

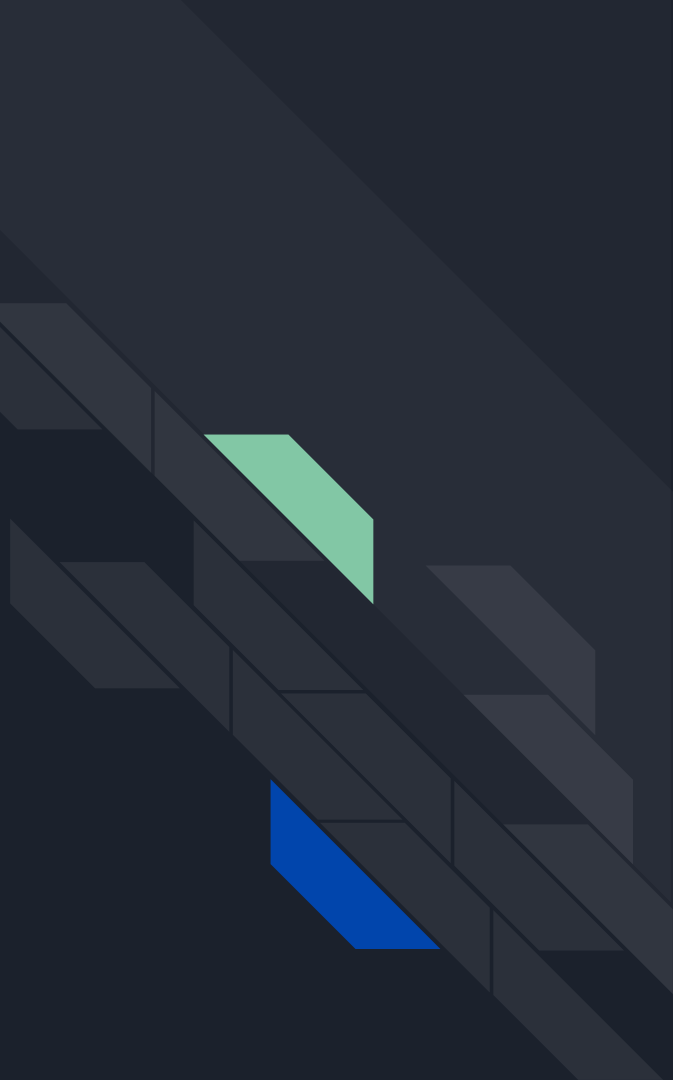


Serverless Home Automation Hub

By

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PROBLEM STATEMENT:

- Home automation and remote control of devices have become increasingly popular, but there's a lack of affordable and flexible solutions that allow users to control their devices using both voice and text commands.
 - Existing home automation solutions often require complex setups and are not easily customizable to fit the user's specific needs.
 - Users are looking for a simple and cost-effective way to control devices such as power outlets, lights, and appliances with voice and text commands.
 - Traditional home automation solutions may not integrate well with IoT devices and may not offer serverless, event-driven capabilities.
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IDEA DESCRIPTION:

- Our idea is to create a serverless home automation hub that allows users to control their devices using voice and text commands. The system is designed to be affordable, customizable, and versatile.
- Users can issue voice commands or send text messages to control various household devices such as power outlets, lights, and appliances.
- The Raspberry Pi serves as the central controller, receiving commands via RF signals and translating them into actions.
- IBM Cloud services provide natural language processing capabilities, enabling the system to understand user intent and determine which devices to control.
- The system provides a flexible, cost-effective, and user-friendly solution for home automation.



BENEFITS:

- Affordability
- Customization
- Voice and Text Control
- Event-Driven
- Ease of Use
- Integration



TECHNOLOGY STACK:

- ★ **Raspberry Pi 3**
- ★ **433MHz RF Transmitter and Receiver**
- ★ **IBM Cloud Services**
- ★ **Watson Assistant**
- ★ **Watson IoT Platform**
- ★ **Twilio**
- ★ **Node.js Server**
- ★ **WiringPi and 433Utils Libraries**

The background is a dark navy blue. In the top-left corner, there are two overlapping parallelogram shapes: a blue one in front of a light green one. In the bottom-left corner, there is a circular inset showing a detailed, grayscale image of a printed circuit board (PCB) with various electronic components. In the top-right corner, there is a grayscale image of a complex, multi-layered circuit board pattern.

THANK YOU....