

ABSTRACT

For people with heart disease who were treated in hospital, her heart condition should always be monitored. Condition of the patient's heart can be seen with the electrocardiogram (ECG) and photoplethysmogram (PPG). Currently the device for monitoring a patient's heart couldn't mobile. This makes doctors and nurses are often assigned to the patient's room to see the condition of the patient. they should be as minimum as possible into patient rooms to reduce contamination.

To solve these problems required the application on mobile devices such as tablet pc android that can display a patient's heart condition. This application will display the ECG signal, PPG and body temperature of patients which which sent by the signal conditioning hardware. For data transmission will be done wirelessly using wifi transmission. With this application the doctor or nurse can remotely monitor the patient's condition.

To see the feasibility of testing applications which include functionality and alpha testing. From the data of tests performed and the analysis and concluded that the application is made has been running well and can be applied to the cardiac monitoring system. These applications can run on a minimum specification of the Android device Android version 2.2, screen resolution of 640 x 1024 pixels, 900 KB of memory devices, and 13,175 MB RAM. From the test results obtained that the average length of time for processing the signals to be displayed in graphical form is 36.3 milliseconds.

Keyword : ECG, PPG, body temperature, monitoring, *wireless lan, android, eclipse*