System Documentation for Study Abroad Consultancy Agency

1. Modules Overview

Module	Description
1. Company Website	Static + dynamic pages (Blogs, News, Events, Services). Adminmanaged.
2. User Portals	Student, Teacher, Admin, Sub-Admin portals with role-based access.
3. E-commerce & LMS	Course enrollment (Free/Paid/Live), payments, quizzes, progress tracking.
4. Appointment System	Manage consultation requests from students.
5. Process Tracking	Visa application steps, document uploads, status updates.
6. Event Management	Create/update events (IDP-style) with registration.

2. Detailed Field Requirements

2.1 User Registration & Login

Student/Teacher Registration (Mandatory Fields)

Field	Type	Validation	Example
Email	String	Unique, valid format	student@example.com
Password	String	8+ chars, 1 number, 1 special char	Pass@1234

Field	Type	Validation	Example
Full Name	String	Min. 2 words (First + Last)	John Doe
Phone	String	Country code + valid number	+8801712345678
Email Verification	Boolean	Required for login (Default: false)	true after verification

Optional Fields (Profile Update)

- Emergency Phone
- Last Degree
- Institute
- Address
- CV (Teachers only)
- Certificates (Teachers only)

2.2 Course Management (E-commerce + LMS)

Course Creation (By Teacher/Admin)

Field	Type	Mandatory?	Notes
Title	String	Yes	e.g., "IELTS Preparation Course"
Description	Rich Text	Yes	WYSIWYG editor with images/links.
Banner/Thumbnail	Image	Yes	Min. resolution: 1200x600px.
Туре	Dropdown	Yes	Free / Paid / Live
Duration	String	Yes	e.g., "3 months"
Price (if Paid)	Float	Conditional	Required if Type=Paid.
Zoom Link (if Live)	String	Conditional	Required if Type=Live.

Field	Type	Mandatory?	Notes
YouTube Link (if Free)	String	Conditional	Required if Type=Free.

LMS Features

- Video Tutorials: Title, Description, Attachments (PDFs), Quiz (Optional).
- Quizzes/Assignments: MCQ/Text/Document upload, grading by teacher.
- Progress Tracking: % completion, scores, certificates.

2.3 Visa Process Tracking

Steps (Admin-Managed)

- 1. Initial Consultation
- 2. University Application
- 3. Offer Letter Acceptance
- 4. Financial Documentation
- 5. Visa Application
- 6. Interview Prep
- 7. Biometrics/Medicals

Student View

- Upload documents (Passport, SOP, Bank Statements).
- Track completed/pending steps.

2.4 Event Management (IDP-style)

Field	Type	Mandatory?	Example
Event Title	String	Yes	"Study in Canada Fair 2024"
Date & Time	DateTime	Yes	2024-10-15 14:00:00
Location	String	Yes	"Dhaka, Bangladesh"
Description	Rich Text	Yes	WYSIWYG editor.
Registration Form	Boolean	Yes	true (Enabled by default)

2.5 Admin Panel

- **CRUD Operations**: Blogs, News, Events, Courses, Users.
- Appointment Management: Approve/reject consultation requests.
- **Reports**: Total students, course enrollments, visa success rates.

3. Flowchart Diagram

Below is a high-level workflow of the system:

Admin/Sub-Admin

1.Admin/Sub-Admin Dashboard Overview

Purpose: Full control over users, content, courses, and visa processing.

2. Dashboard Components

2.1 Sidebar Menu

Section	Access	Description
Dashboard Home	Admin, Sub- Admin	Overview of system stats (users, courses).
User Management	Admin only	CRUD students, teachers, sub-admins.
Content Management	Admin, Sub- Admin	Manage blogs, news, events, Services.
Course Management	Admin, Sub- Admin	Approve/edit courses, monitor progress.
Appointments	Admin, Sub- Admin	Handle consultation requests.
Visa Processing	Admin, Sub- Admin	Track visa steps, verify documents.
Reports	Admin only	Generate analytics (enrollments, revenue).

Section	Access	Description
System Settings	Admin only	Configure payment gateways, email templates.

3. Admin/Sub-Admin Privileges

3.1 User Management

Action	Admin	Sub-Admin	Details
Create/Delete Users	✓	×	Add students, teachers, or sub-admins.
Edit User Profiles	✓	✓	Update roles, reset passwords.
View User Lists	✓	✓	Filter by role (student/teacher).
Deactivate Accounts	✓	✓	Temporarily block users.
3.2 Content Manage	ment		
Action	Admin	Sub-Admin	Details
Publish Blogs/News	✓	✓	Rich text editor with image upload.
Create/Edit Events	✓	✓	Set dates, locations, registration forms.
Delete Content	✓	×	Remove outdated blogs/events.

