

## ABSTRACT

### DEVELOPMENT OF AN INTERACTIVE EDUCATIONAL GAME SORTING 2D WASTE ANDROID-BASED TO INCREASE ENVIRONMENTAL AWARENESS IN CHILDREN (Case Study: Public Elementary School 3 Bumildaya)

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Lack of public awareness and understanding regarding proper waste disposal and sorting, especially in urban areas, is still a major problem that has the potential to cause negative impacts on the environment and health. This research was to develop an Android-based interactive educational game to increase children's knowledge and awareness about waste segregation and garbage sorting. The method used in the development of this game was the Game Development Life Cycle (GDLC) which consists of six stages: initial Life Cycle (GDLC) consists of six stages: initiation, pre-production, production, testing, beta, and release. The results of the testing showed that the game "Pilah Sampah" was able to improve students' understanding of sorting waste correctly. Before using the application, only 76.67% of the students were sure they could sort garbage correctly. After using the application, the percentage of students who were sure they could sort garbage correctly was higher to 93,33%. This game is effective as a learning media that can increase environmental awareness in children.

**Keywords:** Educational Game, Waste Sorting, Environmental Awareness

