## **ABSTRACT**

## DESIGNING AN ONLINE PATIENT REGISTRATION APPLICATION AT A MOBILE-BASED KLUWUT HEALTH CENTER USING THE FLUTTER FRAMEWORK

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The design of an online patient registration application is a solution to improve the efficiency and convenience of registration services at the Kluwut Health Center. Currently, the registration process is still done manually, often causing long lines, long waiting times, causing inconvenience to patients. To overcome these problems, design and development of mobile applications using the Flutter framework with the Prototype method approach. The main purpose of this research is to facilitate patients in registering health services independently, quickly and efficiently. The application is designed with a UI/UX approach using Figma so that the interface is easy to use and in accordance with user needs. After implementation, testing was carried out using the Black Box and User Acceptance Testing (UAT) methods. The results of Black Box testing show that the application features have run according to their functions, and obtained an average UAT score of 90.87% which is in the "Highly Accepted" category, meaning that the application built is able to increase the effectiveness of health center services. With the approach used, this research proves that mobile application design can be a practical, responsive, and user-friendly digital solution for patient registration services at first-level health facilities.

Keywords: online registration application, Black Box testing, flutter, health center, user acceptance testing