3.3 Course Management

Action	Admin	Sub-Admin	Details
Approve New Courses	✓	✓	Review teacher-created courses.
Edit Course Details	✓	✓	Fix errors, update pricing.
Monitor Progress	✓	✓	Track student completion rates.
Enroll Students Manually	✓	✓	Assign students to courses.

3.4 Appointment System

Action	Admin	Sub-Admin	Details
View Requests	✓	✓	Sort by date/status.
Approve/Reject	✓	✓	Send notifications to students.
Schedule Meetings	✓	✓	Integrate with Google Calendar/Zoom.

3.5 Visa Processing

Action	Admin	Sub- Admin	Details
Track Application Steps	✓	✓	Mark steps as complete (e.g., "Interview Done").
Verify Documents	✓	✓	Approve/reject uploaded files (SOP, bank statements).

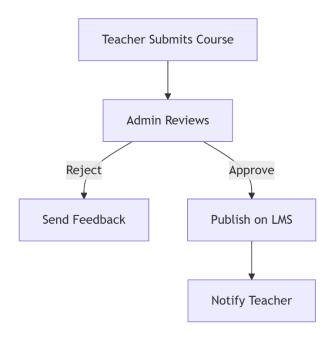
Action	Admin	Sub- Admin	Details
Generate Checklists	✓	✓	Country-specific requirements.

3.6 Reports & Analytics

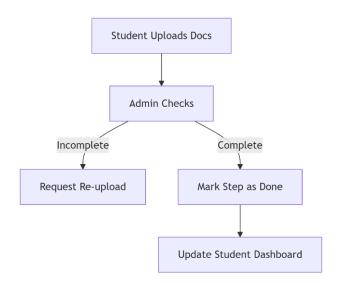
Report Type	Admin	Sub-Admin	Details
Enrollment Stats	✓	×	Course-wise student counts.
Revenue (Paid Courses)	✓	×	Payment history, refunds.
Visa Success Rate	✓	×	Country-wise approval metrics.

4. Admin Workflow Examples

4.1 Course Approval Flow



4.2 Visa Document Verification



5. Permission Hierarchy

Feature	Admin	Sub-Admin
Create Sub-Admins	✓	×
Delete Content	✓	×
Financial Reports	✓	×
Edit System Settings	✓	×

6. UI Mockup Description

- **Dashboard Home**: Cards showing totals (e.g., "Active Students: 250").
- Data Tables: Filterable lists (e.g., "Pending Visa Applications").
- Action Buttons: "Approve", "Reject", "Edit" next to each item.

Teacher Registration & Profile

1.1 Registration (Mandatory Fields)

Field	Type	Validation Rules	Example
Email	String	Unique, valid format	teacher@example.com
Password	String	8+ chars, 1 number, 1 special char	Pass@1234
Full Name	String	Min. 2 words (First + Last)	John Doe
Phone	String	Country code + valid number	+8801712345678

1.2 Profile (Optional Fields)

Field	Type	Notes
Specialization	String	e.g., "IELTS Instructor"
Qualifications	Text	Degrees/certifications
Experience	Text	Years, previous institutions
CV	File	PDF upload (max 5MB)
Certificates	File[]	Multiple PDFs (e.g., TEFL, TESOL)
Photo	Image	Profile picture (200x200px)

Email Verification Required for login.

2. Teacher Dashboard & Privileges

2.1 Dashboard Components

Section	Functionality
My Courses	View/Create/Edit courses (Free/Paid/Live).
Students	List of enrolled students, progress tracking.
Assignments	Grade quizzes, assignments.
Live Classes	Schedule Zoom/Meet links, mark attendance.

2.2 Privileges

Action	Allowed?	Details
Create Courses	✓	Free/Paid/Live (requires admin approval).
Edit Own Courses	✓	Update content, materials.
Delete Courses	×	Only admins can delete.
Grade Assignments	✓	Provide marks/feedback.
Schedule Live Classes	✓	Share links, set timings.
View Student Progress	✓	Track completion rates, scores.

