ABSTRACT

This project designs a visual novel-based video game that teaches the concept and techniques of natural disaster mitigation of floods and earthquakes to improve the understanding of children aged 13 to 17 years. The design process uses the Multimedia Development Life Cycle (MDLC) method which includes the stages of concept, design, material collection, assembly, testing, and distribution. At the design stage, create a storyboard to describe the storyline and interface design. To ensure the quality and effectiveness of video games as a learning medium, this project involves a testing process using the System Usability Scale (SUS) method where this video game gets a Grade A result with an average score of 83 with a total of 39 respondents, with an age range of 13 to 17 years. This shows that this video game has a very good value and it is concluded that the design of this video game design is an alternative media for understanding natural disaster mitigation of earthquakes and floods.

Keywords: Multimedia Development Life cycle (MDLC), System Usability Scale (SUS), Video Game, Visual Novel, Natural Disaster Mitigation