ABSTRACT

In modern times there are many efficient and automated manufacturing products that help humans carry out their daily activities. One of the jobs that require machine assistance is grinding coffee beans. The coffee processing process is divided into three stages, including cooling, cooling and grinding. But at this time the three stages are still done manually. With these problems, an automatic coffee grinder is needed that is able to carry out three stages which include, cooling and an automatic process that uses a microcontroller and the Internet of Things to regulate each component system such as regulating the amount of incoming coffee, coffee fineness levels and monitoring the grinder separately.

In this final project, an automatic coffee bean mill is made that can grind coffee beans for different levels of fineness such as medium fine and fine. In this final project, a system is also made that can monitor the temperature of the grinder machine, the amount of coffee that enters and control the on/off of the coffee grinder machine. Controlling and monitoring is done in real time from the microcontroller device which will then be displayed on the system. This is done by using Internet of Things technology so that it can be used through gadgets and can be used anytime.

From testing the temperature of the coffee grinder, testing the coffee grinder and testing the servo to ensure that all functions are executed successfully and from testing the application to sending and receiving data in seconds when selecting coffee beans in applications connected to databases and tools, the average value is obtained. average delay 1.6 seconds. Based on the test results obtained in the test, it can be ascertained that the coffee grinder machine can be integrated with databases and applications.

Keywords : Microcontroller, Internet of Things, Coffee Milling, Monitoring, Controlling.