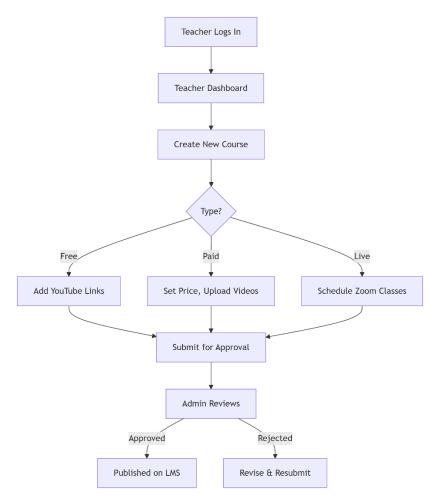
3. Course Creation Workflow

3.1 Fields for Course Creation

Field	Type	Mandatory?	Example
Title	String	Yes	"IELTS Advanced Course"
Description	Rich Text	Yes	WYSIWYG editor with images.
Туре	Dropdown	Yes	Free / Paid / Live
Price	Float	If Paid	₻5000

Field	Type	Mandatory?	Example
Duration	String	Yes	"8 weeks"
Banner	Image	Yes	1200x600px (JPEG/PNG).
Zoom Link	String	If Live	https://zoom.us/j/123456

3.2 Flowchart: Teacher Course Management

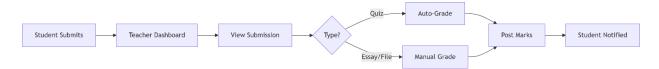


4. Assignment & Grading System

4.1 Assignment Types

Type	Format	Teacher Actions
Quiz	MCQ/Checkbox	Set correct answers, auto-grade.
Essay	Text Submission	Manual grading + feedback.
File Upload	PDF/DOCX (e.g., SOP)	Annotate, add comments.

4.2 Flowchart: Grading Process

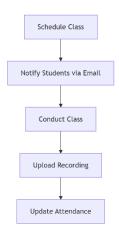


5. Live Class Management

5.1 Steps to Schedule

- 1. Set Date/Time: From dashboard calendar.
- 2. Share Link: Zoom/Google Meet URL.
- 3. Take Attendance: Mark present/absent students post-session.

5.2 Data Flow



Student Registration & Profile

1.1 Registration (Mandatory Fields)

Field	Type	Validation Rules	Example
Email	String	Unique, valid format	student@example.com
Password	String	8+ chars, 1 number, 1 special char	Pass@1234
Full Name	String	Min. 2 words (First + Last)	John Doe
Phone	String	Country code + valid number	+8801712345678

1.2 Profile (Optional Fields)

Field	Type	Notes
Emergency Phone	String	Contact for emergencies
Last Degree	String	e.g., "HSC" or "BSc"
Institute	String	Previous school/university
Address	Text	Current address

Email Verification Required for login.

2. Student Dashboard & Privileges

2.1 Dashboard Components

Section	Functionality
All Courses	Browse and enroll in courses (Free/Paid/Live).
My Courses	Access enrolled courses, track progress.
Assignments	Submit quizzes/essays, view grades.
Consultation	Request study abroad advice.
Visa Process	Upload documents, track application steps.
Certificates	Download course completion certificates.
Assignments Consultation Visa Process	Submit quizzes/essays, view grades. Request study abroad advice. Upload documents, track application steps.

2.2 Student Privileges

Allowed?	Details
✓	Instant access after enrollment.
✓	Payment gateway integration (SSLCommerz).
✓	Via Zoom/Google Meet links.
✓	Text, file uploads, or MCQ quizzes.
✓	Marks and teacher feedback.
	✓ ✓

Action	Allowed?	Details
Request Consultation	✓	For study abroad guidance.
Upload Visa Documents	✓	Passport, SOP, financial proofs.
Rate & Review Courses	✓	1-5 stars with comments.

3. Course Enrollment & Learning

3.1 Enrollment Process

1. **Browse Courses**: Filter by type (Free/Paid/Live).

2. Enroll:

o Free: Immediate access.

 \circ **Paid**: Complete payment \rightarrow access.

o Live: Schedule added to dashboard.

3.2 LMS (Learning Management System)

Feature	Description
Video Lessons	Watch pre-recorded tutorials (or YouTube links for free courses).
Download Materials	PDFs, slides, sample papers.
Progress Tracker	% completion, time spent, quiz scores.
Discussion Forum	Ask questions to teachers/peers.

4. Assignment Submission

4.1 Types of Assignments

Type	Format	Submission Method
Quiz	MCQ/Checkbox	Auto-submit on completion.
Essay	Text Box	Copy-paste or type directly.
File Upload	PDF/DOCX/PPTX (max 10MB)	Drag-and-drop or browse.

