Voice Controlled ESP32 Smart Switch Board

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Project Group No.118

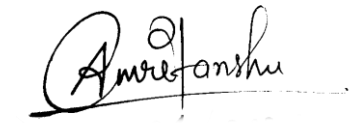
Abstract: This project is a cost-effective and easy-to-implement smart home automation system that integrates voice-controlled assistants, such as Amazon Alexa and Google Home. The system uses an ESP32 micro-controller and an 8-channel relay module to control various devices in the home and communicate with the voice-controlled assistants through the internet. The project was successful in controlling devices using voice commands and is reliable and attractive to users. The proposed system provides a convenient and intuitive solution for smart home automation.

Individual contribution and findings: As a member of the project team, my primary responsibility was the design and implementation of the hardware component of the smart home automation system. I worked closely with the team to select the most suitable components based on their technical specifications, availability, and cost. Once the components were selected, After the hardware was fully assembled, I conducted extensive testing to ensure that it worked correctly. This involved running various tests to check the functionality of each component, such as the sensors, relays, and micro-controller.

Individual contribution to project report preparation: I also played a key role in writing the methodology section of the project report. This involved outlining the technical approach taken in designing and implementing the system, as well as creating diagrams and figures to illustrate zthe hardware design.

Individual contribution for project presentation and demonstration: I also assisted in preparing the project presentation by creating visual aids to accompany the team's oral presentation.

Full signature of the student:



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