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Abstract Book

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A METHOD AND SYSTEM FOR CENTRALIZED HOME AUTOMATION: SMART HOME AUTOMATION HUB

Abstract.
Our Smart Home Automation Hub project aimed to revolutionize the smart home experience by providing a centralized platform for seamless integration and control of various devices, including lights, thermostats, security systems, and entertainment units. We addressed the challenge of managing the increasing number of smart devices in modern homes to simplify and enhance the user experience. Our key tasks included ensuring device compatibility across manufacturers, developing a user-friendly mobile app for intuitive control, and fostering efficient team collaboration. Motivated by the growing need for a user-friendly and integrated smart home solution, we planned the system design including innovative machine learning models for predictive automation, leveraged cutting-edge technologies like voice recognition and IoT protocols, and aimed to outperform competitors with an adaptable Smart Home Automation Hub. The results, featuring advanced machine learning models for predictive automation, high precision in device integration, voice-activated controls for a hands-free experience, and a user-friendly mobile app with an intuitive interface for easy customization and control of the smart home.

Key words: *centralized home automation, smart hub, IoT hub, home assistant, all in one home monitoring system, smart home controller*.

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Smart Home Automation Hub

A Method and System for Centralized Home Automation: Smart Home Automation Hub

Why this?

- Revolutionizing the smart home experience through centralized control.
- Seamless integration and control of diverse devices (lights, thermostats, security systems, entertainment units).

Motivated by the growing need for a user-friendly and integrated smart home solution, we implemented innovative machine learning models for predictive automation, leveraged cutting-edge technologies like voice recognition and IoT protocols, and aimed to outperform competitors with an adaptable Smart Home Automation Hub

The results , featuring advanced machine learning models for predictive automation, high precision in device integration, voice-activated controls for a hands-free experience, and a user-friendly mobile app with an intuitive interface for easy customization and control of the smart home.

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Smart Home Automation Hub