

Non-Functional Requirements

Type	Description
Performance	Timetable should be generated in under a minute.
Performance	The system should be able to support 20 admins.
Performance	Database queries (e.g. fetching timetable or adding entities) should take less than a second.
Performance	Timetable should be exported in under than 3 seconds.
Security	System should only be accessible by VIT admins.
Security	Sensitive data should be encrypted.
Usability	System should be intuitive and easy to navigate.
Reliability	System should have robust error-handling mechanisms to prevent crashes.
Scalability	Database should be able to scale to support the growing number of students, staff, rooms, and courses as the institution expands.
Scalability	Timetable generation should still perform efficiently as the number of entities.
Availability	System should be available 99.9% of the time.
Availability	Maintenance should be scheduled and users should be notified in advance.
Maintainability	Codebase should be well-documented and modular.
Recovery	Database should be regularly backed up.