

OUT OF BOUND BALL DETECTION FOR SCORECARD MARKING USING LASER SENSOR

¹Muhammad Syafiq Mat Salim & ²Romiza Md Nor

¹muhdsyafiqmatsalim@gmail.com

²romiza@uitm.edu.my

ABSTRACT

Scorecard is found in many sports such as golf and woodball. Score is a quantitative measure of opponents' relative performance in a sports discipline. Score is usually measured in the abstract unit of points, can increase or decrease the score of the parties involved. Nowadays, most sports have techniques to make sure the game run smoothly. Without a technology, the game may have been delayed due to lack of utilization of existing technology. iScore is introduced to implemented technology in woodball. The detection method is used to generate an automatic score for player by detecting the out of bound ball. Out of bound ball can effects the score in the gameplay. It is very important for the future in improving the use of the scorecard in sport. In order to generate an automatic scorecard, Calm Technology Principle has been involved. The principle require the smallest amount of attention possible, amplify the best of humanity and machines and solve a problem only using a minimum amount of technology. Evaluation has been conducted among amateurs and world class woodball players. Two sections in the questionnaires which are functionality test and design of iScore using Calm Technology principles. All of the respondents produced a satisfied results and most of them need an improvement of iScore by adding the gate to end the game. For future work, the gate will be added by using PIR motion sensor so that the game can be ended.

Keywords: Woodball, Detection method, Internet of Things, Laser sensor, Scorecard Marking, Web based, Calm Technology Principle