ABSTRACT

APPLICATION OF THE GAME DEVELOPMENT LIFE CYCLE DEVELOPMENT MODEL IN BUILDING EDUCATIONAL GAMES FOR ANIMAL FOOD CLASSIFICATION

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Currently the learning process at SD Negeri 02 Wanareja still uses conventional or lecture learning models. Apart from that, teachers also still use printed books, student worksheets and blackboards due to the lack of use of varied learning media in implementing learning methods in class 4. The design of the educational games developed has a very important role in increasing students' enthusiasm for learning. by utilizing an Android-based technology system to get to know the material on animal food classification so that students don't feel bored when learning in class. The development of this educational game uses the GDLC (Game Development Life Cycle) method. The GDLC method has 6 stages, namely the initiation stage which discusses the game concept, the pre-production stage which discusses game design, the production stage of game development using the Construct 2 game engine, the trial stage to test game functionality using the black box method, the beta Testing stage for users and stage of releasing the game to the public. The subjects involved in this research were science subject teachers and some 4th grade students to introduce an Android-based educational game for classifying animal food. The aim of this research was to obtain an Android-based interactive learning application for classifying animal food. This research involved 30 respondents to test educational games using the black box method and System Usability Scale (SUS). The results show an average SUS score of 87.34, indicating a high level of satisfaction with the interface and ease of use of the application. With an Excellent rating and a B grade, this research concludes that educational games reach high quality standards. Black box Testing also makes a positive contribution.

Keywords: Android, Games, GDLC, Pet Food Classification, Technology.