ABSTRACT

The doodle jump game is a video game with a jumping game model assisted by accelerometer sensor technology. Placing the accelerometer sensor in the doodle jump game is a very appropriate solution to determine the accuracy of the values on the sensor. The accelerometer sensor can be measured in real time, however applying a small force to the sensor can result in interference with measurement accuracy. Therefore, creating the measurement results you need through the use of filters can help reduce noise. The method used to use this filter is the Kalman Filter algorithm. The use of the Kalman Filter method can provide a stable level of accuracy in the movements of the main characters in the game and the accelerometer sensor so that it can become a precise algorithm. Apart from that, the use of the Kalman Filter as a tool or method for measuring numbers in an effort to provide a solution to improve the design of the previous developer.

Keyword: *doodle jump*, *accelerometer*, *noise*, *Kalman Filter*, *accuration*