

ABSTRAK

Penelitian ini bertujuan menerapkan aplikasi pengajuan pendidikan anggota TNI berbasis web pada Korem 044/Garuda Dempo menggunakan metode Rule Based. Permasalahan yang dihadapi adalah proses pengajuan pendidikan yang masih dilakukan secara manual sehingga menyebabkan keterlambatan penyampaian informasi, pengelolaan data yang kurang efektif, serta proses seleksi yang belum terintegrasi. Penelitian difokuskan pada pengajuan Pendidikan Pembentukan Perwira (Diktupa) dan Pendidikan Pembentukan Bintara (Diktuba). Pengumpulan data dilakukan melalui observasi dan wawancara, sedangkan pengembangan sistem menggunakan metode Waterfall yang meliputi analisis kebutuhan, perancangan, pengkodean, pengujian, dan pemeliharaan. Metode Rule Based diterapkan untuk menentukan kelulusan peserta berdasarkan aturan seleksi pada tahapan kesehatan, akademik, dan jasmani. Hasil penelitian menunjukkan bahwa aplikasi mampu mengelola pengajuan pendidikan, data peserta, proses seleksi, serta penentuan hasil secara lebih efektif, sehingga meningkatkan efisiensi administrasi, mengurangi kesalahan pengolahan data, dan mendukung pengambilan keputusan di Korem 044/Garuda Dempo.

Kata kunci: Rule Based, aplikasi berbasis web, pengajuan pendidikan, seleksi pendidikan, Waterfall.

ABSTRACT

This study aims to develop a web-based application for managing military education applications at Korem 044/Garuda Dempo using the Rule-Based method. The existing application process is still conducted manually, resulting in delays in information delivery, inefficient data management, and a lack of integration in the selection process. The study focuses on applications for Officer Formation Education and Non-Commissioned Officer Formation Education. Data were collected through observation and interviews, while the system was developed using the Waterfall model, consisting of requirements analysis, design, implementation, testing, and maintenance. The Rule-Based method was applied to determine participant eligibility based on predefined rules covering health, academic, and physical fitness assessments. The results indicate that the developed application effectively manages education applications, participant data, selection processes, and final decisions. The system improves administrative efficiency, reduces data processing errors, and supports more accurate decision-making at Korem 044/Garuda Dempo.

Keywords: Rule-Based, web-based application, education application, education selection, Waterfall.