

ID PROJECT : 20

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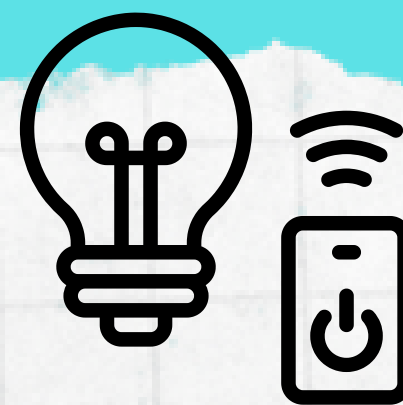
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SMART HOME AUTOMATION CONTROL WITH VOICE COMMAND

ABSTRACT

Time plays a significant role in everyone's life in today's hectic society. Home automation is a network of hardware, communications and electronic interfaces that work to integrate everyday devices with each other over the Internet. This project focused on the development of Smart Home Automation Control with Voice Command that is simplify our daily work. It has three method function of controlling appliances, first function is turn on or off using voice command via Google Assistant, second method is turn off by using BLYNK and last method is by using Push Button. In the market, we rarely see smart switch, mostly to turn on or off by using hand. In today's society to achieve a comfortable lifestyle, many society are willing to work until late night. This cause they feel exhausted after working for a whole day and need some time to rest. Erderly and disabled also engage on this problem, because they have limited capabilities to do something. The objectives of this project are to design a smart home automation system that performs all basic function of a virtual assistant, to develop a mobile application as interface for controlling the home appliances of Smart Home Automation and to build a home automation using Internet of Things (IoT) in voice commands to turn on or off the switch. In this project, the schematic was designed by editing in Canva and the model was designed by using Thinker CAD online software. The product was successfully functioning with controlling the appliances when you are not at home. This can save electricity if the user forgets to turn off the appliances. This project are low-cost and easy to install, allowing everyone to use it.



PROBLEM STATEMENT

In today's society, to achieve a comfortable lifestyle, many society are willing to work until late night. This cause they feel exhausted after working for a whole day and need some time to rest. Elderly and disabled also engage on this problem, because they have limited capabilities to do something. Therefore, Home Automation systems can help to solve this problem, because it does no need more manpower. Such as, turn off the switch without touch it, just use a smartphone to control.

IMPACT AND BENEFITS

- The Google Assistant, Apps BLYNK and Push Button are easy to use turn ON/OFF the switch.
- Flexibility for new devices and appliances.
- Remote control of home automation functions.
- 3 in 1 function
- Can help the elderly and the blind people



