

Ika Maulidia. 2026. Pengembangan Game Edukasi *Adventure* berbasis *Android* Pada materi Elemen Sistem Komputer untuk siswa kelas X TKJ. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunodjoyo Madura. Pembimbing : Luluk Mauli Diana, S.SI., M.Pd.

ABSTRAK

Penelitian ini dilatarbelakangi oleh permasalahan dalam proses pembelajaran Informatika pada materi Elemen Sistem Komputer di kelas X TKJ SMK Nurul Amanah. Berdasarkan observasi awal, yang menjadi permasalahan utama yaitu siswa lebih tertarik pembelajaran menggunakan handphone dan proses pembelajaran masih didominasi oleh guru dengan alat bantu mengajar yang terbatas seperti papan tulis dan PowerPoint, sehingga menyebabkan siswa cenderung cepat jenuh, mengantuk, dan kurang optimal dalam memahami materi. Penelitian ini bertujuan untuk mengembangkan media pembelajaran berupa game edukasi *Adventure* berbasis *Android* pada materi elemen sistem komputer untuk siswa kelas X TKJ, mengetahui tingkat kelayakan *game* edukasi tersebut, dan mengetahui respons siswa terhadap penggunaan *game* edukasi yang dikembangkan. Metode penelitian yang digunakan adalah Penelitian dan pengembangan dengan menggunakan model pengembangan ADDIE yang terdiri dari 5 tahapan utama, yaitu analisis, desain, pengembangan, implementasi dan evaluasi. Subjek uji coba dalam penelitian ini mencakup ahli materi, ahli media, serta guru dan siswa kelas X TKJ SMK Nurul Amanah sebagai pengguna. Pengumpulan data dilakukan melalui wawancara, observasi, dan angket/kuesioner skala Likert untuk mengukur tingkat kelayakan media dan respons siswa. Hasil validasi ahli media menunjukkan rata-rata persentase sebesar 84,28% dengan kategori sangat valid. Hasil validasi ahli materi menunjukkan rata-rata persentase sebesar 90,00% dengan kategori sangat valid. Sedangkan hasil respon siswa dari kelompok perorangan memperoleh persentase rata-rata sebesar 97%, kelompok kecil memperoleh 97% dan kelompok besar memperoleh 97% dengan kategori sangat layak. Berdasarkan hasil tersebut, *game* edukasi *Adventure* berbasis *Android* dinyatakan sangat layak digunakan sebagai alternatif inovatif dalam pembelajaran Informatika serta mampu meningkatkan ketertarikan, minat dan motivasi belajar aktif siswa melalui pendekatan berbasis teknologi.

Kata Kunci : ADDIE, Game Edukasi, Adventure, Elemen Sistem Komputer

Ika Maulidia. 2026. *Development of an Android-Based Adventure Educational Game on Computer System Elements Material for 10th-Grade TKJ Students*. Undergraduate Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Universitas Trunodjoyo Madura. Advisor: Luluk Mauli Diana, S.Si., M.Pd.

ABSTRACT

This research is motivated by problems in the Informatics learning process for the Computer System Elements material in class X TKJ at SMK Nurul Amanah. Based on initial observations, the main issue is that students are more interested in learning through smartphones, while the learning process is still dominated by the teacher using limited teaching tools such as whiteboards and PowerPoint. Consequently, students tend to become quickly bored, drowsy, and sub-optimal in understanding the material. This study aims to develop learning media in the form of an Android-based Adventure educational game for the computer system elements material for class X TKJ students, determine the feasibility level of the educational game, and assess student responses to its use. The research method used is Research and Development (R&D) using the ADDIE development model, which consists of 5 main stages: analysis, design, development, implementation, and evaluation. The trial subjects in this study included material experts, media experts, as well as the teacher and class X TKJ students of SMK Nurul Amanah as users. Data collection was conducted through interviews, observations, and Likert scale questionnaires to measure media feasibility and student responses. The validation results from the media expert showed an average percentage of 84.28% in the "very valid" category. The material expert validation results showed an average percentage of 90.00% in the "very valid" category. Meanwhile, the student response results from the individual trial obtained an average percentage of 97%, the small group trial obtained 97%, and the large group trial obtained 97%, all falling into the "very feasible" category. Based on these results, the Android-based Adventure educational game is declared highly feasible for use as an innovative alternative in Informatics learning and is capable of increasing students' interest, engagement, and active learning motivation through a technology-based approach.

Keywords: *ADDIE, Educational Game, Adventure, Computer Systems.*