ABSTRACT

Qibla for Muslims is very important to know before praying. For normal people, determining the Qibla direction using a smartphone application is quite easy. However, how about Muslims with visual impairments? Determining the direction of Qibla is difficult. With the aim of making it easier for Muslims with visual impairments to determine the direction of Qibla, "Speaking Sajadah Qibla Detector Based From Arduino" use HMC5883L compass sensor as a Qibla detector, WTV020 as an intermediary for audio files output, Arduino Nano as a microcontroller. The tool will be put in the corner of the Sajadah so it will not disturb the worship process. First, HMC5883L will detect the Qibla direction then send it to Arduino Nano as the microcontroller. Arduino Nano will process the input from the HMC5883L, and then send it to WTV020, finally WTV020 will process the input and read it to give an output with audio file by the input conditions.

Keywords: HMC5883L, Qibla, Visual impairments, Arduino, WTV020.