

User Schema

Description: Stores all user-related data including personal information, verification status, course enrollments, and preferences.

- fullName
- email
- mobile
- password
- role
- profileImage
- gender
- dob
- address
- goals
- emailVerified
- mobileVerified
- isActive
- enrolledCourses: [CourseID]
- savedFlashcards: [FlashcardID]
- downloadedLectures: [LectureID]
- preferredVideoSettings: { speed, quality, audioOnly }
- otpVerification: { code, expiresAt, type }
- isKycVerified
- createdAt
- updatedAt

Course Schema

Description: Defines course structure including metadata, pricing, associated content, and visibility settings.

- title
- slug
- description
- level
- classLevel
- board
- examTrack
- category
- price
- discount
- isLive
- isPaid
- duration
- teacherIds: [TeacherID]
- language
- validityInDays
- courseThumbnail
- tags: [String]
- modules: [ModuleID]
- testSeries: [TestSeriesID]
- flashcards: [FlashcardID]

- notes: [EbookID]
- studentsEnrolled: [UserID]
- goalId
- enrollmentCount
- featured
- visibility
- rating
- createdAt
- updatedAt

Lecture Schema

Description: Represents individual lectures, either live or recorded, and includes playback settings and resources.

- moduleId
- title
- videoUrl
- type
- isFree
- isDownloadable
- thumbnail
- viewCount
- duration
- availableFrom
- availableTill
- liveSessionLink
- resourceLinks: [URL]
- playbackSettings: { speedOptions, audioOnlyAvailable }
- analytics: { views, avgWatchTime }
- createdAt
- updatedAt

VideoWatchLog Schema

Description: Tracks each user's video watch progress and completion status.

- userId
- lectureId
- watchedDuration
- lastPlayedAt
- lastPlayedPositionInSec
- completed

TestSeries Schema

Description: Defines a group of tests associated with a course, including test metadata and eligibility.

- courseId
- title
- description
- tests: [TestID]
- type

- difficulty
- attemptLimit
- passingMarks
- certificateEligible
- visibleFrom
- visibleTill
- attemptedBy: [UserID]
- startDate
- endDate
- createdAt

Test Schema

Description: Structure of an individual test, including questions, time limits, and scoring rules.

- testSeriesId
- title
- instructions
- duration
- totalMarks
- questions: [QuestionID]
- shuffleQuestions
- negativeMarking
- allowCustomCreation
- sectionWiseTimeLimit
- questionShuffleConfig
- maxAttempts

TestAttempt Schema

Description: Captures a user's attempt of a test with scores, timing, and submission details.

- userId
- testId
- score
- rank
- percentage
- accuracy
- timeTaken
- responseLog
- isSubmitted
- submittedAt
- attemptedAt

Doubt Schema

Description: Represents a doubt posted by a student, with resolution status and interactions.

- userId
- courseId
- lectureId
- text
- imageUrl
- answeredBy: TeacherID

- answerText
- status
- isResolved
- upvotes
- comments
- attachments: [URL]
- resolvedAt
- createdAt

Discussion/Comment Schema

Description: Handles user comments and replies on lectures, with moderation and thread support.

- lectureId
- userId
- message
- parentId
- likes
- attachments
- commentCount
- isPinned
- isDeleted
- reportedBy: [UserID]
- replies: [CommentID]
- createdAt

Certificate Schema

Description: Stores certificate information issued to students after course completion.

- userId
- courseId
- certificateUrl
- certificateNumber
- verified
- issueDate
- qrCodeUrl
- templateType
- downloadCount
- downloadedAt

Banner Schema

Description:

Stores banners to be displayed in different sections of the platform UI based on their position and associated course. Banners can be targeted to specific locations like header, bottom, left, or right of the course or platform section.

- title: String – Title or label for the banner
- imageUrl: String – URL of the banner image
- linkUrl: String – Target URL when banner is clicked
- courseId: ObjectId (Course) – If banner is tied to a specific course (optional)
- position: String – Banner position: "header", "bottom", "left", "right"
- isActive: Boolean – Whether the banner is currently active
- startDate: Date – When the banner should start showing
- endDate: Date – When the banner should stop showing
- priority: Number – Priority of display (higher = more priority)
- createdAt: Date – Timestamp of creation
- updatedAt: Date – Timestamp of last update