

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Home Appliance Control System

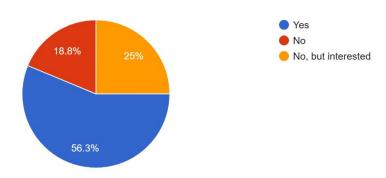
SURVEY REPORT

BY



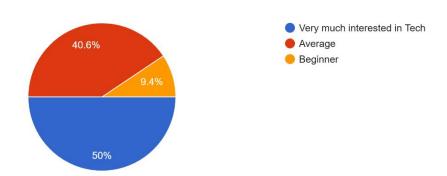
MODE OF SURVEY: G FORM TEAM: CREATI_CORE

Do you currently use any smart home appliance ? 32 responses

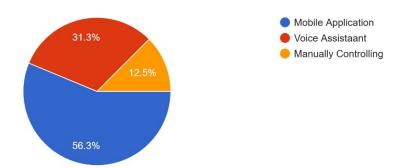


How tech-enthusiast are you?

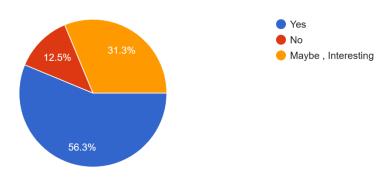
32 responses



Which device would you prefer to control home appliance with ? $^{32 \text{ responses}}$

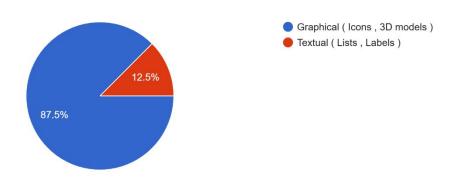


Do you prefer a voice-command feature along with touch interface for controlling Appliance ? 32 responses

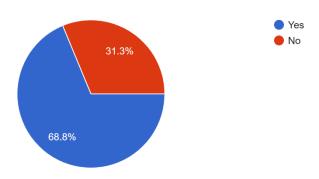


What kind of interface do you find more user-friendly?

32 responses

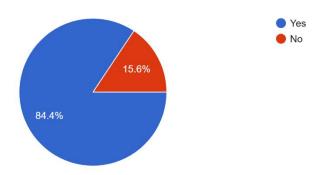


Are you comfortable with systems that require a continuous internet connection? 32 responses



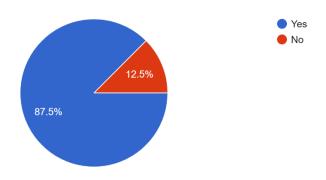
Do you want to group appliances into rooms or zones?

32 responses

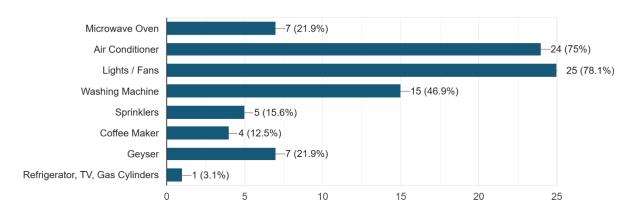


Would you like the ability to control multiple appliances simultaneously?

32 responses

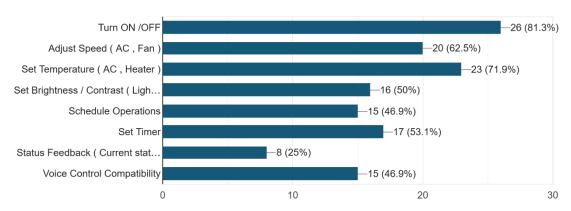


Which home appliances do you most frequently use and wish to control remotely ? $^{32 \text{ responses}}$



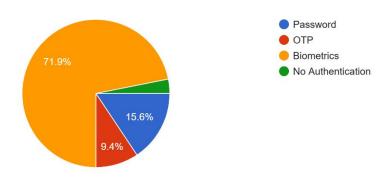
If we provide an option to control a specific home appliance through the HACS system , what kind of controls would you expect for it?

32 responses

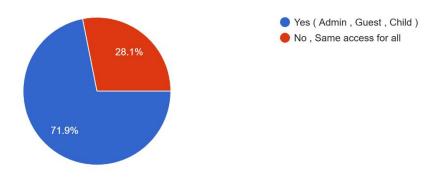


What kind of authentication do you prefer?

