

19.230.0032 (ALFIANDI ZULFIKAR FAUZI)

SISTEM PENDUKUNG KEPUTUSAN PENERIMAAN BANTUAN SISWA KURANG MAMPU BERBASIS WEB DENGAN MENGGUNAKAN METODE *SIMPLE ADDITIVE WEIGHTING* (SAW) DI SMA NEGERI 1 PETARUKAN, dibawah bimbingan Arief Soma Darmawan, ST., M.Kom. dan Mosses Aidjili, S.Kom., M.Kom.

118 + xv halaman / 73 gambar / 43 tabel / 5 lampiran / 13 pustaka (2010-2022)

ABSTRAK

Undang-Undang nomor 20 tahun 2003 yang mengacu pada Peraturan Pemerintah nomor 48 tahun 2008 menyatakan bahwa pendanaan pendidikan menjadi tanggung jawab bersama antara pemerintah, pemerintah daerah, dan masyarakat. Hal ini menjadi pedoman SMA Negeri 1 Petarukan dalam mengelola program penyaluran bantuan siswa kurang mampu. Data tahun 2021 menunjukkan terdapat 1188 siswa yang mengajukan bantuan dengan alasan orang tua dirumahkan karena pandemi melanda. Namun proses pemilihan bantuan tersebut kurang efektif karena membutuhkan waktu lama dalam melakukan pemilihan bantuan siswa kurang mampu dan terkadang diperoleh hasil penilaian yang sama pemilihan urutan bantuan siswa kurang mampu dipilih berdasarkan pilihan pribadi. Sehingga dibangun Sistem Pendukung Keputusan (SPK) untuk mengatasi permasalahan, menggunakan metode Waterfall melalui tahapan Communication, Planning, Modelling, Construction, dan Deployment. SPK dirancang dengan menggunakan Unified Modeling Language (UML) dan Lembar Kerja Tampilan (LKT), serta diuji dengan menggunakan Blackbox, Whitebox dan User Acceptance Test (UAT) yang menunjukkan bahwa 80% hasil sistem mampu bekerja dengan optimal dan dapat digunakan sebagaimana kebutuhan pengguna. SPK yang dibangun dapat menghindarkan resiko manipulasi data dalam penentuan penerima bantuan siswa miskin, sehingga secara tidak langsung membantu agar bantuan siswa miskin dapat disalurkan dengan tepat sasaran. Namun SPK masih perlu dikembangkan agar memiliki fitur chat, notifikasi, serta support shortcut keyboard. Selain itu SPK juga seharusnya dapat diakses secara online ataupun menggunakan platform mobile sehingga memudahkan dalam pengaksesan datanya.

Kata kunci : sistem pendukung keputusan, simple additive weighting, bantuan siswa

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WEB-BASED WEB-BASED DECISION SUPPORT SUPPORT SYSTEM FOR RECEIVING ASSISTANCE TO STUDENTS USING THE SIMPLE ADDITIVE WEIGHTING (SAW) METHOD IN SMA NEGERI 1 PETARUKAN, under the guidance of Arief Soma Darmawan, ST., M.Kom. and Mosses Aidjili, S.Kom., M.Kom.

118 + xv pages / 73 pictures / 43 tables / 5 attachments / 13 bibliography (2010-2022)

ABSTRACT

Law number 20 of 2003 which refers to Government Regulation number 48 of 2008 states that education financing is a shared responsibility between the government, regional governments and the community. This is a guideline for Public Senior High School 1 of Petarukan in managing programs for distributing aid to underprivileged students. Data for 2021 shows that there were 1188 students who applied for assistance on the grounds that their parents were home because the pandemic hit. However, the process of selecting assistance is ineffective because it takes a long time to select assistance for underprivileged students and sometimes the same results are obtained in the selection of the order of assistance for underprivileged students selected based on personal choice. So a Decision Support System (DSS) was built to solve the problem, using the Waterfall method through the stages of Communication, Planning, Modeling, Construction, and Deployment. DSS is designed using the Unified Modeling Language (UML) and Display Worksheet (DW), and tested using Blackbox, Whitebox and User Acceptance Test (UAT) which shows that 80% of the results of the system are able to work optimally and can be used according to user needs. The DSS that was built can avoid the risk of data handling in hunting down beneficiaries of poor student assistance, thereby indirectly helping poor student assistance to be distributed on target. However, DSS still needs to be developed so that it has chat features, notifications, and supports keyboard shortcuts. In addition, DSS should also be accessible online or using a mobile platform to make it easier to access the data.

Keywords: decision support system, simple additive weighting, student assistance