

ABSTRACT

During this pandemic, hand hygiene is important because it can prevent the transmission of Covid-19. No exception when throwing garbage in the trash. Touching the trash can to open the lid can cause germs to stick to your hands. One of solution is the automatic trash can. The systems include trash can itself, Arduino functions as a microcontroller, servo motor as a driver for the trash can cover, ultrasonic sensor as a garbage height detector, LCD as a trash can capacity indicator display with several levels, DFPlayer Mini as a module to process recorded sound from MicroSD, the speaker will emit a sound in the form of an appreciation thank you for throwing the trash in its place, the Bluetooth module as a voice command receiver, and a smartphone as an intermediary for applications with Bluetooth modules and applications that send voice commands. The results of the test, voice command can work properly without obstacle in a maximum distance 150 cm and 21 cm with obstacle.

Keywords: Arduino, Trash can, Ultrasonic, Voice commands, DFPlayer