

Naila Nataswa Juniar. 2026. *Pengembangan Sistem Informasi Bimbingan Konseling dan Penelusuran Minat Bakat di SMK Walisongo 1 Gempol*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunodjoyo Madura. Pembimbing: Nuru Aini, S.Kom., M.Kom.

ABSTRAK

Proses bimbingan konseling dan penelusuran minat bakat di SMK Walisongo 1 Gempol masih dilakukan secara manual sehingga diperlukan sistem yang lebih efektif dan efisien. Penelitian ini bertujuan mengembangkan serta mengetahui kelayakan Sistem Informasi Bimbingan Konseling dan Penelusuran Minat Bakat. Metode yang digunakan adalah model *Waterfall* yang meliputi analisis kebutuhan, desain, implementasi, pengujian, dan pemeliharaan. Analisis kebutuhan dilakukan melalui observasi dan wawancara, sedangkan tahap desain mencakup perancangan UML, basis data, dan antarmuka. Implementasi sistem dilakukan menggunakan PHP dengan *framework* Laravel 12. Pengujian mengacu pada standar ISO 25010. Hasil pengujian *functional suitability* menunjukkan sistem sangat layak digunakan. Pengujian *usability* terhadap 20 pengguna memperoleh nilai 88% dengan kategori sangat layak. Aspek *reliability* pada 25 VUs sebesar 99,67%. Sedangkan *performance efficiency* menunjukkan waktu akses rata-rata 2,2 detik. Pada aspek *maintainability*, sebanyak 61 fitur memenuhi kriteria pengujian. Aspek *compatibility* menunjukkan sistem dapat berjalan dengan baik pada berbagai browser tanpa kendala fungsi maupun tampilan. Pengujian *security* menunjukkan tidak ditemukan kerentanan kritis, sedangkan aspek *portability* memperoleh tingkat keberhasilan 100% pada tiga *browser* berbeda. Dengan demikian, sistem informasi ini dinyatakan layak digunakan sebagai solusi untuk mendukung proses bimbingan konseling dan penelusuran minat bakat di SMK Walisongo 1 Gempol.

Kata Kunci : bimbingan konseling, sistem informasi, penelusuran minat bakat, Waterfall

Naila Nataswa Juniar. 2026. Development of a Guidance and Counseling Information System and Interest and Aptitude Assessment at SMK Walisongo 1 Gempol. Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Trunodjoyo University Madura. Supervisor: Nuru Aini, S.Kom., M.Kom.

ABSTRACT

The process of counseling guidance and talent interest tracing at SMK Walisongo 1 Gempol is still carried out manually, so a more effective and efficient system is needed. This research aims to develop and determine the feasibility of the Counseling Guidance Information System and Talent Interest Search. The method used is the Waterfall model which includes needs analysis, design, implementation, testing, and maintenance. The needs analysis is done through observation and interviews, while the design stage includes designing UMLs, databases, and interfaces. The system implementation is carried out using PHP with the Laravel 12 framework. The test refers to the ISO 25010 standard. The results of the functional suitability test show that the system is very feasible to use. Usability testing on 20 users obtained a score of 88% in the very feasible category. The reliability aspect at 25 VUs is 99.67%. Meanwhile, performance efficiency shows an average access time of 2.2 seconds. In terms of maintainability, as many as 61 features met the test criteria. The compatibility aspect shows that the system can run well on various browsers without any functional or display problems. Security testing showed no critical vulnerabilities were found, while the portability aspect obtained a 100% success rate on three different browsers. Thus, this information system is declared feasible to be used as a solution to support the process of counseling guidance and talent interest tracing at SMK Walisongo 1 Gempol.

Keywords: guidance and counseling, information system, interest and aptitude assessment, Waterfall.