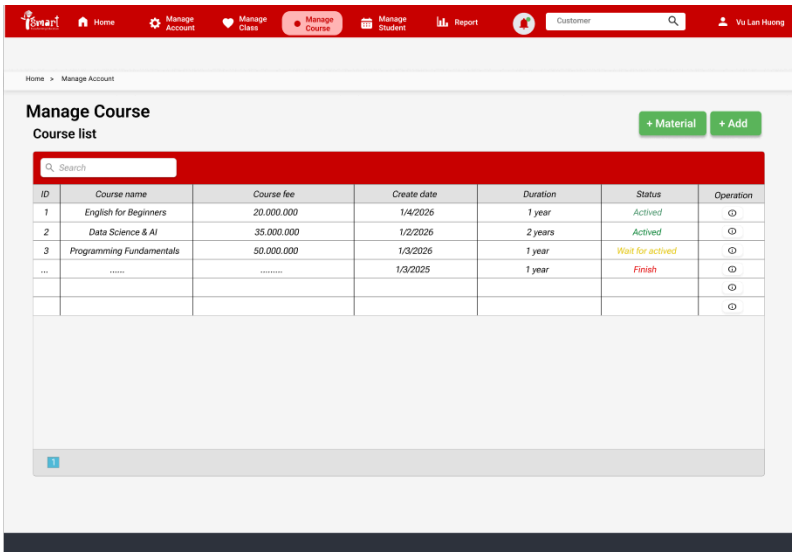
Admin

1. **USER STORY: Admin View Courses**

Card	- As an Admin - I want to view and search courses, including viewing course details - So that I can monitor and access full course information
Summary	This user story allows Admin Admin can view course list, search courses, and view detailed course information, the course status to help Admin distinguish between active and draft courses.
In-Scope:	- View the course list, search by keyword, and view specific course details.
Out of scope	- Modify course data.
Trigger	Admin clicks the [Manage Course] menu on the Sidebar.
Pre-condition	- Admin must be logged into the system - Admin role must have permission to manage courses - System database must be available
Business rule and error message	- System must retrieve course data from database **Error:** *Unable to load course data*" - If no courses exist in the system **Error:** No courses available in the system. - Duration must be greater than 0 **Error:** *Duration must be greater than 0.* - Fee must be a valid positive number **Error:** *Course fee must be greater than 0.* - Course cannot be deleted if there are classes associated with the course **Error:** *Course cannot be deleted because classes are associated with it.*

<table>
<tr><td></td><td>- created_by must reference the logged-in Admin (User.user_id)</td></tr>
<tr><td>Screen design</td><td> 
</td></tr>
<tr><td>Screen description</td><td>Course Management screen allows Admin to view and search course information.

Includes:

• Search bar (search by course name)
• Course table:
  ○ Course Name
  ○ Duration
  ○ Fee
  ○ Status
  ○ Created At
• Click row / View button → open course detail
• Add New button
• (i) to Edit button and edit button

<table>
<tr><th>Name</th><th>Description</th><th>Type</th><th>Min</th><th>Max</th><th>Maxlength</th><th>Required</th></tr>
<tr><td>course_name</td><td>Name of the course</td><td>varchar(100)</td><td>-</td><td>-</td><td>100</td><td>yes</td></tr>
</table></td></tr>
</table>

description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	0	-	-	yes
status	Course status	varchar	-	-	20	yes
created_at	Created date	datetime	-	-	-	System

Acceptance Criteria

AC1 – View Course List

Given Admin opens Course Management page
When the system loads
Then system displays list of courses

AC2 – Display Course Information

Given course list is displayed
Then each course shows course name, duration, fee, and created date

AC3 – View Course Details

Given Admin is on course list
When Admin selects a course
Then system displays course details

AC4 – Search Course

Given Admin enters keyword
When performing search
Then system displays matching courses

