LMS Database Diagram – Version 3

(Single-Tenant Deployment)

USER

string	id	PK
string	email	
string	password	
string	displayName	
json	roles	
string	status	
json	metadata	
datetime	createdAt	
datetime	updatedAt	

CLASSSECTION

string	id	PK
string	code	
string	name	
string	level	
int	capacity	
string	homeroomTeacherId	FK
string	campusId	
json	metadata	
datetime	startDate	
datetime	endDate	

STUDENT

string	id	PK
string	userId	UK
string	code	
json	metadata	
datetime	createdAt	
datetime	updatedAt	

SUBJECT

string	id	PK
string	code	
string	name	
string	description	
int	defaultDurationMinutes	
json	metadata	

TEACHER

string	id	PK
string	userId	UK
string	bio	
json	metadata	
datetime	createdAt	
datetime	updatedAt	

ENROLLMENT

string	id	PK
string	studentId	FK
string	classSectionId	FK
string	status	
datetime	joinedAt	
datetime	leftAt	
json	metadata	

INVOICE

string	id	PK
string	studentId	FK
string	period	
string	status	
float	totalAmount	
float	outstandingAmount	
datetime	issuedAt	
datetime	dueDate	
json	metadata	

CLASSSUBJECT

string	id	PK
string	classSectionId	FK
string	subjectId	FK
string	leadTeacherId	FK
int	weeklySessions	
int	creditHours	
string	status	
json	metadata	

INVOICELINE

string	id	PK
string	invoiceId	FK
string	item	
int	quantity	
float	unitPrice	
float	subtotal	
json	metadata	

PAYMENT

string	id	PK
string	invoiceId	FK
float	amount	
string	method	
string	txRef	
datetime	paidAt	
json	metadata	

SESSION

string	id	PK
string	classSubjectId	FK
string	teacherId	FK
string	roomId	FK
datetime	startsAt	
datetime	endsAt	
string	recurrenceId	
json	metadata	

ASSIGNMENT

string	id	PK
string	classSubjectId	FK
string	title	
string	description	
datetime	dueDate	
json	metadata	
datetime	createdAt	

ROOM

string	id	PK
string	name	
string	location	
int	capacity	
json	metadata	

SUBMISSION

string	id	PK
string	assignmentId	FK
string	studentId	FK
string	type	
json	payload	
datetime	submittedAt	

ATTENDANCERECORD

string	id	PK
string	sessionId	FK
string	studentId	FK
string	status	
string	note	
datetime	recordedAt	

GRADE

string	id	PK
string	submissionId	UK
float	score	
float	maxScore	
json	rubric	
string	feedback	
datetime	gradedAt	
string	gradedBy	

Relationships:
- USER mapsTo STUDENT
- USER mapsTo TEACHER
- USER has INVOICE
- STUDENT attends ENROLLMENT
- STUDENT billed INVOICE
- STUDENT submits SUBMISSION
- CLASSSECTION offers CLASSSUBJECT
- CLASSSECTION homeroom
- SUBJECT catalogues CLASSSUBJECT
- TEACHER instructs CLASSSUBJECT
- ENROLLMENT
- INVOICE details INVOICELINE
- INVOICE settled PAYMENT
- CLASSSUBJECT schedules SESSION
- CLASSSUBJECT evaluates ASSIGNMENT
- SESSION heldIn ROOM
- SESSION marks ATTENDANCERECORD
- ASSIGNMENT receives SUBMISSION
- SUBMISSION scored GRADE

All multi-tenant discriminator columns (`tenantId`) and the `Tenant` table are removed. Each deployment runs isolated for a single institution. `CLASSSECTION` aligns with the previous `Class` table name.