

User Schema

- 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

- title - slug - description - level: ["School", "Competitive", "Professional"] - 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: ["public", "private", "draft"] - rating - createdAt - updatedAt

Lecture Schema

- moduleId - title - videoUrl - type: ["live", "recorded"] - isFree - isDownloadable - thumbnail - viewCount - duration - availableFrom - availableTill - liveSessionLink - resourceLinks: [URL] - playbackSettings: { speedOptions: [0.5, 1, 1.5, 2, 3], audioOnlyAvailable: Boolean } - analytics: { views, avgWatchTime } - createdAt - updatedAt

VideoWatchLog Schema

- userId - lectureId - watchedDuration - lastPlayedAt - lastPlayedPositionInSec - completed: Boolean

TestSeries Schema

- courseId - title - description - tests: [TestID] - type: ["PYQ", "Mock", "All-India"] - difficulty: ["Easy", "Medium", "Hard"] - attemptLimit - passingMarks - certificateEligible: Boolean - visibleFrom - visibleTill - attemptedBy: [UserID] - startDate - endDate - createdAt

Test Schema

- testSeriesId - title - instructions - duration - totalMarks - questions: [QuestionID] - shuffleQuestions: Boolean - negativeMarking: Boolean - allowCustomCreation: Boolean - sectionWiseTimeLimit: Boolean - questionShuffleConfig: { enable, perSection } - maxAttempts

TestAttempt Schema

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

Doubt Schema

- userId - courseId - lectureId - text - imageUrl - answeredBy: TeacherID - answerText - status: ["open", "answered"] - isResolved: Boolean - upvotes - comments - attachments: [URL] - resolvedAt - createdAt

Discussion/Comment Schema

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

Certificate Schema

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