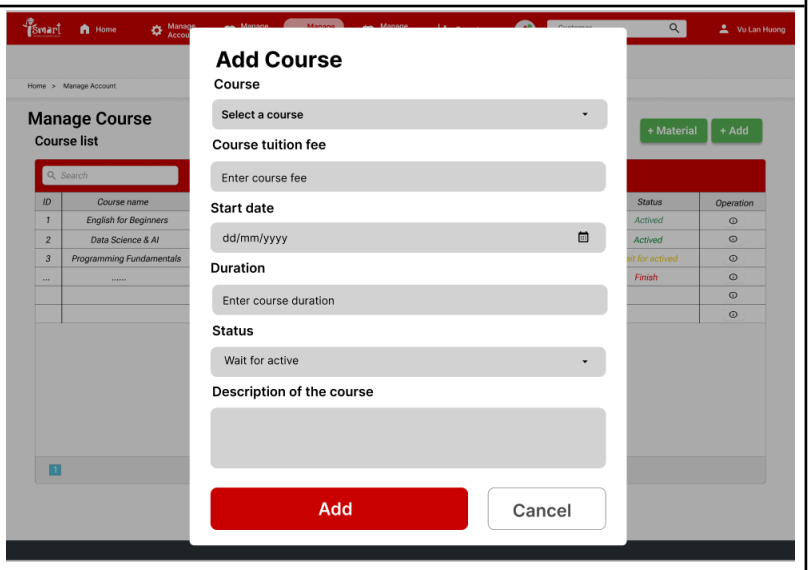
AC5 – No Course Available

Given no courses exist
When page loads

	Then system shows message as defined in Business Rules **AC6 – No Search Result** Given no courses match search When search is performed Then system shows message as defined in Business Rules **AC7 – Navigate to Create Course** Given Admin clicks "Add New" Then system navigates to Create Course screen **AC8 – System Error Handling** Given system fails to load data When page loads Then system shows error as defined in Business Rules

2. **USER STORY: Admin Create Courses**

Card	- As an Admin - I want to create a new course - So that the system can store course information for future class creation
Summary	This user story allows Admin to create a new course by entering required information such as course name, duration, and fee, and status.
In-Scope:	- Input and validate new course details (name, duration, fee, operational status).

Out of scope	- Assign classes or learning materials directly.
Trigger	Admin clicks the [Add] button on the Course Management screen.
Pre-condition	- Admin must be logged into the system - Admin role must have permission to manage courses - System database must be available
Business rule and error message	- Course name must not be empty **Error:** Course name is required - Course name must be unique **Error:** Course name already exists. - Duration must be greater than 0 **Error:** *Duration must be greater than 0.* - Fee must be a valid positive number **Error:** *Course fee must be greater than 0.* - *System must successfully save data* **Error:** *Unable to save course data.* - *Course status must be selected* **Error:** "Course status is required."
Screen design	
Screen description	Create Course screen allows Admin to enter course information.

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar(100)	-	-	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	1	-	-	yes
status	Course status	varchar	-	-	20	yes

Acceptance Criteria

AC1 – Open Create Course Screen

Given Admin is on Course Management page
When Admin clicks "Add "
Then system displays Create Course screen

AC2 – Create Course Successfully

Given Admin enters valid course information
When Admin clicks Create
Then system saves course successfully
And redirects to Course List

AC3 – Course Name Required

Given Admin leaves course_name empty
When submitting form
Then system shows error as defined in Business Rules

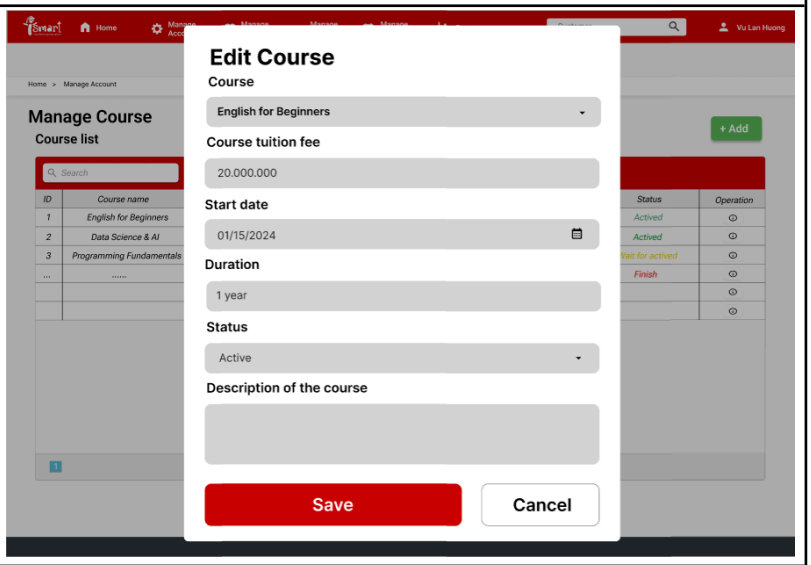
AC4 – Duplicate Course Name

Given course name already exists
When Admin submits form

	Then system shows error as defined in Business Rules **AC5 – Invalid Duration** Given Admin enters duration ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Fee** Given Admin enters fee ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC7 – Status Selection Required** Given Admin does not select a status When submitting form Then system shows error as defined in Business Rules. **AC8 – Cancel Create Course** Given Admin is on Create Course screen When Admin clicks Cancel Then system returns to Course List And no data is saved **AC9 – Data Persistence** Given course is created successfully When Admin returns to Course List Then new course appears in the list **AC10 – System Error Handling** Given system fails to save data When Admin submits form Then system shows error as defined in Business Rules

