaching material. The aim of creating this application is to facilitate the learning process for vocational school students. Students can learn explanations about engine components in cars using applications on their own smartphones. This application is designed using markerless technology, namely by detecting the ground as a rendering reference.

Keywords : Augmented reality, Otomotive Education, Car Component, Markerless, Markerbase.