

1.Certificate_types

filed_name	type	rule	remarks
Id	integer	required	
certificate_name	text	required	
certificate_description	text	nullable	
is_active	Boolean	required	

certificate_requests

filed_name	type	rule	remarks
id	integer	required	
student_id	bigint	required	Primary key of student table
certificate_type_id	bigint	required	Primary key of certificate table
request_date	Date	required	Certificate date
purpose	text	Not required	Purpose of request
status	enum	required	ENUM('Pending', 'Approved', 'Rejected', 'Issued') DEFAULT 'Pending',
requested_by	bigint	required	Request by parent/staff/student
approved_by	bigintiger	required	Who approve the request
approved_date		required	Certificate approved date
issued_by	Big integer	required	Primary key of issued person
issued_date	date	required	Approved date
remarks	text	Not required	Add in both case request or approval

USECASES

USECASE ID	00
Name	Seed Certificate Types
Actor(s)	System (Developer/Deployment Script)
Trigger	Application is first installed or database is reset/re-migrated
Preconditions	1 Database is set up and migrations have been run. 2 Seeder file with certificate types exists in <code>database/seeder</code> directory. 3 The developer has execution rights for artisan commands.
Main Flow	1. Developer runs <code>php artisan db:seed --class=CertificateTypesSeeder</code> . 2. System reads predefined certificate types from seeder file. 3. Inserts each certificate type into <code>certificate_types</code> table with: <ul style="list-style-type: none">- Name (e.g., Bonafide, Transfer Certificate, Conduct Certificate)- Description- Template file path- Active status (<code>TRUE</code>). 4. Seeder confirms records were inserted successfully.
Alternative Flow / Exceptions	- E1: Table already has records → Seeder may skip duplicates or overwrite depending on logic. - E2: Template file path missing → Seeder logs error and skips that record. - E3: Database connection error → Seeder execution fails.
Postconditions	- <code>certificate_types</code> table contains the predefined set of certificate types ready for use in requests. - Admin and users can see these types in dropdown lists when making requests.

USECASE ID	02
Name	Request Certificate
Actor(s)	student/parent /direct office
Trigger	Student/Parent needs an official school certificate
Preconditions	<ol style="list-style-type: none"> 1. Students exist in ERP with valid status. 2. Requested certificate type exists in certificate_types and is Active
Main Flow	<ol style="list-style-type: none"> 1. The actor logs into the ERP portal (web or mobile). 2. Navigates to "Certificate Requests". 3. Click "New Request". 4. Selects certificate type from dropdown. 5. Enter purpose/reason. 6. Submit the request. 7. System saves request in certificate_requests with Pending status, logs timestamp and requested_by.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: Certificate type not active → system shows error. - E2: Student has outstanding fees (if business rule applies) → block request with reason. - E3: Network failure before saving → prompt retry.
Postconditions	<ul style="list-style-type: none"> - Request stored in DB. - Notification sent to Admin. - Requests visible in the student portal.

USECASE ID	03
Name	List and filter all certificate lists
Actor(s)	student/parent /direct office
Trigger	Admin/staff/patient/student opens the “Certificate Requests” list page(based on the permission we adjust the visibility)
Preconditions	<ul style="list-style-type: none"> - Actor has permission to view requests. - At least one record exists in <u>certificate_requests</u>.
Main Flow	<ol style="list-style-type: none"> 1. logs in. 2. Open the "Certificate Requests" page. 3. The system loads all requests. 4. Admin applies filters: <ol style="list-style-type: none"> a) By status d) By date range. 5. Filtered results shown. 6. Admin selects a request to review.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: No matches → Show “No requests found”. - E2: Invalid filter values → Show validation error. - E3: Large data load timeout → Show partial results.
Postconditions	<ul style="list-style-type: none"> - Filtered list ready for further action

USECASE ID	04
Name	Review the certificates
Actor(s)	student/parent /direct office
Trigger	School Admin / Designated Staff
Preconditions	Admin selects a pending request from the list
Main Flow	<ol style="list-style-type: none"> 1. Admin opens request. 2. Reviews student data, request details, and eligibility. 3. Chooses: <ol style="list-style-type: none"> a) Approve → Set Approved, record approver and date. b) Reject → Set Rejected, enter remarks. 4. System updates status. 5. Notification sent to requester.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: Missing student details → Cannot approve. - E2: Type retired after request → Auto reject.
Postconditions	<ul style="list-style-type: none"> - Approved requests proceed to generation. - Rejected requests closed.

USECASE ID	05
Name	Generate certificates
Actor(s)	School Admin/staff
Trigger	School Admin / Designated Staff
Preconditions	Request is approved and ready for document preparation
Main Flow	<ul style="list-style-type: none"> - Status = Approved. - Certificate type has a valid template. - Student data complete.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: Missing template → Error. - E2: Merge field mismatch → Highlight missing data. - E3: File save error → Retry.
Postconditions	<ul style="list-style-type: none"> - Certificate ready for issuance.

USECASE ID	06
Name	Issue Certificate
Actor(s)	School Admin / Staff
Trigger	Certificate is generated and ready for delivery
Preconditions	<ul style="list-style-type: none"> - File exists in certificate_attachments. - Status = Approved or Ready to Issue.
Main Flow	<ol style="list-style-type: none"> 1. Admin opens request. 2. Verifies certificate. 3. Marks as Issued. 4. Records issuer and date. 5. If digital → Sends link via portal/email. 6. If physical → Prints and records collection.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: File corrupted → Regenerate. - E2: Student without ID proof → Delay issuance. - E3: Email bounce → Retry delivery.
Postconditions	<ul style="list-style-type: none"> - Certificate delivered. - Status updated to Issued.

USECASE ID	07
Name	View Certificate History
Actor(s)	Student / Parent / Admin
Trigger	User wants to see past or current requests

Preconditions	<ul style="list-style-type: none"> - The user has permission to view history. - At least one record exists for that user.
Main Flow	<ol style="list-style-type: none"> 1. The user logs in. 2. Opens "Certificate History". 3. The system loads request records. 4. Displays type, dates, status, and download link (if available). 5. Users can click to view full details.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: No records → Show “No requests yet”. - E2: File missing for issued certificate → Show “Contact admin”.
Postconditions	Use can track all certificate actively

USECASE ID	08
Name	Reject Certificate Request
Actor(s)	Admin / Authorized Staff
Trigger	Admin decides that a certificate request cannot be processed due to invalid data, ineligibility, or policy violations.
Preconditions	<ul style="list-style-type: none"> - Certificate request exists in certificate_requests table. - Request status is Pending or Under Review. - Admin has permission to reject requests.

Main Flow	<ol style="list-style-type: none"> 1. Admin navigates to certificate request list . 2. Opens a request in review mode . 3. Selects "Reject" option. 4. Enters rejection reason in a required text field. 5. System updates request status to Rejected. 6. System stores rejection reason in request record. 7. System notifies student/parent via ERP portal or email about the rejection.
Alternative Flow / Exceptions	<ul style="list-style-type: none"> - E1: Admin tries to reject an already approved or rejected request → System shows error message. - E2: Rejection reason left blank → System prompts to enter reason. - E3: Notification service fails → Request is still rejected, but error logged for notification failure.
Postconditions	<ul style="list-style-type: none"> - Request status is updated to Rejected. - Reason is recorded for audit/history. - Student/parent sees rejection status and reason in UC-05 (View Certificate History).

UI not completed