3. USER STORY: Admin Update Courses

Card	- As an Admin - I want to update course information and its operational status - So that courses data remains accurate and up to date
Summary	This user story allows Admin to edit existing course information such as course name, description, duration, and fee and its operational status.
In-Scope:	- Modify existing course details and toggle its operational status.
Out of scope	- Delete the course
Trigger	Admin clicks the [Edit] icon on a specific course record.
Pre-condition	- Admin is logged in. - Admin must have permission to manage classes - At least one course must exist in the system - System database must be available
Business rule and error message	- Course name must not be empty **Error:** *"Course name is required."* Course name must be unique (excluding current course) **Error:** *"Course name already exists."* Duration must be greater than 0 **Error:** *"Duration must be greater than 0."* *Fee must be a positive number* ***Error:*** *"Course fee must be greater than 0."* *System must successfully update data* ***Error:*** *"Unable to update course data."*

Screen design	
Screen description	Update Course screen allows Admin to modify existing course information. Includes: • Course Name input field (editable) • Description textarea • Duration input field • Fee input field • Status dropdow • **Save button** (update course) • **Cancel button** (return to Course List)

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar(100)	-	-	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	1	-	-	yes

status	Course status	varchar	-	-	20	yes

Acceptance Criteria

AC1 – Open Update Course Screen

Given Admin is on Course Management page
When Admin clicks Edit on a course
Then system displays Update Course screen
And shows existing course data

AC2 – Update Course Successfully

Given Admin updates valid course information
When Admin clicks Save
Then system updates course successfully
And redirects to Course List

AC3 – Course Name Required

Given Admin clears course_name
When submitting form
Then system shows error as defined in Business Rules

AC4 – Duplicate Course Name

Given another course already has the same name
When Admin submits form
Then system shows error as defined in Business Rules

AC5 – Invalid Duration

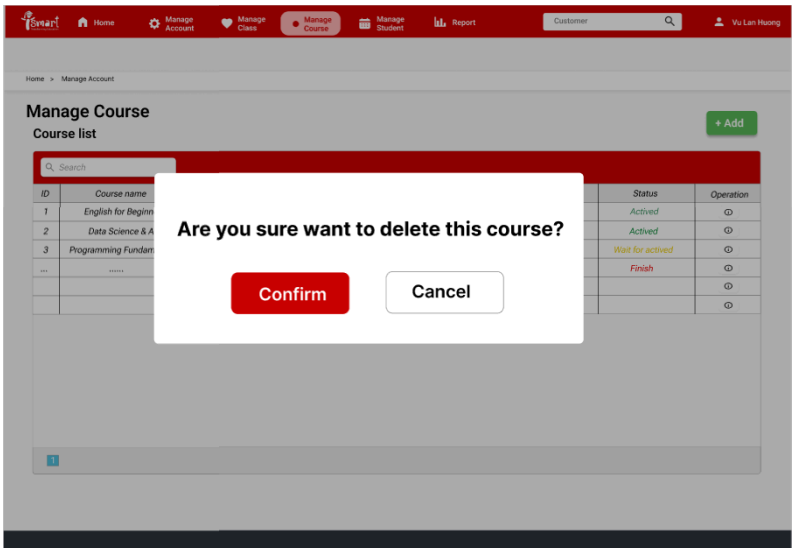
Given Admin enters duration ≤ 0
When submitting form

	Then system shows error as defined in Business Rules **AC6 – Invalid Fee** Given Admin enters fee ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC7 – Change Course Status** Given Admin changes the status from Active to Inactive (or vice versa) When Admin clicks Save Then system updates the status and reflects it in the Course List. **AC8 – Cancel Update** Given Admin is on Update Course screen When Admin clicks Cancel Then system returns to Course List And no changes are saved **AC9 – Data Persistence After Update** Given course is updated successfully When Admin returns to Course List Then updated information is displayed **AC10 – System Error Handling** Given system fails to update data When Admin submits form Then system shows error as defined in Business Rules

