ABSTRACT

ECG or Electrocardiogram is biological signal than exist cause of electrical activity of human heart. ECG is usually used in medical field as a tool for examining patient. ECG is used in many different systems like computer, mobile device, or medical device which is designated for that usage. The diversity of the system has resulted in representation of ECG data stored by the system also varies.

In this final project the writer has done the design data representations that can be used for uniform form ECG data. Writer implement XML format to represent the ECG data for transmission. ECG data is stored and converted to XML format and then transmitted over HTTP protocol collectively. In this final project also transmit ECG data partially or per point with JSON in the HTTP protocol as well as a comparison in testing.

In the both test of data delivery method used in this final test parameters used are as follows: delay, throughput, packetloss, overhead and memory utilization. The results of the tests performed on this final project can be said that ECG data delivery collectively with XML is better than the method of delivery of partially ECG data with JSON.

Key words: ECG, XML, JSON, Data Representation, Android, Tranmition