

Validation Checks for University Timetabling App SRS

This document performs validation checks on the University Timetabling App SRS to identify ambiguities and conflicts, ensuring requirements are valid, consistent, complete, realistic, and verifiable. Use this as a guide for your group's validation activity.

Validation Checks

The checks follow the types outlined in the Requirements Engineering process:

- **Validity:** Do requirements align with stakeholder needs?
- **Consistency:** Are there contradictory requirements?
- **Completeness:** Are all necessary requirements included?
- **Realism:** Can requirements be implemented within constraints (6-month timeline, in-house development)?
- **Verifiability:** Can requirements be tested objectively?

Findings

Requirement ID	Check Type	Issue	Description	Suggested Fix
FR4	Verifiability	Ambiguity	"Push notifications for schedule changes or cancellations within 5 minutes" lacks specificity on conditions (e.g., types of changes).	Clarify: "Send push notifications for room changes, cancellations, or time changes within 5 minutes of database update."
FR5	Realism	Potential Issue	"Email notifications for room change confirmations" may be unrealistic if admin approval delays exceed lecturer expectations.	Add: "Notify admin personnel for approval after the room change happened"
NFR1	Verifiability	Ambiguity	"Load timetables within 3 seconds on mobile devices with standard network conditions" does not define "standard network conditions."	Specify: "Standard network conditions = 4G with >5 Mbps download speed."
NFR2	Completeness	Missing Detail	"Comply with WCAG 2.1" is broad; lacks	List key criteria: "Support high-

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			specific guidelines (e.g., which success criteria).	contrast UI, screen readers, and keyboard navigation."
FR2 vs. FR6	Consistency	Conflict	FR2 (lecturers request room changes) expects quick action, but FR6 (admin approval) introduces delays, potentially frustrating lecturers.	Temporary swaps pending approval within 1 hour.
FR7	Completeness	Missing Detail	"Alert administrators if room capacity is exceeded" does not specify alert delivery method.	Add: "Alerts delivered via web dashboard and email."
All	Completeness	Missing Requirement	No requirement for user logout functionality, critical for security.	Add FR9: "The system shall allow users to log out, terminating active sessions."