

**APLIKASI GAME SUSUN AKSARA JAWA (SURAJA)
SEBAGAI MEDIA BELAJAR AKSARA JAWA
KELAS V SDIT SALSABILA BAITURRAHMAN
UNTUK PLATFORM ANDROID**

Oleh:

Dewi Anisa Istiqomah
NIM: 10520244044

ABSTRAK

Tujuan penelitian ini dirancang untuk: (1) mengembangkan aplikasi *game* Suraja sebagai media belajar aksara Jawa pada *platform* Android, (2) mengetahui hasil pengujian kualitas aplikasi *game* Suraja berdasarkan ISO 9126 yang meliputi aspek *functionality*, *efficiency*, *portability*, *usability*, *maintainability*, dan materi.

Metode penelitian yang digunakan adalah *Research and Development* (R&D). Tahap-tahap dalam penelitian ini meliputi: (1) analisis, (2) desain, (3) pengembangan, (4) implementasi, dan (5) evaluasi. Sumber data/subjek penelitian yaitu 31 siswa kelas V SDIT Salsabila Baiturrahman untuk pengujian *usability*, 3 orang ahli untuk pengujian *functionality*, 3 orang ahli untuk pengujian materi, dan dokumentasi terhadap aplikasi *game* Suraja untuk pengujian *efficiency*, *portability*, *maintainability*. Teknik dalam pengumpulan data berupa wawancara, observasi, dan kuesioner.

Hasil penelitian diketahui bahwa: (1) pengembangan aplikasi *game* Suraja sebagai media belajar aksara Jawa pada *platform* Android menggunakan *software* Construct 2 dan dilakukan dengan beberapa tahap yaitu analisis (analisis kebutuhan, analisis *hardware*, dan analisis *software*), desain (desain sistem dan desain *interface*), pengembangan (perancangan desain *interface* dan pembuatan program), implementasi (uji materi dan uji kualitas *software* berdasarkan ISO 9126), dan evaluasi (kualitas perangkat lunak, kelebihan, kekurangan, kendala, dan rekomendasi), (2) hasil pengujian kualitas aplikasi *game* Suraja diperoleh nilai *functionality* 100% (Sangat Baik), *efficiency* dengan Appthwack dan Testdroid menunjukkan skala kualitas "Baik", *portability* dengan OS Android versi Gingerbread, Ice Cream Sandwich, Jelly Bean, dan Kitkat diperoleh nilai 100% (Sangat Baik), *usability* menghasilkan nilai alpha cronbach 0,909 (Sangat Baik), *maintainability* dengan JSComplexity menghasilkan *Maintainability Index* sebesar 97 (*High MI*), dan pengujian materi menunjukkan bahwa materi yang ada dalam aplikasi dinyatakan 100% valid.

Kata kunci: game, media belajar, aksara Jawa, Android, ISO 9126

SURAJA GAME APPLICATION AS JAVANESE SCRIPT LEARNING MEDIA OF FIFTH GRADE SDIT SALSABILA BAITURRAHMAN FOR ANDROID PLATFORM

By:

Dewi Anisa Istiqomah
Student Number: 10520244044

ABSTRACT

The aims of this research were (1) to develop Suraja game application as Javanese script media learning for Android platform, (2) to find out the quality test result of Suraja game application grounded on ISO 9126 which includes aspects of functionality, efficiency, portability, usability, maintainability, and content.

Research methods that used in this research were Research and Development (R&D). The steps of the research were (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. Data sources/research subjects were 31 students of fifth grade SDIT Salsabila Baiturrahman for usability test, 3 experts for functionality test, 3 experts for content test, and documentation of Suraja game application for efficiency, portability, maintainability test. Data collection techniques such as interviews, observations, and questionnaires.

The results of this research were (1) development of Suraja game application as Javanese script learning media on Android platform used Construct 2 and was done with some stage namely analysis (needs analysis, hardware analysis, and software analysis), design (system design and interface design), development (designing the interface and making the program), implementation (content test and software quality test with ISO 9126), and evaluation (software quality, excess, shortage, constraint, and recommendation), (2) the quality test result of Suraja game application were value of functionality obtained 100% (Very Good), efficiency test with Appthwack and Testdroid obtained quality scale "Good", portability with Android OS version Gingerbread, Ice Cream Sandwich, Jelly Bean, and Kitkat obtained 100% (Very Good), usability obtained value of alpha cronbach was 0,909 (Very Good), maintainability with JSComplexity produced value of Maintainability Index was 97 (High MI), and content test indicated content in this application was 100% valid.

Keywords: game, learning media, Javanese script, Android, ISO 9126