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Home Automation using Arduino and Bluetooth Module

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Abstract: *Home automation integrates technology to manage household systems, enhancing convenience and energy efficiency. Combining Arduino microcontrollers with Bluetooth modules facilitates cost-effective and user-friendly solutions for remotely controlling appliances via Bluetooth-enabled devices. The Arduino serves as the central controller, receiving commands from smartphones and operating appliances through relay modules. Incorporating features like password protection and EEPROM storage enhances security and personalization. This integration offers an affordable approach to modernizing home automation systems.*

Keywords: arduino uno, 1 channel relay(5v), bluetooth module hc05, power supply, load (bulb 220v), connecting wires, vero board, smartphone (bluetooth enabled)

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