

ABSTRACT

The main issue with having dogs is their feeding. This happens since many people are busy yet still want to have a dog as it is a low maintenance animal. However, the truth is not quite so simple. In fact, many dog owners are so busy with their activities away from home that they are unable to feed their dogs when they are hungry. This study proposes the development of automated dog feeding technologies to address this issue. In this study, the dog feeder will be remotely controlled through the website.

This thesis develops an automatic dog feeding tool, and website to make feeding dogs during peak hours easier. The microcontroller used is based on ESP-8266 and connected to the website. Both services allow dog owners to remotely regulate meal schedules, history, streaming, food portions to be served, and food supply.

Based on the results and analysis that have been carried out in this study, it can be concluded that the application and IoT that have been designed will provide information about pet feeding schedules and weight control in pets, which will be classified as pets. The amount of food that will come out and information on the rest of the food storage. In QoS testing according to the ITU-T G.1010 standard, the average for the smallest delay that occurs in the evening is 70.13 s, while the largest delay occurs in the morning, which is 98.55 s. Based on the standardization of ITU-T G.1010, the results obtained are classified as good. the result of the throughput test that has been carried out, for the smallest average throughput in the morning of 2467 bps while the largest in the evening of 2733.4 bps. In accordance with the ITU-T G.1010 standard with the results obtained, the total data transfer per unit time from the device to the database is classified as very good category with an index of 4. The packet loss result is in the first evening test and first night test, and the result is 0.24% and 0.25%.

Keywords: feeding, scheduling, Arduino, website, develop, Iot