

ABSTRACT

DESIGN AND CONSTRUCTION OF A HEALTH CENTER INFORMATION SYSTEM FOR IMPROVING ANDROID-BASED HEALTH SERVICES

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Community Health Center (Puskesmas) in Rebang Tangkas District, Regency Way Kanan has an important role in providing health services for its people. The use of ambulances faces obstacles in quick response to emergencies, route efficiency, and coordination with related parties. On the other hand, management ineffective queuing can result in long patient waiting times, confusion regarding schedules, and a less-than-optimal patient experience. The Android-based community health center information system application was created to improve health services as an effort to overcome problems and potential improvements in the use of ambulances as well as improving queue management services at the Puskesmas. The system development method used extreme programming which consists of planning, design, coding, and testing stages. In addition, the UML used for designing and documenting the structure and behavior of software systems and carried out using use case diagrams, class diagrams, activity diagrams, and sequence diagrams. The solution obtained from the application is that it allows a fast response to emergencies with a route mapping feature and increases the chances of saving lives.

Online registration for health services reduces patient waiting times in Puskesmas and increases administrative efficiency and effectiveness. Also, digital medical records providing easy and fast access to the patient's medical history makes it possible more informed decisions and better care planning by health workers.

Keywords: Community Health Center Health Services, Queues, Ambulances, Android, Extreme Programming, UML.

