

Automatic Hand Washing and Dryer

Abstract:

- The "Automatic Hand Washing and Dryer" project aims to develop an intelligent system that automates the process of hand washing and drying to promote hygiene and reduce the spread of germs in public facilities. This project leverages sensor technology, actuators, and control algorithms to provide a touchless and efficient hand hygiene solution.
- The primary objective of this project is to streamline the hand hygiene process by eliminating the need for manual operation of faucets, soap dispensers, and hand dryers.
- The system integrates components such as infrared sensors for hand detection, solenoid valves for water control, soap dispensing mechanisms, air blowers for drying, and a microcontroller-based control unit.
- The system operates in a touchless manner, where users simply place their hands within the designated washing area.
- The infrared sensors detect hand presence and activate the sequence of water dispensing, soap application, and hand drying automatically.
- This abstract outlines the fundamental goals and components of the "Automatic Hand Washing and Dryer" project, highlighting its potential to revolutionize hand hygiene practices by providing a convenient and hygienic solution for public facilities.

