Pengembangan Game Edukasi Algoritma untuk Anak Usia Dini (Studi Kasus TK Al-Islam Banyuwangi)

Development on Educational Game Application of Algorithm for Early Childhood (Case Study in Al-Islam Kindergarten Banyuwangi)

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ABSTRACT

Algorithm is one of the steps of Computational Thinking, which is a collection of commands performed sequentially to solve a problem. Algorithm educational games were developed to prepare early childhood to face the future curriculum Computational Thinking. This research was conducted using the *method*, which stands for Analysis, Design, ADDIE Development, Implementation, and Evaluation. The game developed by using RPG Maker MV software with the help of Android Studio to port the game platform to Android. The implementation was tested on teachers and students from second grade class B at Al-Islam Kindergarten. The results of this study was student finished the whole game with estimated total gameplay time of 15 minutes 37 seconds, teachers' response strongly approves on the approach proven with Likert scale measurement result by 92%, game developer expert's approval response with the score result of 77.143%, and multimedia expert's strong approval response with the score result of 81,053%

Keywords: Educational Game, Algorithm, Early Childhood, ADDIE