

ABSTRAK

Keberadaan permainan tradisional saat ini semakin langka karena anak-anak dan generasi muda sekarang lebih suka *game gadget*. Salah satunya di desa Suka Damai Timur banyak anak-anak yang lebih suka bermain *game digital* sehingga anak-anak sudah jarang berinteraksi dengan teman-temannya. Dengan memanfaatkan perkembangan teknologi saat ini maka dibuatlah aplikasi *game* edukasi pengenalan permainan tradisional dengan genre *puzzle*. Dalam penelitian ini, digunakan metode algoritma *Fisher Yates Shuffle*. Metode ini akan membuat permutasi acak dalam memuat *puzzle* dan potongannya. Salah satu metode pengembangan aplikasi yang digunakan adalah *game development life cycle* dimana metode ini menggunakan 6 tahapan yaitu tahap inisialisasi, tahap pra-produksi, tahap produksi, tahap *alpha testing*, tahap *beta testing* dan tahap versi rilis. Proses penelitian di ikuti oleh 20 responden menggunakan perhitungan analisis frekuensi skala *likert* dengan skor maksimal 5. Didapat hasil penelitian pada aspek *learnability* mendapat skor rata-rata 4,18, aspek *flexibility* skor rata-rata 4,3, aspek *effectiveness* skor rata-rata 4,3, dan aspek *attitude* skor rata-rata 4,3. Nilai rata-rata skor dari seluruh aspek berada diangka 4,27% dan menyatakan aplikasi *game puzzle* ini dalam kategori memuaskan.

Kata kunci : Suka Damai Timur, Permainan *Puzzle*, *Fisher Yates Shuffle*, *Game Development Life Cycle*.

ABSTRACT

The existence of traditional games is now increasingly rare because children and the younger generation now prefer gadget games. One of them in the village of Suka Damai Timur, many children prefer to play digital games so that children rarely interact with their friends. By utilizing current technological developments, an educational game application for the introduction of traditional games with the puzzle genre was made. In this research, the Fisher Yates Shuffle algorithm method is used. This method will create a random permutation in loading the puzzle and its pieces. One of the application development methods used is the game development life cycle where this method uses 6 stages, namely the initialization stage, pre-production stage, production stage, alpha testing stage, beta testing stage and release version stage. The research process was followed by 20 respondents using a Likert scale frequency analysis calculation with a maximum score of 5. The results of the research on the learnability aspect received an average score of 4.18, the flexibility aspect received an average score of 4.3, the effectiveness aspect received an average score of 4.3, and the attitude aspect received an average score of 4.3. The average score of all aspects is 4.27% and states that this puzzle game application is in the satisfactory category.

Keywords : *Suka Damai Timur, Puzzle Game, Fisher Yates Shuffle, Game Development Life Cycle.*