ABSTRACT

In today's smartphone technology, many applications that allow users to communicate via SMS Internet-based, such as WhatsApp, We Chat, and so on. However, the application requires the user to connect to networks and the Internet are paid depends on the carrier signal available in the area.

Therefore, in this thesis will be made an SMS application with android-based Intranet Wifi Java programming language and the Eclipse software that allows users to send text messages without using a paid Internet network, but rather utilize available local WiFi network, in this case taken Telkom in the University environment. For that created a database server that will store the SMS database, so the only connected the same WiFi network, in this case Telkom University WiFi network, then the user can send SMS for free via android application. In this system, the communication is done is point to point involving the database server as user id and data storage smsnya.

MOS test results, the lowest value of the components of the application test was 3.50 with an average value of the test results is 3.88. From the test results to the state of the server application performance and user normally numbered 4, the measured average delay only 1 second, so it could be said there was no delay. From the test results performasi database server, it can be concluded that the larger the loop count (the bigger the request), the same delay, then the probability that an error occurs and the greater the response time of the server serving the request is also getting old. Moreover, the greater the ramp up (the smaller the delay), the same number of requests, then the probability that an error occurs the greater the response time of the server serving the request are also getting faster. Of the total tests performed, it can be concluded that the application has been made feasible for use as an Intranet Application Wifi SMS in the Telkom University.

Keywords: SMS, Wi Fi Networking, Android Applications, Database Server