ABSTRAK

Pengembangan aplikasi pelaporan dan aspirasi masyarakat disabilitas berbasis *website* menggunakan metode *rule-based* dilakukan untuk meningkatkan partisipasi dan inklusivitas layanan publik di Dinas Sosial Provinsi Sumatera Selatan. Aplikasi ini dirancang sebagai solusi terhadap keterbatasan mekanisme pelaporan dan aspirasi yang belum mampu menentukan tingkat urgensi dan prioritas secara *real time*. Pengembangan aplikasi dilakukan menggunakan model *Software Development Life Cycle* (SDLC) *Waterfall*. Metode *rule-based* diterapkan untuk mengotomatisasi proses klasifikasi tingkat urgensi laporan dan tingkat prioritas aspirasi berdasarkan kriteria yang telah ditentukan. Selain itu, metode ini juga digunakan untuk memberikan respons otomatis melalui fitur *chatbot* sebagai media komunikasi interaktif. Aplikasi mendukung tiga peran utama, yaitu admin, kepala bidang, dan masyarakat, serta dilengkapi dengan fitur aksesibilitas guna mendukung prinsip inklusivitas bagi penyandang disabilitas. Hasil implementasi menunjukkan bahwa aplikasi mampu mengklasifikasikan laporan ke dalam tiga tingkat urgensi (mendesak, penting, dan normal), serta aspirasi ke dalam tiga tingkat prioritas (tinggi, sedang, dan rendah). Pengujian fungsional menggunakan metode *Black-Box Testing* menunjukkan bahwa seluruh fitur berjalan sesuai dengan spesifikasi. Evaluasi *usability* menggunakan metode *System Usability Scale* (SUS) menghasilkan skor rata-rata 92, yang termasuk dalam kategori sangat baik. Dengan demikian, aplikasi ini diharapkan dapat meningkatkan aksesibilitas dan partisipasi masyarakat dalam pelayanan publik.

Kata Kunci: aksesibilitas, aspirasi, disabilitas, *Rule-Based*, pelaporan, *Waterfall*.

ABSTRACT

The development of a website-based reporting and aspiration application for the people with disabilities using a rule-based method was conducted to improve participation and inclusiveness in public services at the South Sumatra Provincial Social Service (Dinas Sosial Provinsi Sumatera Selatan). This application was designed as a solution to the limitations of existing reporting and aspiration mechanisms, which are unable to determine the level of urgency and priority in real time. The development process followed the Waterfall model of the Software Development Life Cycle (SDLC). The rule-based method was applied to automate the classification of report urgency levels and aspiration priority levels based on predefined criteria. Additionally, this method was utilized to generate automated responses through the chatbot feature, serving as an interactive communication medium. The application supports three main roles, namely administrator, division head, and the general public. It is also equipped with accessibility features to support the principle of inclusivity for people with disabilities. The implementation results show that the application is capable of classifying reports into three levels of urgency (urgent, important, and normal) and aspirations into three levels of priority (high, medium, and low). Functional testing using the Black-Box Testing method showed that all features operated according to specifications. A usability evaluation using the System Usability Scale (SUS) method resulted in an average score of 92, which falls into the excellent category. This application is expected to enhance accessibility and increase public participation in public services.

Keywords: accessibility, aspiration, disability, reporting, Rule-Based, Waterfall.