

ABSTRACT

This research resulted in a small, automatic dishwashing system designed to support dishwashing among MSMEs. The system consists of a water heater controlled by a DS18B20 temperature sensor, an automatic water pump, a relay, and an Arduino Uno microcontroller module. In testing, the system was able to heat water to 60°C in an average time of 3 minutes and 42 seconds and automatically perform a washing cycle for 180 seconds. Red and green LED indicators serve as visual indicators for operation and completion, while an active buzzer produces a short sound when the cycle starts and a long sound when it ends, making it easier for seniors to recognize the device's status. The use of a "Start" button makes the device more interactive and simple. The final results show that the device operates stably, is user-friendly, and is suitable for use in confined environments such as food carts or small kiosks. The addition of visual and audible features improves accessibility for elderly users and increases time efficiency compared to manual washing methods.

Keywords: accessibility, Arduino Uno, buzzer, LED indicator, temperature sensor, MSMEs