ABSTRACT

The heart is a very important organ for the human body because heart health affects the healthy body. Two indicators to determine heart health are the heart rate and electrical signal activity of the heart. Therefore, it is necessary to do therapy to maintain heart performance, one of which is Al-Qur'an therapy. In this study, the ECG prototipe based on Raspberry Pi has been designed to prove the effect of reading the Qur'an on the electrical activity of a person's heart. The data collection was carried out on Telkom University student who were grouped into three categories, including five respondents in the hafiz category, five respondent in the fluent reading category, and five respondents in the less fluent reading category. The results of the measurements that have been carried out in this study indicate that there is a correlation value between the activity of reading the Qur'an with a fairly large change in heart rate which is indicated by a determinant coefficient of 0.8982 for the first respondent category. Meanwhile, the second category of respondents was 0.7178 and 0.48 for the third category of respondents. So that in this third category it is considered that there is no effect of reading the Qur'an on the electrical activity of the heart. Based on the analysis of the research results, it was found that the prototype that had been designed could be used to analyze the effect of reading the Qur'an on the electrical activity of the heart properly.

Keywords: The Al-Qur'an Reading, BPM, Electrocardiograph, Heart, Raspberry Pi