ABSTRACT

EDUCATIONAL GAME DESIGN INTRODUCTION TO PLANETS IN THE SOLAR SYSTEM GDLC METHOD

Oleh
Yerico Rosanta
NIM 20102204

The use of Information Technology in teaching materials for students is considered very useful in conveying science learning material regarding the solar system, including the types, textures and layers found within the planets. The Solar System is one of the topics in science lessons taught in elementary schools. However, many students currently have difficulty understanding and memorizing material about the solar system because each planet has different characteristics. The delivery of material that still uses media such as blackboards and pictures in books makes it difficult for students to imagine the planets in the solar system because they are rarely encountered in everyday life. Educational games can be an effective solution for increasing students' interest in learning and making it easier to understand the material. This research aims to provide entertainment and provide knowledge so that students can differentiate the characteristics, revolution and rotation of each planet in the solar system through this educational game. In making this educational game, Construct 2 software is used with the game development life cycle (GDLC) method with 6 stages, namely initialization, pre-production, production, testing, beta, release. In the testing stage using Blackbox and SUS. The results of testing the functionality and user satisfaction of the game using Blackbox and the System Usability Scale show an average score of 76.33, which is declared Acceptable and included in the Good and grade C ratings. It can be concluded that this educational game is quite good, but in the future it needs to be There is development of features and displays that are easier to understand, so that this educational game can be above 80 so that it can be included in Excellent with grade B or A. Blackbox testing also makes a positive contribution.

Keywords: Android, Game Development Life Cycle, Educational Games, System Usability Scale, Solar System