<u>CSP-588 User Centered Design</u> <u>Project - 1</u>

Team-P

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Analyze the processes supported by "Blackboard" 1. Pain Points

Mobile Accessibility Challenges: When using mobile devices like smartphones or tablets to access Blackboard, users may encounter difficulties. The interface for smartphones and tablets may not be designed for smaller devices or may lack some functionality found in the version for desktops, resulting in an inconsistent experience for the user.

Notification Overload: Too many or irrelevant notifications may confuse users, making it difficult to detect important information. As a result, users may struggle to notice and focus on important updates or information related to their jobs or courses. Users may gradually start to ignore notifications entirely, missing important notifications or deadlines.

Quick Logout Sessions: Users are experiencing sudden or unexpected system logouts, which could be related to short connection termination settings. This can disturb efficiency, cause data loss if unsaved work is closed, and reduce overall satisfaction with the service.

Frequent Maintenance Breaks: Frequent or extended breakdowns can disrupt connectivity to the platform, disrupting learning timings and students' ability to finish their assignments on time. This problem becomes worse if maintenance is scheduled during high-traffic hours or if the system fails to alert users in advance.

Time Zone Challenges: When team members are located in different regions, time zone issues develop, causing delays in communication and making arranging meetings in real time problematic. This causes delayed responses to important queries or issues.

2. The workflow associated with each.

Mobile Accessibility Challenges: Users face challenges to accessing material and services on mobile devices, which affects their ability to browse and utilize the platform effectively.

Notification Overload: Users obtain a huge amount of notifications, which causes attention and lost productivity.

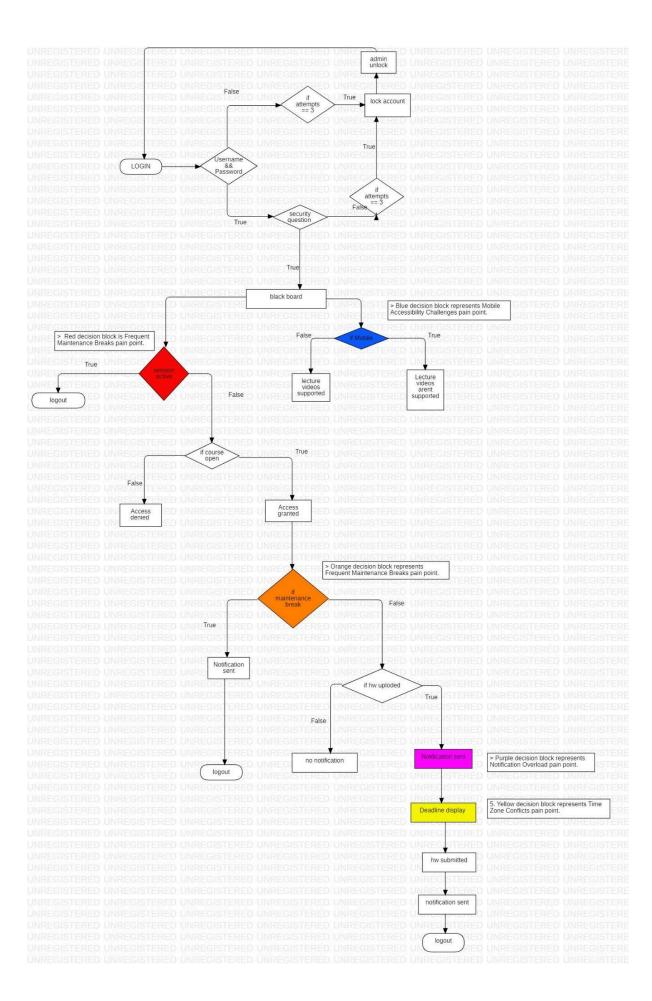
Quick Logout Sessions: Users experience rapid logout sessions, disrupting workflow and requiring frequent reauthentication.

Frequent Maintenance Breaks: The platform is often maintained, which disrupts accessibility for users and workflow consistency.

Time Zone Challenges: Because of the differences in time zones, team members in various locations struggle to coordinate, causing communication and scheduling delays.

FlowChart:

The image shows a step-by-step guide for using a Blackboard system. Firstly, you must enter a username and password. If you make the same mistake too often, it will lock and require assistance to unlock. If you get in, you may be asked another question before proceeding to the main page. Then you may do stuff like upload your assignments. If you upload something, it may result in a message. There is also a section that discusses how to proceed if there is a problem in the system or you need to log out immediately.



3. Identify opportunities for improvement for each and describe both the proposed improvement and an assessment of the degree of improvement.

1. Mobile Accessibility Challenges:

Proposed Improvement:

- 1. Responsive Design Improvement: Use an entirely adaptive design that changes content design based on device screen size, improve mobile readability and engagement.
- **2.** *Mobile App Development:* Create a focused mobile app with offline features and push alerts to ensure that vital resources are available even when there is no internet connection.

Assessment of Improvement:

- 1. Increased User Involvement: A responsive design may significantly increase user satisfaction through providing an effortless user interface across all platforms, perhaps leading to better course completion rates.
- 2. Enhanced Accessibility and Efficiency: A dedicated mobile application would considerably improve accessibility as well as ease of use, allowing users to interact with course materials at any time and from any location, which would be especially advantageous for students with occupied schedules or a poor internet connection.

2. Notification Overload:

Proposed Improvement:

- 1. Flexible Notification Settings: Allow users to modify notification types, the frequency, and pathways, allowing them to organize vital notifications while reducing clutter.
- 2. Smart Notifications Platform: Create a system that responds to user behavior by prioritizing and summarizing alerts according to importance and urgency while thereby improving communication.

Assessment of Improvement:

- 1. Adaptable Notification Settings: This might greatly improve user happiness by giving users more choice over the flow of data, potentially enhancing platform involvement and efficiencies.
- **2.** *Smart Notifications System:* By reducing overload and concentrating on relevance, this method has the potential to greatly improve platform use and retention.

3. Quick Logout Sessions:

Proposed Improvement:

1. Session Timeout Caution: Add an alert message before automatic logout, providing users the option to extend their session.

2. Variable Session Timers: Users can change the time of an active session within an appropriate range according to their activity level.

Assessment of Improvement:

- 1. Improved User have: Users would have less distractions, particularly during long study periods or while multitasking.
- 2. Increased Flexibility: Giving users privacy over session length responds to a wide range of needs, increasing pleasure and decreasing frustration.

4. Frequent Maintenance Breaks:

Proposed Improvement:

- 1. Proactive Maintenance Scheduling: Avoid delays by planning service during less busy times and providing sufficient notice.
- 2. Redundancy and Failover Systems: Provide continuous access to backup systems during repair, hence improving user experience.

Assessment of Improvement:

- 1. Reduced Changes: Proactive management dramatically reduces disruptions, improving reliability.
- **2.** *Improved User Experience:* Redundancy techniques provide seamless access, increasing user pleasure.

5. Time Zone Challenges:

Proposed Improvement:

- 1. Time Zone Awareness Methods: Automatically detect and present everyone's local times for more efficient scheduling.
- 2. **Dynamic Meeting Scheduling:** Provide choices such as rotating meeting hours to accommodate various time zones and ensure inclusion.

Assessment of Improvement:

- 1. Higher Communication Efficiency: Having real-time visibility into team members' availability reduces reaction times, increasing communication efficiency.
- **2.** *Improved Collaboration:* Flexible scheduling promotes collaboration by accommodating various schedules and enabling prompt decision-making.