ABSTRACT MATHEMATICS LEARNING EDUCATION GAME FOR ELEMENTARY STUDENTS BASED ON ANDROID

Oleh

Muhammad Eris Pumayoga Andriawan

19102290

Mathematics is a subject that is of little interest to almost all students in Indonesia. Therefore, there are various things such as various formulations that must be understood, not understanding the concept of the material, the absence of teachers giving students the opportunity to ask questions and so on. Therefore, to make it easier to understand mathematics subjects, the solution is to create an educational game. This educational game contains various types of quizzes such as composing answers and multiple choices which can help users understand the material. The development of this educational game uses the Analysis, Design, Development, Implementation, Evaluation (ADDIE) method and construct 2 as its application. Game testing goes through 3 stages, the first uses the Black Box Testing method and the second uses the System Usability Scale (SUS) method. According to the results of Black Box Testing, it shows that all game components function well without experiencing problems. Meanwhile, based on the results of the System Usability Scale with a total of 24 respondents, an average score of 68 was obtained, which means this game can be accepted by users. Through pretest and posttest testing, it is known that there has been an increase in students' understanding of large whole number material.

Keywords: Education Game, Math, ADDIE, Android, System Usability Scale