

Abstract

The development of a child's motor skills starts when a child is 0 months old to 6 years old. In general, the development of motor skills divided into fine motor development and gross motor development. Fine motor development is a development that involves small muscles to follow certain movements. An example of a game activity that help stimulate small muscle development is the Bag Toss game. This game helps stimulate fine motor development by increasing eye coordination with the hand. In addition to the types of activities that boost fine motor development, it also requires the ability to monitor, record, and process the results of children's activities to assess and analyze the status of a child's fine motor development. In this study, we developed the Bag Toss game system that connected to the Internet of Things (IoT) platform. Bag Toss game has linked with a sensor that will record children's play activities. The results of recording data will be sent to the IoT platform to be processed and presented through the internet network. The implementation of IoT for educational purposes is known as the Internet of Educational Things (IoET). The system built will be tested in terms of functionality, reading accuracy and child assessment. The functionality of the system works 100% according to predetermined component functions, as well as for 100% successful reading accuracy for the scenario of throwing distances of 1 meter and 1.5 meters. In addition, the average delay time for every hole is 0.62 seconds. The delay value can still be tolerated and does not interfere with the game when the child assessment is conducted. The child assessment involved 4 children, the results obtained that 3 children are in the Well Development (BSH) stage and 1 child in Very Well Development (BSB) stage.

Keywords: fine motor development, eye and hand coordination, bag toss game, IoT, IoET.