KONNEXWEB

NAME OF ORGANIZING SOCIETY: Konnexions

NAME OF THE COORDINATORS: Priyanshu Jha, Swasti Mishra

DATE: 17/03/24

PROBLEM STATEMENT:

Craft a web interface that seamlessly interacts with the provided API and framework to control smart home elements, specifically focusing on fan lights and other equipment. The interface should be aesthetically pleasing, intuitive to navigate, and follow best practices for user experience (UX) and user interface (UI) design.

Phase 1: Orchestrating Smart Equipment Control

1.API Integration: Establish secure communication between the web interface and the provided API, enabling manipulation of device states (e.g., turning on/off fan lights, adjusting equipment settings).
2.Equipment Representation: Design clear and intuitive visual representations for each controllable element (e.g., virtual buttons, sliders, icons) corresponding to their real-world counterparts.
3.User Interaction: Implement responsive controls for users to interact with equipment, triggering appropriate API calls to update device states in real-time. Prioritize intuitiveness and accessibility to ensure the interface is readily operable by all users.
4.Status Feedback: Provide real-time feedback on equipment status changes, indicating whether adjustments were successful or encountering errors.
Error Handling: Gracefully handle potential API errors or communication breakdowns, informing users in clear and concise language through visual cues or messages.

Phase 2: Working in the User Experience

1.Information Architecture: Define a logical and intuitive layout for the web interface, ensuring equipment controls are readily accessible and organized in a way that mirrors natural user expectations.
2.Visual Design: Craft an aesthetically pleasing and consistent UI using modern design principles, employing color palettes, typography, and iconography that complement the overall brand identity. Prioritize visual hierarchy and legibility to guide users' attention towards key functionalities.
3.Microinteractions: Introduce subtle animations and interactive elements to enhance user engagement and provide feedback on user actions, creating a more delightful and responsive interface.

CONCLUSION

This Web Dev event will enhance students to explore this domain and it will be great of them to study regarding this from the beginning which will help us thus Konnexions as the IT WEB SOCIETY of KIIT to organize events specially Web Dev events in the near future as well.

INSTRUCTION FOR PARTICIPANTS:

1. Upon receiving the problem statement, participants are encouraged to create their own individual repositories on GitHub.
2. After creating their repositories, participants will need to log in to the provided link using their unique IDs that have been assigned to them.
3. The system will verify the provided unique IDs. Upon successful verification, a notification email will be sent to the associated team. An additional One-Time Password (OTP) will be required for final authentication.
4. Once authenticated, participants can begin their session using their Gmail address, unique ID (PID), team name, and arena information.
5. After successfully entering their session details, participants will be directed to the dashboard.
6. Upon reaching the dashboard, participants will encounter the problem statement. Additionally, based on their selected devices, they will be provided with specific API details including token, URL, type, and range.?
7. Participants are required to regularly push their work to their individual GitHub repositories at an interval of 2 hours.
8. Participants will have access to their work within the dashboard until 12 PM, marking the conclusion of Phase 1.
9. Participants will have a break from 2:00 PM to 3:00 PM.
10. Participants are informed that Phase 2 will begin promptly at 4:00 PM and conclude at 6:00 PM.
11. Please note: Attendance is mandatory for all participants in both Phase 1 (until 12 PM) and Phase 2 (from 4 PM to 6 PM).