

## Assignment

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System: University Management System

<https://github.com/adhamamerrrr/assignment-1-4.3>

## Functional Requirements

ID	Requirement	MoSCoW	Justification
FR1	Store student personal details	Must	Essential for identification and academic recordkeeping.
FR2	Record student academic history	Must	Needed for tracking progress and graduation eligibility.
FR3	Manage instructor profiles	Must	Tracks expertise, courses, and schedules.
FR4	Course registration system	Must	Core function for student enrollment.
FR5	Generate student transcripts	Must	Required for academic verification.
FR6	Handle tuition billing and payments	Must	Supports financial operations.
FR7	Manage class schedules	Must	Ensures proper timetable organization.
FR8	Track classroom availability	Should	Helps optimize resource allocation.
FR9	Provide academic reports	Should	Improves decision-making and

			oversight.
FR10	Manage staff shifts and duties	Should	Supports operational efficiency.
FR11	Store guardian/emergency contacts	Must	Vital for emergencies.
FR12	Search student records	Must	Improves accessibility and usability.
FR13	Manage library inventory	Could	Useful for student resources.
FR14	Record disciplinary actions	Must	Ensures proper documentation.
FR15	Provide graduation clearance reports	Must	Procedural requirement.
FR16	User authentication and role management	Must	Ensures system security.
FR17	Manage scholarship applications	Should	Important for financial aid tracking.
FR18	Track dormitory occupancy	Should	Optimizes housing allocation.
FR19	Provide analytics for administration	Should	Supports strategic decisions.
FR20	Backup and recovery of records	Must	Prevents data loss.

### Non-Functional Requirements

ID	Requirement	MoSCoW	Justification
NFR1	Database should be ACID compliant	Must	Ensures data integrity.

NFR2	Response time < 2 seconds	Should	Important for smooth usage.
NFR3	System uptime 99.9%	Must	University systems must be available.
NFR4	Data encryption at rest and in transit	Must	Ensures privacy and security.
NFR5	Scalable architecture	Should	Supports future growth.