

**DESIGNING AND DEVELOPING A WEB AND MOBILE-BASED  
DOCTOR RESERVATION APPLICATION USING THE LARAVEL  
FRAMEWORK**

**(Case Study: VALIO MEDICAL CENTER CLINIC)**

**DAVA AL HAQ NUR ADDIN**

*Informatics Study Program, Faculty of Science and Technology,  
University of Technology Yogyakarta  
Jl. Ringroad Utara Jombor, Sleman, Yogyakarta  
E-mail: [dafa.alhaq64@gmail.com](mailto:dafa.alhaq64@gmail.com)*

**ABSTRACT**

*Valio Medical Center faces a recurring issue of patient waiting times exceeding the 60-minute standard set by the Ministry of Health. This study aims to address the problem by developing a web and mobile-based doctor reservation application using the Laravel framework. The system is built using the Model-View-Controller (MVC) architecture and MySQL as the database to enable efficient patient data management. Key features include online reservation and online payment, integrated via the Midtrans payment gateway. These functionalities allow patients to schedule appointments and complete administrative processes remotely, thereby reducing the need for physical presence and shortening wait times. Testing results indicate that the application operates effectively and significantly contributes to reducing patient waiting times at Valio Medical Center.*

*Keywords: Doctor Reservation, Laravel, MVC, Patient Waiting Time, MySQL, Digital Health Services*