4. USER STORY: Admin Delete Courses

Card	- As an Admin - I want to delete a course - So that outdated or unused courses are removed from the system
Summary	This user story allows Admin to delete a course from the system, with validation to ensure no related classes exist.
In-Scope:	- Delete a course with strict constraint validation (blocked if classes exist).
Out of scope	- Recover deleted courses.
Trigger	Admin clicks the [Delete] icon on a specific course record.
Pre-condition	- Admin must be logged into the system - Admin role must have permission to manage courses - System database must be available
Business rule and error message	- Admin must confirm before deletion **Message:** "Are you sure you want to delete this course?" - Course cannot be deleted if there are classes associated **Error:** "Course cannot be deleted because classes are associated with it." - System must successfully delete course **Error:** "Unable to delete course."

Screen design



Screen description

Course Management screen allows Admin to delete a course.

Includes:

- Course table with list of courses
- **Delete button** for each course
- **Confirmation dialog** before deletion:
  - Confirm button
  - Cancel button

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar(100)	-	-	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	1	-	-	yes
status	Course status	varchar	-	-	20	yes

Acceptance Criteria

AC1 – Trigger Delete Action

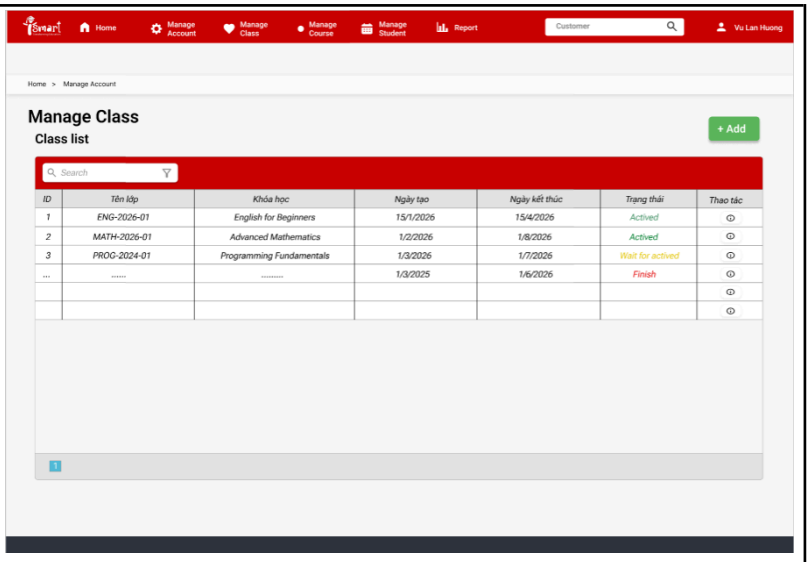
	Given Admin is on Course Management page When Admin clicks Delete on a course Then system displays confirmation dialog **AC2 – Confirm Deletion** Given confirmation dialog is displayed When Admin clicks Confirm Then system proceeds with deletion **AC3 – Cancel Deletion** Given confirmation dialog is displayed When Admin clicks Cancel Then system closes dialog And no data is deleted **AC4 – Delete Course Successfully** Given course has no associated classes When Admin confirms deletion Then system deletes course And removes it from the list **AC5 – Delete Course Failed (Constraint)** Given course has associated classes When Admin attempts to delete Then system shows error as defined in Business Rules

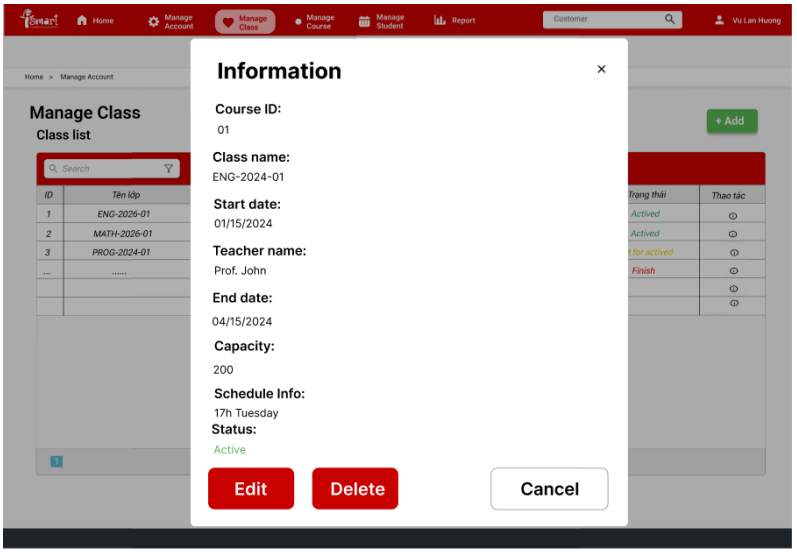
	AC6 – Data Persistence After Delete Given course is deleted successfully When course list reloads Then deleted course no longer appears **AC7 – System Error Handling** Given system fails to delete course When Admin confirms deletion Then system shows error as defined in Business Rules **AC8 – UI Update After Delete** Given deletion is successful When system updates UI Then course list refreshes automatically

