ABSTRACT

Pull Up is a movement that is carried out in a dependent way and then lifts the body up and down until the chin is parallel to the iron or grip bar, aiming to measure the endurance of the arm and shoulder muscles. Based on the problems above, this research will create an automatic pull up measurement tool by applying IOT technology. Where this tool requires an LDR sensor which serves as a light receiver and the KY-008 Laser sensor is tasked with emitting a laser to the LDR.

If the laser beam during the pull up movement is interrupted, this measurement tool calculates the pull up gain and then the gain will be sent to the MySQL database connected to the network and then displayed to an interface which also contains the test takers' acquisition scores. In the research, this pull-up measurement tool was tested by five people who had and are in the process of selecting the TNI/POLRI test and then the authors distributed questionnaires to find the results of technology acceptance using the TAM model where researchers got percentage data in terms of perceived usefulness of 91.5 % and perceived ease of use is 88.5%, so the Pull Up measurement tool using IOT Technology gets technology acceptance of 90%.

Keywords: LDR Sensor, KY-008 Laser Sensor, IOT, PHP