

IMPLEMENTATION OF AUGMENTED REALITY AS BUTTERFLY METAMORPHOSIS LEARNING MEDIA

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ABSTRACT

The augmented reality application designed to facilitate understanding of butterfly metamorphosis aims to enhance student engagement in learning about this biological process. Traditional methods of instruction, which primarily rely on textbooks and teacher explanations, are less stimulating for students. The implementation of augmented reality as a pedagogical tool is proposed to address this issue and foster greater interest in the subject. This approach is anticipated to be more engaging, allowing students to interact with visual representations of the metamorphosis stages. The research process for developing this augmented reality application involved several key stages: an examination of existing instructional methods, a comprehensive literature review on butterfly metamorphosis, a needs analysis, and the design of the application itself. The development of the augmented reality experience employs marker-based tracking technology, which utilizes specific markers to identify and track objects within the augmented environment. This innovative educational tool is intended to provide students with a more interactive and visually stimulating means of learning about butterfly metamorphosis through three-dimensional (3D) visualizations.

Keywords: *Butterfly, Metamorphosis, Augmented Reality, Marker, 3D Object*

