

## ABSTRAK

Bima Pratama, 2024. **Pengembangan Sistem Informasi Pelayanan Medis Pasien Klinik Gigi Berbasis Website Dengan Metode Microservice Guna Menunjang Kualitas Pelayanan.** Tugas Akhir, Program Studi S1, Sekolah Tinggi Informatika & Komputer Indonesia, Pembimbing: Adnan Zulkarnain, S.Kom., M.M.S.I.

Kata kunci: Sistem Informasi, Microservice, API, Klinik Gigi, Pelayanan

Penelitian ini bertujuan untuk mengembangkan sistem informasi klinik gigi berbasis web yang sebelumnya menggunakan arsitektur monolitik, menjadi berbasis arsitektur microservice dengan bahasa pemrograman Go (Golang) dan Vue.js. Metode pengembangan yang digunakan meliputi analisis kebutuhan, perancangan arsitektur microservice, implementasi sistem, serta evaluasi performa. Sistem yang dikembangkan terdiri dari layanan mikro yang saling independen, seperti User Core, Doctor Core, Transaction Core, dan frontend. Pengujian dilakukan melalui black-box testing, integration testing, dan end-to-end testing. Hasil evaluasi menunjukkan adanya peningkatan kinerja sistem, dengan waktu respons yang lebih cepat serta keandalan yang lebih tinggi. Diharapkan, sistem ini dapat berkontribusi dalam meningkatkan efisiensi operasional dan kualitas layanan di klinik gigi.

## ABSTRACT

Bima Pratama, 2024, **Development of a Website-Based Medical Service Information System for Dental Clinic Patients Using the Microservice Method to Support Service Quality**. Final Project, Study Program Informatika, Sekolah Tinggi Informatika & Komputer Indonesia, Advisor 1 : Adnan Zulkarnain, S.Kom., M.M.S.I.

Keyword : Information Systems, Microservices, APIs, Dental Clinics, Services

This study aims to develop a web-based dental clinic information system, which was previously built using a monolithic architecture, into a microservice-based architecture using the Go (Golang) programming language and Vue.js. The development method includes requirement analysis, microservice architecture design, system implementation, and performance evaluation. The developed system consists of independent microservices, such as User Core, Doctor Core, Transaction Core, and the frontend. Testing was conducted through black-box testing, integration testing, and end-to-end testing. The evaluation results show improved system performance, with faster response times and higher reliability. It is expected that this system will contribute to improving operational efficiency and the quality of services in dental clinics.