

ABSTRACT

Electricity becomes one of the primary needs in this modern age, almost every single device used by people uses electricity. However, people still lack the awareness to use efficiently. This can cause monthly electricity bills to increase significantly.

This final project's main goal is to manage and control when using electricity in houses or offices. On this project, the result is an Android application with features such as priority usage, a priority algorithm for managing and controlling electronic loads. To measure how well the app is made, we give a 32-question form to all users. The result obtained can be categorized that this application is well accepted.

From this experiment, the priority queue algorithm works as intended and needs 0.008s to send device 1 data, 0.005s to send device 2 data, 0.005s to send device 3 data, and 0.004s to send device 4 data in automatic mode. For manual mode, it takes 0.007s to send device 1 data, 0.006s to send device 2 data, 0.006s to send device 3 data, and 0.006s to send device 4 data. Last, the total system time to receive data from the MySQL database is 0.004s.

Kata Kunci : *Android, IoT, Android Studio, Database.*