

ABSTRAK

Syahrul Reza Destianto. 2026. Sistem Penentuan Siswa Berbakat Menggunakan Metode *Naive Bayes* Berbasis Website (Studi Kasus: SDN 2 Ngadirejo). Program Studi Teknik Informatika, Fakultas Teknik, Universitas PGRI Madiun. Pembimbing (I) Saifulloh, S.Kom., M.Kom. Pembimbing (II) Fatim Nugrahanti, S.T., M.T.

Penentuan siswa berbakat di SDN 2 Ngadirejo masih dilakukan secara manual berdasarkan penilaian guru sehingga berpotensi menimbulkan subjektivitas, kurang transparan, dan memerlukan waktu lama. Penelitian ini bertujuan merancang dan membangun Sistem Pendukung Keputusan berbasis website menggunakan metode *Naive Bayes* agar penentuan siswa berbakat lebih objektif dan akurat. Metode *Naive Bayes* digunakan untuk mengklasifikasikan siswa berdasarkan probabilitas dari kriteria nilai akademik, keaktifan, kedisiplinan, dan prestasi. Sistem dikembangkan menggunakan metode *Extreme Programming (XP)* melalui tahap perencanaan, perancangan, pengkodean, pengujian, serta diimplementasikan menggunakan *PHP* dan *MySQL*. Hasil penelitian menunjukkan sistem mampu mengklasifikasikan siswa ke kategori berbakat dan tidak berbakat berdasarkan probabilitas tertinggi serta meningkatkan efektivitas, akurasi, transparansi, dan efisiensi keputusan.

Kata kunci: Sistem Pendukung Keputusan, *Naive Bayes*, Siswa Berbakat, Website, Klasifikasi.

ABSTRACT

Syahrul Reza Destianto. 2026. *A Website-Based Gifted Student Identification System Using the Naive Bayes Method (Case Study: SDN 2 Ngadirejo). Informatics Engineering Study Program, Faculty of Engineering, Universitas PGRI Madiun. Supervisor (I) Saifulloh, S.Kom., M.Kom. Supervisor (II) Fatim Nugrahanti, S.T., M.T.*

The identification of gifted students at SDN 2 Ngadirejo is currently conducted manually based on teacher assessments, a process that is potentially subjective, lacks transparency, and is time-consuming. This research aims to design and develop a website-based Decision Support System using the Naive Bayes method to make the identification of gifted students more objective and accurate. The Naive Bayes method is employed to classify students based on probabilities derived from criteria such as academic grades, active participation, discipline, and achievements. The system was developed using the Extreme Programming (XP) methodology—encompassing planning, design, coding, and testing phases—and implemented using PHP and MySQL. The research results demonstrate that the system is capable of classifying students into "gifted" and "non-gifted" categories based on the highest probability, while also enhancing the effectiveness, accuracy, transparency, and efficiency of the decision-making process.

Keywords: Decision Support System, Naive Bayes, Gifted Students, Website, Classification.