

MOCH. FEBRIAN TRI AJI SAPUTRA, 17.240.0001

PEMBELAJARAN SISTEM PEREDARAN DARAH PADA MANUSIA BERBASIS GAME MAZE ANDROID UNTUK KELAS 5 DI SD NEGERI 06 KEDUNGWUNI

Di bawah bimbingan Much. Rifqi Maulana, M.Kom., dan Nur Ika Royanti, M.Kom.
87 + xv halaman / 43 gambar / 12 tabel / 22 pustaka

ABSTRAK

Game Edukasi adalah segala sesuatu dalam proses pembelajaran yang berupa game yang dapat membantu guru dalam menyampaikan materi pelajaran kepada siswa sehingga mempermudah pencapaian tujuan pembelajaran dan dapat mempermudah siswa memahami pembelajaran. Permasalahan dalam pembelajaran di SD Negeri 06 Kedungwuni adalah pembelajaran tatap muka secara terbatas dengan sistem bergiliran rombongan belajar (shifting) dan pembatasan jumlah maksimal peserta didik per ruang kelas sehingga menyebabkan adanya keterbatasan jam belajar siswa di sekolah. Hal tersebut dapat menimbulkan ketidakcapaian materi jam belajar sehingga akan berpotensi penurunan capaian belajar. Game edukasi ini dibangun untuk dijadikan sebagai bahan ajar penunjang proses pembelajaran pada materi sistem peredaran darah manusia. Alat bantu pengembangan sistem yang digunakan berupa struktur navigasi, flowchart, Lembar Kerja Tampilan (LKT), dan storyboard game. Game edukasi ini dirancang menggunakan software Construct 2, dengan metode pengembangan multimedia menurut Sutopo yang terdiri dari enam tahap, yaitu concept, design, material collecting, assembly, testing, dan distribution. Game edukasi yang dibangun dapat menampilkan game edukasi 2d sistem peredaran darah manusia disertai materi singkat dan latihan soal yang dapat membantu siswa dalam belajar. Dalam tahap pengujiannya digunakan pengujian Graphic User Interface (GUI) dan User Acceptance Test (UAT). Melalui serangkaian tahapan pengembangan dan pengujian tersebut maka telah dihasilkan Game Edukasi Sistem Peredaran Darah pada Manusia sebagai Penunjang Pembelajaran bagi Siswa di SD Negeri 06 Kedungwuni Berbasis Android.

Kata Kunci : Game Edukasi, Peredaran Darah, Android

MOCH. FEBRIAN TRI AJI SAPUTRA, 17.240.0001

A STUDY OF HUMAN CIRCULATORY SYSTEM BASED ON ANDROID MAZE GAME FOR STUDENTS AT SD NEGERI 06 KEDUNGWUNI

Under the guidance of Much. Rifqi Maulana, M.Kom., and Nur Ika Royanti, M.Kom.
87 + xv pages / 43 pictures / 12 tables / 22 references

ABSTRACT

An Educational Game is about everything in the learning process in the form of games that can help teachers in conveying subjects to students, so that it can make it easier to achieve the learning goals and help the students in understanding the learning subjects. The problem in the learning process at SD Negeri 06 Kedungwuni is that the students have limited face-to-face learning process with a shifting learning system and limiting the maximum number of students per classroom, so that it is caused limited hours of students learning process at school. This problem can lead to unattainable learning hours material so that it will have the potential in decreasing learning achievement. This educational game is created as a supporting tool in the learning process of human circulatory system subject. The system development tools used are navigation structure, flowchart, Display Worksheets, and storyboard game. This educational game is designed using Construct 2 software, with the development method of multimedia according to Sutopo which consists of six stages, those are concept, design, material collecting, assembly, testing, and distribution. The educational game that is created can display 2d educational game of the human circulatory system with short material and practice questions that can help the students in the learning process. In the testing phase, Graphic User Interface (GUI) and User Acceptance Test (UAT) tests are used. Through a series of stages of development and testing, an Educational Game of Human Circulatory System Based on Android as a Learning Support for Students at SD Negeri 06 Kedungwuni has been created.

Keywords: Educational Game, Circulatory Systems, Android