

ABSTRACT

The need for rice has become popular because of the low consumption costs, the fast preparation process and the nutrient content in rice can meet the daily nutritional needs. Rice is usually stored in rice or ricebox. The Internet of Things (Iot) development has taken care of all aspects, including home automation. Currently research on the use of rice has come to design a prototype for monitoring and monitoring rice stock in the ricebox. This study was made to see how rice is used for a certain period of time and predict its use for some time to come using a microcontroller and Iot platform. Prediction is done by studying the pattern of rice use in a certain period of time using the linear regression method. The variable used is the weight change of time variable. The final results of this prediction are in the form of reminder, information about rice stocks and predictions of rice use to see how much rice is consumed in the future. The results indicate that the exponential regression method can predict the use of rice more effectively than the linear regression method with an exponential mean square error (MSE) of 0.020147062.

Keywords – *ricebox; internet of things; regression; prediction; rice*