4.2 Grading & Feedback

- Instant Results: For quizzes (MCQ).
- **Teacher Feedback**: For essays/file uploads (within 3-5 days).

5. Visa Process Tracking

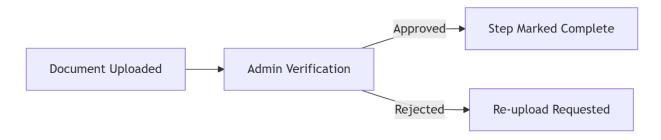
5.1 Steps for Students

1. **Request Consultation**: From dashboard.

2. Upload Documents:

- o Passport copy.
- o SOP (Statement of Purpose).
- o Bank statements.

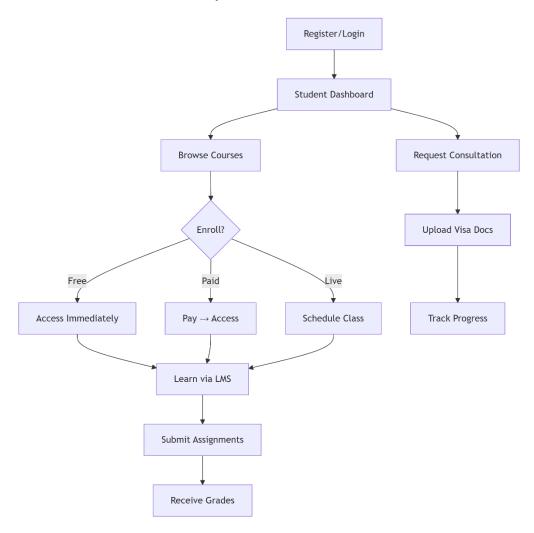
3. Track Progress:



5.2 Dashboard View

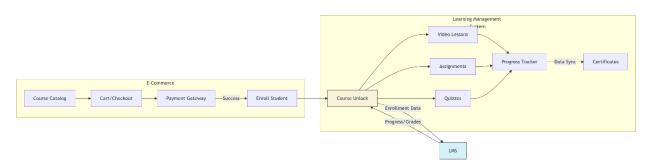
- Checklist: Completed/pending steps (e.g., "Interview Scheduled").
- Notifications: Email/alert when admin updates status.

6. Flowchart: Student Journey



E-Commerce & LMS Integration: Detailed Workflow Diagram

System Relationship Diagram



Key Interactions Explained

1. E-Commerce \rightarrow LMS Flow

- 1. Course Discovery: Student browses courses on e-commerce platform.
- 2. **Purchase**: Completes payment for paid courses (free courses auto-enroll).

3. Enrollment Sync:

- o E-commerce sends enrollment data to LMS via API.
- o LMS unlocks course content for the student.

2. LMS → E-Commerce Feedback Loop

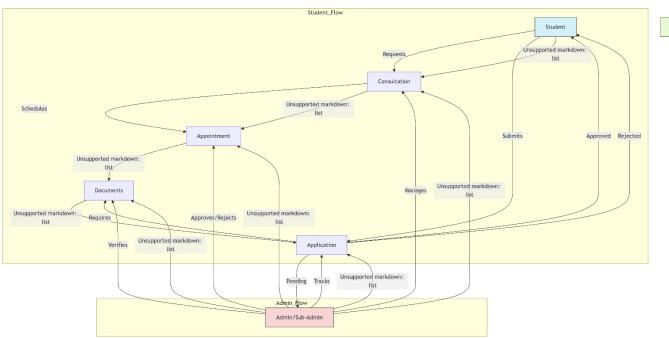
- Progress Tracking: LMS sends completion % and quiz scores back to e-commerce.
- Certification: Issues certificates upon course completion (visible in e-commerce profile).

Data Fields Exchanged

E-Commerce $\rightarrow LMS$ $LMS \rightarrow E$ -Commerce

Student ID	Course Completion %
Course ID	Quiz/Assignment Scores
Payment Status	Certificate Status
Enrollment Date	Last Access Time

Application Tracking, Appointment & Consultation System: Relational Flowchart



Key Interactions Explained

1. Student Actions

1. Request Consultation:

o Submits purpose (e.g., "Visa Help") via form.

2. Schedule Appointment:

o Chooses available slot from admin's calendar.

3. Upload Documents:

o Passport, academic records, etc.

4. Track Application:

o Real-time status (Pending/Approved/Rejected).