OBJECTIVE

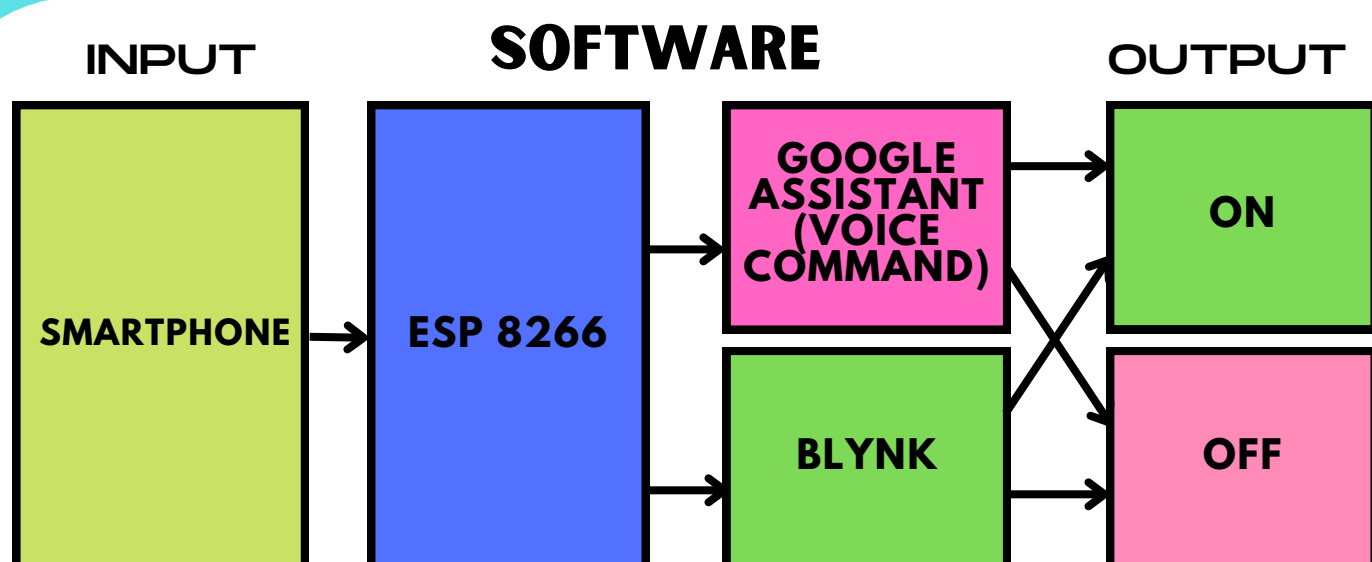
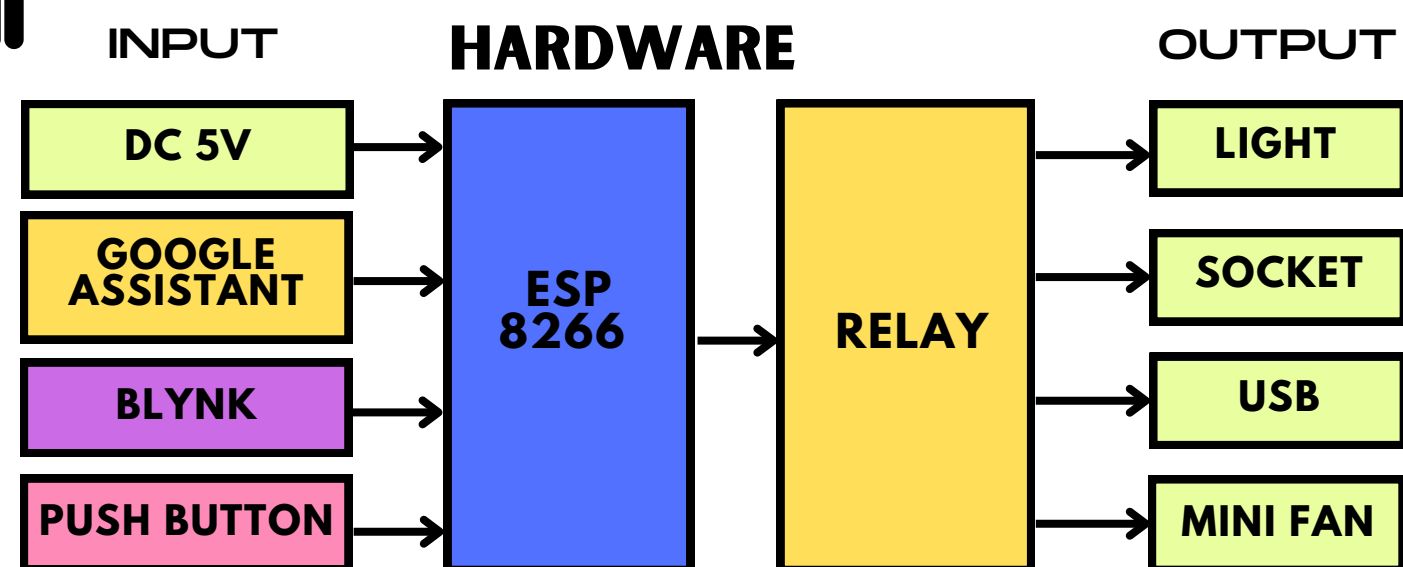
- **To design** a smart home automation system that performs all basic functions of a virtual assistant
- **To develop** a mobile application as interface for controlling the home appliances of Smart Home Automation
- **To build** a home automation using Internet of Things (IoT) in voice commands to turn on or off the switch.

PRODUCT FEATURES

- 20cm x 17cm x 5.5cm size.
- App easy to use and free.
- Can use in Remote Access and use Push Button.
- Control by Voice Command by Google Assistant, on or off using BLYNK and Push Button
- Use power supply from Alternating Current (AC) 240V - 50/60Hz and Direct Current (DC) 5V/2A.
- If <50 meter range of WIFI to ESP 8266.



BLOCK DIAGRAM



PRODUCT PICTURE OF PRODUCT



OUTCOME OF PRODUCT

