

User Interface Validation Survey (GenAI–UX for Smart Agriculture)

Purpose:

This survey aims to evaluate the usability, accessibility, and trustworthiness of the GenAI-based user interface for the smart agriculture system running on edge devices. Your feedback will help improve the interaction design and ensure that the system meets the needs of agricultural users.

Section 1: Participant Profile

1. 1. Age: 18–25 / 26–35 / 36–45 / 46–60 / 60+
2. 2. Gender: Male / Female / Prefer not to say
3. 3. Education level: Primary / Secondary / Technical / Undergraduate / Postgraduate
4. 4. Experience with technology: None / Basic / Intermediate / Advanced
5. 5. Experience with agricultural technologies (IoT, sensors, etc.): None / Low / Moderate / High
6. 6. Main type of crop: _____

Section 2: Usability and Interface Design

- ☐ The interface is easy to understand and navigate. (1-Strongly Disagree → 5-Strongly Agree)
- ☐ The information on the screen is clear and well organized. (1-Strongly Disagree → 5-Strongly Agree)
- ☐ Icons, colors, and text are appropriate and easy to read. (1-Strongly Disagree → 5-Strongly Agree)
- ☐ I can quickly find the functions I need (e.g., irrigation, lighting). (1-Strongly Disagree → 5-Strongly Agree)
- ☐ The system responds quickly when I perform an action. (1-Strongly Disagree → 5-Strongly Agree)
- ☐ Overall, the interface feels intuitive and efficient. (1-Strongly Disagree → 5-Strongly Agree)

Section 3: Accessibility and Multimodal Interaction

- ☐ Voice commands are easy to use and understand. (1-Strongly Disagree → 5-Strongly Agree)

☐ Audio responses are clear and helpful. (1-Strongly Disagree → 5-Strongly Agree)

☐ The interface can be used without reading complex text. (1-Strongly Disagree → 5-Strongly Agree)

☐ The system provides good visual and audio feedback. (1-Strongly Disagree → 5-Strongly Agree)

☐ The system is accessible for users with limited vision or literacy. (1-Strongly Disagree → 5-Strongly Agree)

Section 4: Trust, Transparency, and AI Interaction

☐ I understand how the system makes its recommendations. (1-Strongly Disagree → 5-Strongly Agree)

☐ The system provides explanations for its actions. (1-Strongly Disagree → 5-Strongly Agree)

☐ I feel confident that the system's suggestions are reliable. (1-Strongly Disagree → 5-Strongly Agree)

☐ I trust the information displayed on the interface. (1-Strongly Disagree → 5-Strongly Agree)

☐ I am aware that I am interacting with an AI-based system. (1-Strongly Disagree → 5-Strongly Agree)

Section 5: Personalization and Control

☐ The system allows me to adjust settings (e.g., language, response detail). (1-Strongly Disagree → 5-Strongly Agree)

☐ The interface adapts well to my preferences or profile. (1-Strongly Disagree → 5-Strongly Agree)

☐ I can control when and how the AI provides recommendations. (1-Strongly Disagree → 5-Strongly Agree)

☐ I feel that the system learns or adapts based on my interactions. (1-Strongly Disagree → 5-Strongly Agree)

Section 6: Overall Experience

☐ The system helps me make better farming decisions. (1-Strongly Disagree → 5-Strongly Agree)

☐ Using the system saves me time and effort in crop management. (1-Strongly Disagree → 5-Strongly Agree)

☐ I would like to continue using this interface in the future. (1-Strongly Disagree → 5-Strongly Agree)

☐ I would recommend this system to other farmers. (1-Strongly Disagree → 5-Strongly Agree)

Section 7: Open Feedback

1. What did you like most about the interface? _____

2. What did you find difficult or confusing when using the system?

3. What features or improvements would you suggest?

4. Any additional comments or recommendations?
