

ABSTRAK

Penelitian ini bertujuan untuk merancang dan membangun *game* 2D edukatif Bersih Sekolahku sebagai media pembelajaran pendukung tentang menjaga kebersihan lingkungan sekolah untuk siswa SMP Negeri 1 Wangon. Latar belakang penelitian ini didasarkan pada perlunya media pembelajaran interaktif yang dapat membantu siswa memahami kebiasaan menjaga kebersihan sekolah, seperti membuang sampah pada tempatnya, memilah sampah, dan menjaga kebersihan area sekolah. Penelitian ini menggunakan pendekatan *Research and Development* (R&D) dengan metode *Game Development Life Cycle* (GDLC) yang terdiri atas tahap *initiation*, *pre-production*, *production*, *testing*, *beta*, dan *release*. *Game* dikembangkan menggunakan *Unity* dan memuat tiga level permainan, yaitu membersihkan ruang kelas, memilah sampah di kantin, dan menjaga kebersihan halaman sekolah. Pengumpulan data awal dilakukan melalui observasi, wawancara, studi pustaka, dan diskusi, sedangkan evaluasi produk dilakukan melalui pengujian fungsional dan kuesioner respons pengguna. Hasil pengujian fungsional menunjukkan bahwa fitur utama *game*, seperti menu, kontrol karakter, interaksi sampah, pemilahan sampah, *feedback*, progres misi, dan skor kebersihan berjalan sesuai rancangan. Uji respons pengguna terhadap 20 siswa memperoleh persentase keseluruhan sebesar 91,36% dengan kategori sangat baik. Berdasarkan hasil tersebut, *game* Bersih Sekolahku dapat digunakan sebagai media pembelajaran pendukung mengenai kebersihan lingkungan sekolah.

Kata kunci: *game* 2D edukatif, kebersihan lingkungan sekolah, GDLC, *Unity*, respons pengguna.

ABSTRACT

This research aims to design and develop a 2D educational game entitled Bersih Sekolahku as a supporting learning medium about maintaining school environmental cleanliness for students of SMP Negeri 1 Wangon. The background of this research is based on the need for interactive learning media that can help students understand school cleanliness habits, such as disposing of waste properly, sorting waste, and maintaining the cleanliness of the school area. This research uses a Research and Development (R&D) approach with the Game Development Life Cycle (GDLC) method, consisting of initiation, pre-production, production, testing, beta, and release stages. The game was developed using Unity and consists of three levels: cleaning the classroom, sorting waste in the canteen, and maintaining the cleanliness of the schoolyard. Initial data were collected through observation, interviews, literature study, and discussion, while product evaluation was conducted through functional testing and a user response questionnaire. The functional testing results show that the main game features, including menu navigation, character control, waste interaction, waste sorting, feedback, mission progress, and cleanliness score, functioned according to the design. The user response test involving 20 students obtained an overall percentage of 91.36%, categorized as very good. Based on these results, Bersih Sekolahku can be used as a supporting learning medium for school environmental cleanliness.

Keywords: 2D educational game, school environmental cleanliness, GDLC, Unity, user response.