WEB AND MOBILE-BASED ONLINE QUEUING INFORMATION SYSTEM DESIGN (Case Study: Population and Civil Registration Office of Klaten Regency)

AGUS BUDI RAHARJO
Informatics Study Program, Faculty of Science and Technology
Universitas Teknologi Yogyakarta
Jl. Ringroad Utara, Jombor, Sleman, Yogyakarta
E-mail: rbudi6823@gmail.com

ABSTRACT

The Population and Civil Registration Office (Dukcapil) plays a crucial role in delivering public services, particularly in managing population documents. In Klaten Regency, citizens often face challenges such as long and disorganized queues, as well as inefficient and error-prone manual queuing systems. Additionally, the public lacks real-time updates on queue positions, resulting in prolonged waiting times without service time certainty. To address these issues, this study aims to design and develop an integrated and computerized online queuing information system for Dukcapil Klaten using the User Centered Design (UCD) method. The system was developed using the Laravel 12 framework along with Laravel Filament for the admin panel, integrated with a MySQL database. System testing was carried out using the black-box method to identify functional errors. This online queuing system allows citizens to obtain queue numbers remotely and monitor real-time queue progress, enhancing convenience and accessibility to Dukcapil services. Consequently, the quality of public services, particularly in population document processing, can be significantly improved.

Keywords*: Information System, Online Queue, User Centered Design (UCD), Laravel, Public Service.*