2. Admin/Sub-Admin Actions

1. Manage Requests:

o Approve/reject consultations based on availability.

2. Verify Documents:

o Mark as "Complete" or request re-upload.

3. Update Application:

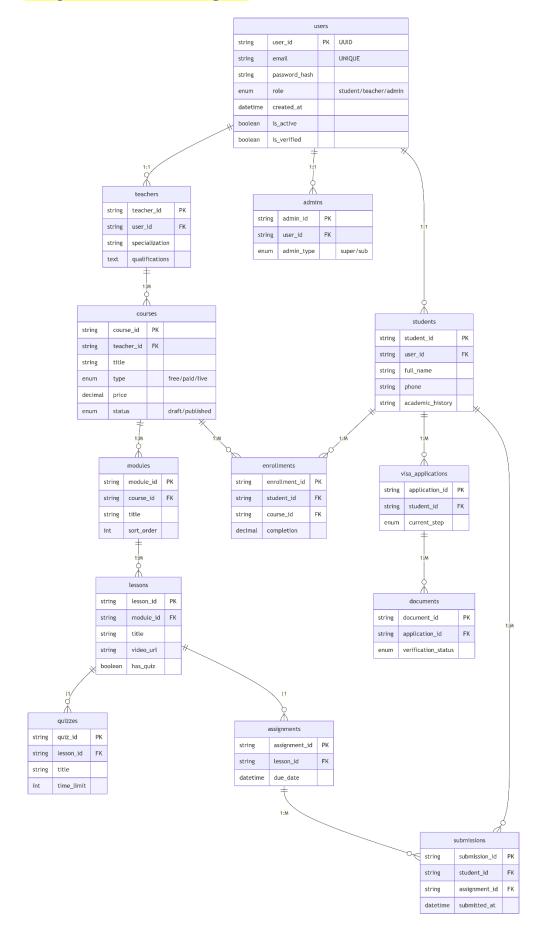
C,AP,A,D

o Move visa steps (e.g., "Interview Scheduled").

4. Generate Reports:

o Track all student applications.

Complete Database ER Diagram



Key Components Explained

1. Core Tables

- users: Base table for all login credentials
- students/teachers/admins: Role-specific extensions
- courses: Central course repository with pricing
- modules/lessons: Hierarchical content organization

2. Assessment System

- quizzes: Auto-graded assessments
- assignments: Manual evaluation tasks
- **submissions**: Student work repository

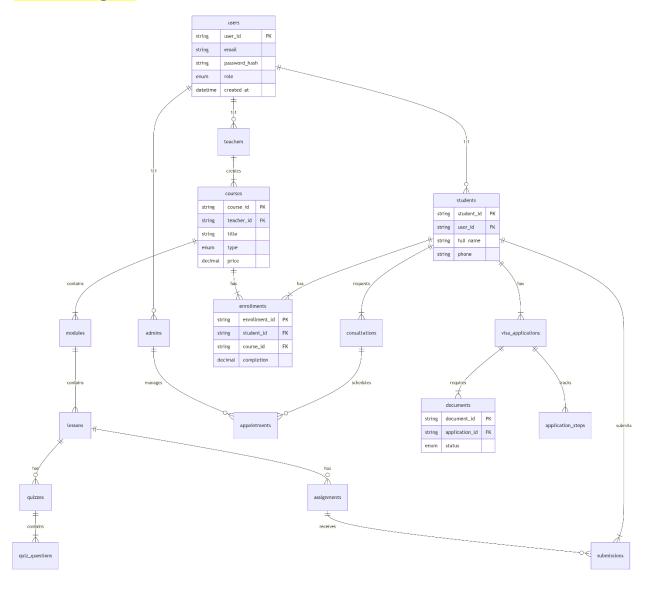
3. Visa Processing

- visa_applications: Tracks student progress
- **documents**: Manages required paperwork

Technical Specifications

- 1. **Primary Keys**: UUID strings for all tables
- 2. Relationships:
 - o 1:1 for user role inheritance
 - o 1:M for course hierarchies
 - o M:M resolved via junction tables (e.g., enrollments)

RDBMS Diagram



Key Fixes Applied:

- 1. Simplified Syntax: Removed special characters in relationship definitions
- 2. **Standardized Notation**: Used ||--|{ for one-to-many and ||--o{ for one-to-one
- 3. Reduced Attributes: Kept only essential fields for clarity
- 4. Proper Indentation: Ensured consistent spacing