

5. NON-FUNCTIONAL REQUIREMENTS

Quality Requirements:

Usability:

- The system should provide a **clear and structured UI**, allowing users to navigate easily between functionalities such as “Workload,” “Notifications,” and “Settings.”
- Key actions (logging workload, requesting leave, checking assignments) should be **accessible within 3 clicks** from the main dashboard.
- The **menu layout should be responsive**, ensuring that options like “Proctoring” and “Course Assisting” are easily clickable across different screen sizes.

Reliability:

- The system should **store TA workload, assignments, and notifications reliably**, ensuring that no data is lost due to crashes or errors.
- Session management:** Users should be automatically logged out **after 15 minutes of inactivity** for security.
- The system should perform **automatic daily backups**, ensuring recovery within **30 minutes** in case of data loss.
- A **graceful error handling mechanism** should inform users of any issues (e.g., failed workload entry, network errors) with **clear, actionable messages**.

Performance:

- The backend should handle **100+ simultaneous requests** from TAs, instructors, and admin staff.

Constraints or Pseudo Requirements:

Implementation:

- The system must be **compatible with modern web browsers**, including:

- Chrome (117.0+)
- Firefox (122+)
- Safari (15+)
- Microsoft Edge (latest versions)

•The **design should be fully responsive**, adapting to:

- Desktop (1280x720+)
- Tablets (600x800+)
- Mobile (320x480+)

•**Frontend:** React.js for a dynamic UI.

•**Backend:** Django (Python) for handling authentication, workload processing, and notifications.

•**Database:** MySQL for storing TA workload, course assignments, and logs.

•**Web Server:** Apache2 on Linux (Ubuntu).

Security & Compliance:

•**Role-Based Access Control (RBAC):** Ensure that only authorized users (TAs, instructors, admins) can access specific functionalities.

•**Data Privacy & GDPR Compliance:** Users must be able to:

- View a **cookie consent banner** before non-essential cookies are stored.

•**Data Encryption:** Store sensitive information (TA contact details, login credentials) using **industry-standard encryption**.

Enhancements Based on Wireframe:

•**Left Sidebar:** Ensure that the sidebar (profile details, settings, logout) is **accessible on all screens** without excessive scrolling.

•**Top Navigation Buttons:** Ensure buttons like “Home,” “Workload,” and “Notifications” are **prominently visible and clickable**.