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**PENGEMBANGAN GAME EDUKASI MENGGUNAKAN ALGORITMA
COLLISION DETECTION UNTUK UPAYA PENGENALAN OBJEK WISATA
DI JAWA TENGAH PADA SISWA SEKOLAH DASAR**

BUDI SATRIA

18.01.53.0113

Abstrak

Game edukasi merupakan media pembelajaran berupa game yang berisikan materi pembelajaran di dalamnya. Game edukasi mempermudah dalam memberikan pengetahuan serta pemahaman terkhusus untuk anak-anak. Saat ini, objek wisata di Jawa Tengah telah mengalami penurunan jumlah pengunjung tercatat dari tahun 2020 hingga 2021 lalu. Padahal banyak situs destinasi wisata yang sangat menarik untuk dikunjungi serta dipelajari. Merujuk pada masalah tersebut, dibuatlah sebuah game edukasi mengenai pengenalan objek di Jawa Tengah pada siswa sekolah dasar. Game ini dibuat untuk mengetahui pengaruh game edukasi sebagai upaya pengenalan objek wisata di Jawa Tengah. Game ini dibuat dengan menggunakan algoritma *collision detection* di dalam gamenya. Siswa yang terlibat sebanyak 14 anak. Hasil penelitian ini diperoleh bahwa ada peningkatan nilai rata-rata antara hasil belajar *pretest* dan *posttest*. Yang membuktikan bahwa adanya pengaruh game edukasi pada upaya pengenalan objek wisata di Jawa Tengah.

Kata kunci: game edukasi, *collision detection*, pandemi covid-19, objek wisata

Abstract

Educational games are learning media in the form of games that contain learning material in them. Educational games provide convenience in providing knowledge and understanding especially for children. Currently, tourist attractions in Central Java have experienced a decline in the number of recorded visitors from 2020 to 2021. Even though there are many tourist destination sites that are very interesting to visit and learn. Referring to this problem, an educational game was made about object recognition in Central Java for elementary school students. This game was created to determine the effect of educational games as an effort to introduce tourist attractions in Central Java. This game is made by using the collision detection algorithm in the game. There were 14 students involved. The results of this study showed that there was an increase in the average score between the pretest and posttest learning outcomes. Which proves that there is an influence of educational games on the introduction of tourist attractions in Central Java.

Keywords: educational games, collision detection, covid-19 pandemic, online learning

Pembimbing

A handwritten signature in blue ink, appearing to be 'Budi Hartono', written in a cursive style.

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