

# **Development of Markerless Augmented Reality as a Media to Help Independent Learning for students of SMK N 2 Depok Sleman**

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## **ABSTRACT**

The spread of the corona virus that mutates repeatedly has an impact on many parties. Several sectors, including the education sector, were forced to change the mode of learning. Online and hybrid learning are choices on behalf of Health to be a mode of learning. However, due to the lack of time to prepare and anticipate, online learning does not appear to be trusted as optimal learning. Although over time improvements and adjustments were made, learning was still less than optimal, especially when it was put into practice. Vocational education is clearly greatly affected because for some concentrations, tools are needed only available in school laboratories. The research to be carried out is development research, using software development steps with a prototype model. This research will be conducted for two years with a total of six stages, namely 1) Requirements Gathering and Analysis; 2) Quick Design (Fast design); 3) Build Prototype (Build Prototype); 4) User Evaluation (User Evaluation); 5) Refining Prototype (Refining Prototype); and 6) Implement Product and Maintain. The outputs of this research in the first year are product prototypes and articles, while in the second year, finished products and intellectual property rights (IPR).

*Kata Kunci: Augmented Reality, Markerless, Independent Learning, Vocational*