

ABSTRACT

The heart is a vital organ that is very important in the human body. Heart rate can be an indicator of human health conditions. Under normal conditions, the heart rate is in the range of 60-100 BPM (beats per minute). It is necessary to take action if the heart rate is outside this range, one of which is murottal Al-Qur'an therapy. In this study, a prototype Electrocardiogram (ECG) based on Raspberry Pi was designed to assist the process of analyzing the effect of listening to the Qur'an on heart performance. This Prototype Raspberry Pi based ECG designed is cost-effective, effective and efficient. The programming language used is Python. Measurements were carried out on 15 respondents with three levels (five people who memorized and often heard the Qur'an, five people who often heard the Qur'an, five people who rarely heard the Qur'an). The results of this study indicate that there is an effect of listening to the Qur'an which is read directly through a decrease in the BPM value by 15.46% from before to after hearing the Qur'an on the first level respondents with a determinant coefficient of 0.9225. While the determinant coefficient is 0.3967 for the second-level respondents and 0.2233 for the third-level respondents, which does not show any effect on hearing the reading of the Qur'an. From the analysis of the results, it is found that the prototype that has been designed can be used to analyze the effect of hearing the Qur'an on the electrical activity of the heart properly.

Keywords: *Al-Qur'an Reading, BPM, ECG, Heart, Raspberry Pi*