

ABSTRAK

Lisa Ameilia Desti, 2026. Rancang Bangun Game Edukasi *Digital Escape Room* Berbasis *Website* Untuk Meningkatkan *Higher Order Thinking Skills* (HOTS) Siswa SMP Negeri 1 Pangkur. Program Studi Teknik Informatika, FT, Universitas PGRI Madiun. Pembimbing (I) Sekreningsih Nita, S.Kom., M.T, (II) Yoga Prisma Yuda, S.Kom., M.Kom

Penelitian ini bertujuan untuk merancang dan membangun game edukasi *Digital Escape Room* berbasis *website* sebagai media pembelajaran interaktif untuk meningkatkan *Higher Order Thinking Skillss* (HOTS) siswa SMP Negeri 1 Pangkur Ngawi. Metode pengembangan sistem yang digunakan adalah Prototyping dengan tahapan analisis kebutuhan, desain prototype, evaluasi prototype, perbaikan, pengkodean, implementasi, dan pengujian sistem. Sistem dikembangkan menggunakan framework Laravel dan basis data MySQL dengan dua hak akses, yaitu admin/guru dan siswa. Fitur utama sistem meliputi pengelolaan cerita, level, soal, mission map, halaman permainan, inventory, skor, progres permainan, final score, dan hasil permainan terakhir. Analisis peningkatan HOTS dilakukan melalui pretest dan posttest terhadap 30 siswa kelas VII, VIII, dan IX. Hasil penelitian menunjukkan bahwa rata-rata nilai pretest sebesar 60,00 meningkat menjadi 91,00 pada posttest, dengan rata-rata N-Gain sebesar 0,78 yang termasuk kategori tinggi. Pengujian fungsional menggunakan *Black Box Testing* menunjukkan bahwa seluruh fitur utama sistem berjalan sesuai kebutuhan. Dengan demikian, game edukasi *Digital Escape Room* berbasis *website* dapat digunakan sebagai media pembelajaran interaktif yang mendukung peningkatan HOTS siswa.

Kata kunci: *Digital Escape Room*, game edukasi, HOTS, Prototyping, *website*

ABSTRACT

Lisa Ameilia Desti, 2026. *Design and Construction of a Website-Based Digital Escape Room Educational Game to Improve Higher Order Thinking Skillss (HOTS) in Students of SMP Negeri 1 Pangkur. Informatics Engineering Study Program, FT, Universitas PGRI Madiun.* Supervisors: (I) Sekreningsih Nita, S.Kom., M.T, (II) Yoga Prisma Yuda, S.Kom., M.Kom

This research aims to design and build a website-based Digital Escape Room educational game as an interactive learning medium to improve Higher Order Thinking Skillss (HOTS) in students of SMP Negeri 1 Pangkur Ngawi. The system development method used was prototyping, with the stages of needs analysis, prototype design, prototype evaluation, improvement, coding, implementation, and system testing. The system was developed using the Laravel framework and a MySQL database with dual access rights: admin/teacher and student. The system's main features include managing stories, levels, questions, mission maps, game pages, inventory, scores, game progress, final scores, and final game results. HOTS improvement analysis was conducted through pretests and posttests on 30 students in grades VII, VIII, and IX. The results showed that the average pretest score of 60.00 increased to 91.00 in the posttest, with an average N-Gain of 0.78, which is considered high. Functional testing using Black Box Testing showed that all key system features functioned as required. Therefore, the website-based Digital Escape Room educational game can be used as an interactive learning medium that supports the improvement of students' HOTS.

Keywords: Digital Escape Room, educational game, HOTS, Prototyping, website