ABSTRACT

Health monitoring is very important in the medical area because of the presence of the monitoring system will help to monitor a person's health condition in *realtime*. A good monitoring system is an effective monitoring system and can facilitate the work of observers. One of the methods in the health monitoring system is to use a wireless sensor network. In this final project, it is designed a wireless sensor network for ECG (electrocardiogram) monitoring system using xbee RF module.

The system consists of 3 sensor nodes, 2 routers, and a coordinator node. Sensor node devices are designed to retrieve information of ECG signal by using electrodes and ECG block device. Coordinator node in charge of collecting and processing data. Nodes will be communicated wirelessly by using a mesh topology.

The output of this system has been able to show the results of the ECG signal information in real time, which is the monitoring result from that three nodes.

Keywords : ECG, WSN, xbee