## ABSTRACT

Snooker is one of the Cue Sports sports games that uses a point system in its game. This snooker game uses the color of the ball to determine the points earned. Previously the process of calculating scores in this snooker game was still manual. The manual by means that the player or referee still has to determine the points of the ball that goes into the pocket of the table and calculate their own scores obtained. So it can be determined that the time required for the score calculation process is still long and cannot be said to be efficient in terms of time. Because the determination of the score depends on the color of the incoming ball, it can therefore be a gap in the contribution of this study to implementing a system that can identify colors. Therefore, a Scoring Assistant System was built that could streamline the score calculation in the snooker game by identifying the color of the ball. The system built utilizes an RGB sensor and a microcontroller that is embedded in the snooker table. From the analysis results of the testing system that has been built, the Scoring Assistant System can work under 1 second with a standard deviation of the average time still within tolerance. The process of calculating the score needed by the Scoring Assistant System is still faster than the process of calculating the score manually which we can agree on will take more than 1 second. Thus it can be concluded that the Scoring Assistant System can efficiently calculate scores from time parameters and is more effortless than manually calculating scores.

Keywords: Scoring Assistant System, snooker, efficient, calculation, time.