

RINGKASAN

Penelitian ini bertujuan untuk merancang dan membangun Sistem Informasi Praktik Kerja Industri berbasis *web* pada SMK Negeri 2 Kota Jambi guna membantu sekolah dalam pengelolaan data dan administrasi prakerin yang melibatkan banyak siswa, jurusan, dan mitra industri.

Pengembangan sistem dilakukan menggunakan metode *Scrum*, yang mencakup tahapan *sprint planning*, *sprint*, *daily scrum*, *sprint review*, dan *sprint retrospective*. Pengembangan sistem dilakukan melalui empat *sprint*. *Sprint* pertama menghasilkan analisis kebutuhan, pemodelan sistem, dan fitur-fitur awal seperti *login* pengguna serta pengelolaan data tahun ajaran, jurusan, kelas, dan pengguna. *Sprint* kedua menghasilkan fitur kelola lokasi prakerin, penetapan DUDI dan penetapan prakerin. *Sprint* ketiga menghasilkan fitur unggah dokumen prakerin, presensi harian, jurnal kegiatan, dan informasi prakerin. *Sprint* keempat menghasilkan fitur pemantauan siswa bimbingan, validasi jurnal kegiatan, penilaian, serta menu pengunduhan dokumen dan pengelolaan akun siswa.

Setelah pengembangan selesai, sistem diuji menggunakan metode *black-box testing* dan *user acceptance test* (UAT). Pada pengujian *black-box*, sebanyak 1.403 skenario diuji oleh 46 penguji dari empat peran pengguna (admin utama, admin jurusan, guru pembimbing, dan siswa), dengan tingkat keberhasilan 100%. Hal ini menunjukkan bahwa seluruh fungsi berjalan sesuai kebutuhan. Sementara itu, hasil UAT yang juga melibatkan 46 responden memperoleh skor rata-rata 85,04%, dengan aspek desain sebagai nilai tertinggi, diikuti kenyamanan dan efisiensi. Hasil tersebut menunjukkan bahwa sistem tidak hanya memenuhi kebutuhan fungsional, tetapi juga diterima dengan baik oleh pengguna.

SUMMARY

This study aims to design and develop a web-based Industrial Work Practice Information System (*Prakerin*) at SMK Negeri 2 Kota Jambi to support the school in managing data and administrative tasks related to the internship program, which involves a large number of students, departments, and industry partners. *Prakerin*, or Industrial Work Practice, is a mandatory internship program for vocational high school (SMK) students in Indonesia, typically carried out in collaboration with industry or business partners.

The system was developed using the Scrum methodology, which includes the stages of sprint planning, sprint, daily scrum, sprint review, and sprint retrospective. Development was carried out through four sprints. The first sprint focused on requirements analysis, system modeling, and the initial implementation of features, including user login and management of academic years, departments, classes, and users. The second sprint produced features for managing internship locations, assigning industry partners (DUDI), and setting student internship placements. The third sprint delivered features including document uploads, daily attendance, activity journals, and internship information. The fourth sprint focused on features for monitoring mentored students, validating activity journals, evaluating student performance, document download, and account management.

After development, the system was tested using black-box testing and user acceptance testing (UAT). The black-box testing involved 46 testers across four user roles (super admin, department admin, mentor teacher, and student), with a total of 1,403 test cases, all of which were successfully executed, indicating a 100% success rate. This demonstrates that all system functionalities operated as expected. Meanwhile, UAT results, also involving 46 respondents, showed an average score of 85.04%, with the highest ratings in design, followed by user comfort and system efficiency. These results indicate that the system not only meets functional requirements but is also well-received by its users.