Team Design Review for Team U

Group - V

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Section 1

The team's proposed design focuses on EduConnect, an application aimed at enhancing communication within the educational ecosystem by facilitating interaction among students, educators, and administrators. The key features of the design include:

Registration and Profiles: A streamlined registration process with detailed user profiles to build an engaged community.
Homepage/Dashboard: Central access point for schedules, classes, deadlines, and alerts, catering to users of varying experience levels.
Data Integration: Direct integration with university systems to provide up-to-date information to all users.
Priority System: A feature to help users organize tasks by different criteria, aiding in time management and academic success.

The design categorizes users into students, educators, and administrators, considering their unique needs such as diverse academic backgrounds, technological proficiency, educational process insights, and system-level permissions.

Functional requirements include:

- Communication tools
- Goal adjustment mechanisms
- Educational platform integration
- Feedback and rating systems
- Personalized calendars

Non-functional requirements focus on usability, scalability, security, reliability, and adaptability. These encompass user-friendly design, scalable cloud infrastructure, two-factor authentication for security, real-time error detection, and a modular architecture for easy updates and adaptability.

The system/context model describes interactions with users, university systems, databases, cloud infrastructure, security services, third-party services, monitoring systems, and user support channels, aiming to offer a comprehensive and secure platform that boosts communication, collaboration, and productivity in education.

The report also details algorithmic processes for registration, login, data integration, and other core functionalities. It discusses the data model, design approach for non-functional requirements, risk assessment, HCI and CCI protocols, and outlines the remaining work for the final prototype, including completing pending features, user testing, performance tuning, security audits, final review, and launch preparation.

Section 2

1. Proposed Design Improvements:

Enhance User Customization and Personalization:

Design Recommendation: Provide consumers the option to further personalize their dashboards and notification settings to better reflect their priorities and tastes. Changes to the theme, modifiable homepage widgets, and customized assignment or event alert settings are a few examples of this.

Report Enhancement: Describe the level of user personalization that is offered and explain how these features might raise user happiness and engagement.

Improve Accessibility Features:

Design Suggestion: Include more sophisticated accessibility capabilities including enhanced keyboard navigation, text-to-speech for visually impaired users, and color contrast adjustments for improved readability.

*Report Enhancement: Provide a special section on accessibility that details the elements that have been put in place to make sure that everyone can use the software, regardless of their physical capabilities.

2. Recommendations for Describing the Design in the Report:

Clarify Scalability and Cloud Infrastructure:

Improvement Suggestion: Give more thorough details on how scalability would be supported by cloud infrastructure. Details on the selected cloud services (such as AWS, Google Cloud, and Azure), anticipated scaling plans, and how they will manage peak load periods should all be included.
Improvement of Reports: Explain the cloud architecture in more detail in the section on scalability. Include models or diagrams that show how the system adjusts its size dynamically to meet demand.

Detail Security Measures Beyond Login:
Enhancement Recommendation: Include data at rest, in transit, and while processing in the explanation of security precautions. Bring up the usage of secure coding techniques, end-to-end encryption, and frequent security training for developers.
Improvement of Reports: Give a more thorough analysis of the security measures used, emphasizing not only user authentication but also data integrity, encryption techniques, and adherence to privacy laws (such as FERPA and GDPR).

Incorporate Feedback Loop Mechanisms:
Suggestion for Improvement: Create systems that allow for ongoing user input, enabling the reporting of problems in real time, feature requests, and general usability enhancements. User forums, in-app feedback forms, or recurring surveys could all help with this.
Report Enhancement: Highlight a user-centered design approach by outlining the feedback loop process, which includes how user feedback is gathered, prioritized, and integrated into development cycles.

Demonstrate Real-world Integration Scenarios:
Enhancement Provide case studies or samples of how EduConnect will interact with current university systems, outlining the organizational and technological procedures required.
Improvement of Reports: Include a section on integration problems and solutions with real-world examples showing how the program works with other educational systems and technology.