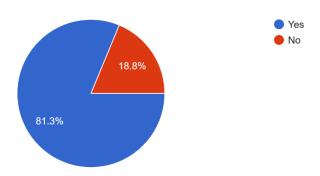
32 responses



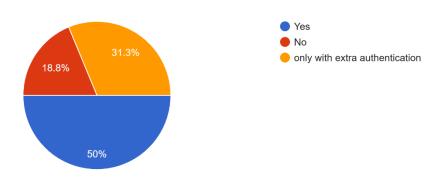
Do you want any different kind of access levels for family members ? 32 responses



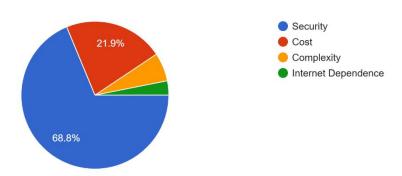
Would you be willing to share appliance data with the system for performance improvement ? $^{32 \text{ responses}}$



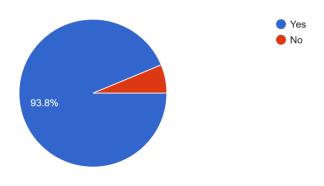
Would you allow system control from outside your home network? 32 responses



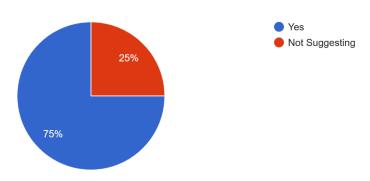
What's your biggest concern about smart home system? 32 responses



What should the system do if the internet or Wi-Fi connectivity is lost? Should it notify you? 32 responses



Wuld you want a manual override option in case the app fails or becomes unresponsive? 32 responses



The following are some notable responses from individuals when asked: "If this system were installed in your home, what specific features, controls, or functionalities would you personally expect?"

User 1: I'd expect an easy-to-use system with app/voice control, automated scheduling, real-time energy tracking, remote operation, safety notifications, personalized modes, and a single emergency shutdown for efficiency and safety.

User 2: I Need to control it from my bed , and I need to secure my home from anywhere in case of security concern

User 3: Ability to control and monitor through mobile app

User 4: I would expect an Al-integrated system that learns my daily routines and preferences-like adjusting lights, temperature, or appliances automatically. Features like predictive energy saving, auto-scheduling based on behavior, and personalized alerts would make the system truly smart. It would be most helpful in reducing manual control, saving time, and creating a seamless living experience.

User 5: In this tech paced world, these kinda system would be highly useful. Especially for differently abled people, or people who go to work when it's operable away from home. HACS sounds very useful hope this project comes to life

User 6: I would expect voice control for lights and fans, remote access to turn off appliances when I'm not home, and energy usage reports to help save electricity."

User 7: If a Home Appliance Control System (HACS) were installed in my home, I'd expect centralized control through a mobile app and voice assistants, along with smart scheduling like auto-starting the geyser or switching off unused lights. It should track real-time energy usage, suggest optimizations, and automatically power down idle appliances. I'd also want security features such as gas leak detection, smart locks, and alerts for appliances left on. The system should allow personalized user profiles for different family members, with modes like "Movie Mode" or "Sleep Mode" to simplify daily routines. Parental controls and gesture-based control would also be useful. Overall, it would be most helpful in managing time, saving energy, and ensuring safety—especially for elderly users or when away from home

User 8: If I had a Home Appliance Control System, I'd want to control all appliances remotely via my phone. It should support scheduling, like turning off lights or AC automatically at night. Voice control through Alexa or Google Assistant would be very useful. I'd also expect energy usage tracking to help reduce electricity bills. Security features like remote door locking and motion alerts would make my home safer.

User 9: If I had a Home Appliance Control System at home, I would want it to let me control lights, fans, and other devices from my phone, set timers, save electricity, and use voice commands. It should also give safety alerts have an away mode to turn off everything when I leave and send notifications for power cuts or faults

User 10: Centralized control, Voice & remote access, Energy monitoring & optimization, Scheduling & automation, Custom alerts & notifications, User profiles & permissions, Strong security.

User 11: I'd expect centralized control via app/voice, scheduling and automation, energy monitoring, remote access, safety alerts, custom modes, and an emergency OFF feature for convenience, security, and energy savings.

User 12: 100 percent authentication, good security, no sharing data, control through voice, remote as well as manually, if possible without network connection

User 13: same as u mentioned I would be expecting features like controlling the appliance via voice also along with it if u just add feature like update the condition of the appliance through notification so that it would be helpful to rectify future problems.

User 14: I will used it in all the appliance from stove lighting to air conditioner but in that case I prefer the more security and safety So if there if the hacs is possible i would prefer the security priority as first

User 15: I'd expect remote access via smartphone, voice control, energy usage monitoring, scheduling, emergency shut-off, and strong security measures to protect my data and devices.

Based on user feedback, the Home Appliance Control System (HACS) is expected to provide a centralized and easy-to-use platform for controlling household appliances through both mobile apps and voice assistants. Users emphasized the need for remote access, scheduling, and automation features, such as auto-starting or shutting down appliances, along with Al-driven personalization that adapts to daily routines. Strong expectations were placed on security and safety, including smart locks, gas leak detection, child/parental controls, emergency shutdown, and reliable authentication. Many highlighted the importance of energy monitoring and optimization, with real-time tracking, predictive savings, and usage reports to reduce electricity costs. Additionally, users valued convenience and accessibility, especially for differently abled individuals and elderly users, through features like personalized modes (e.g., "Sleep Mode," "Movie Mode"), gesture control, and remote fault notifications. Overall, users envision HACS as a smart, secure, and efficient system that enhances comfort, saves time and energy, and ensures home safety.