5. USER STORY: Admin View Classes

Card	- As an Admin

	- I want to view and search classes including viewing class details - So that I can monitor and access full course information
Summary	This user story allows Admin to view the list of classes, search/filter classes, and access detailed information of each class.
In-Scope:	- View class list, view detailed information, search by name, and filter by course.
Out of scope	- Modify class data.
Trigger	Admin clicks the [Manage Class] menu on the Sidebar.
Pre-condition	- Admin must be logged into the system - Admin role must have permission to manage courses - System database must be available
Business rule and error message	-System must retrieve class data from database **Error:** "Unable to load class data" If no classes exist in the system **Message:** "*No classes available*" If search/filter returns no result **Message:** "*No classes found*"
Screen design	





Screen description

Class Management screen allows Admin to view and search class information.

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes
teacher_id	assigned teacher	varchar	1	100	100	no

start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – View Class List

Given Admin opens Class Management page
When the system loads
Then system displays list of classes

AC2 – Display Class Information

Given class list is displayed
Then each class shows class name, course name, teacher name, start date, end date, capacity, schedule info and status.

AC3 – View Class Details

Given Admin is on class list
When Admin selects a class
Then system displays detailed class information

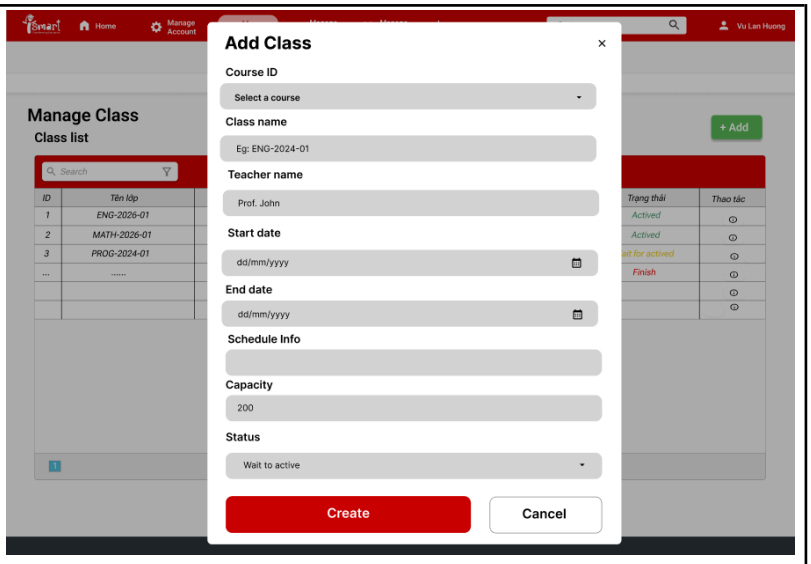
	AC4 – Search Class Given Admin enters keyword When performing search Then system displays matching classes **AC5 – Filter Class by Course** Given Admin selects a course in filter When filter is applied Then system displays classes belonging to that course **AC6 – No Class Available** Given no classes exist When page loads Then system shows message as defined in Business Rules **AC7 – No Search/Filter Result** Given no classes match search/filter When action is performed Then system shows message as defined in Business Rules **AC8 – Navigate to Create Class**

	Given Admin clicks "Add" Then system navigates to Create Class screen **AC9 – System Error Handling** Given system fails to load class data When page loads Then system shows error as defined in Business Rules

6. **USER STORY: Admin Create Classes**

Card	- As an Admin - I want to create a new class - So that courses can have scheduled classes for students
Summary	This user story allows Admin to create a new class by assigning it to a course and providing necessary information such as class name, teacher, start date, capacity, and schedule information.
In-Scope:	- Input class details, schedule info, and assign the class to a specific course.
Out of scope	
Trigger	Admin clicks the [Add New] button on the Class Management screen.
Pre-condition	- Admin must be logged into the system - At least one course exists in the system. - System database must be available

Business rule and error message	Class must belong to an existing course **Error:** *"Selected course does not exist."* Class name must not be empty **Error:** *"Class name is required."* Class name must be unique within the same course **Error:** *"Class name already exists for this course."* Teacher name must not be empty **Error:** *"Teacher name is required."* Start date must be today or a future date **Error:** *"Start date must be today or a future date."* Capacity must be greater than 0 **Error:** *"Capacity must be greater than 0."* *Schedule info must not be empty* ***Error:*** *"Schedule information is required."* System must successfully save class **Error:** *"Unable to create class."*
Screen design	



Screen description

Create Class screen allows Admin to enter class information.

Includes:

- **Course dropdown** (select course)
- Class Name input field
- Teacher Name input field
- Start Date picker
- Capacity input field
- Schedule Info input field
- **Create button** (submit form)
- **Cancel button** (return to Class List)

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes
teacher_id	assigned teacher	varchar	1	100	100	no

start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – Open Create Class Screen

Given Admin is on Class Management page
When Admin clicks "Add New"
Then system displays Create Class screen

AC2 – Create Class Successfully

Given Admin enters valid class information
When Admin clicks Create
Then system saves class successfully
And redirects to Class List

AC3 – Class Name Required

Given Admin leaves class_name empty
When submitting form
Then system shows error as defined in Business Rules

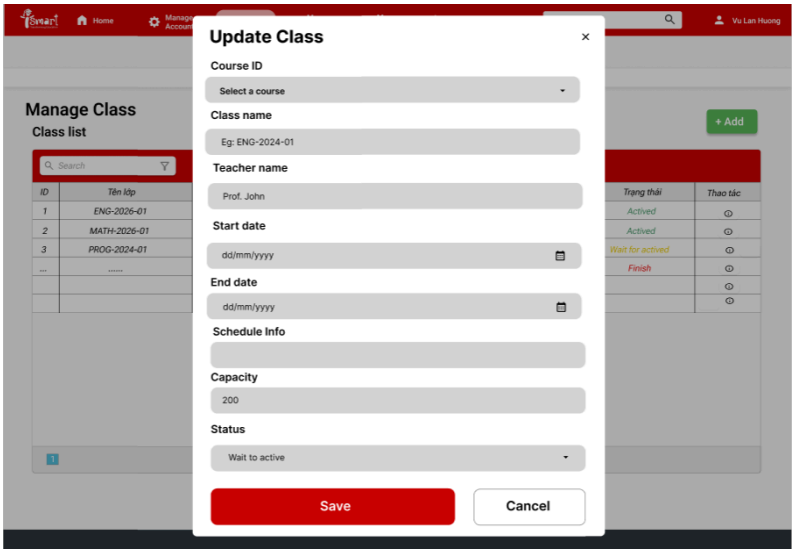
	AC4 – Duplicate Class Name in Course Given class name already exists in selected course When submitting form Then system shows error as defined in Business Rules **AC5 – Invalid Course Selection** Given selected course does not exist When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Start Date** Given Admin selects a past date When submitting form Then system shows error as defined in Business Rules **AC7 – Invalid Capacity** Given Admin enters capacity ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC8 – Schedule Info Required** Given Admin leaves schedule_info empty

	When submitting form Then system shows error as defined in Business Rules. **AC9 – Cancel Create Class** Given Admin is on Create Class screen When Admin clicks Cancel Then system returns to Class List And no data is saved **AC10 – System Error Handling** Given system fails to save class When submitting form Then system shows error as defined in Business Rules

7. **USER STORY: Admin Update Classes**

Card	- As an Admin - I want to update a new class - So that class data remains accurate and classes can be activated for student enrollment.
Summary	This user story allows Admin to edit existing class information such as class name, assigned course, teacher, start date, capacity, schedule info, and change the class status.
In-Scope:	- Modify existing class details, schedule, capacity, and change operational status.

Out of scope	- Delete the class.
Trigger	Admin clicks the [Edit] icon on a specific class record.
Pre-condition	- Admin must be logged into the system - Admin role must have permission to manage courses - System database must be available
Business rule and error message	Class must belong to an existing course **Error:** *"Selected course does not exist."* Class name must not be empty **Error:** *"Class name is required."* Class name must be unique within the same course **Error:** *"Class name already exists for this course."* Teacher name must not be empty **Error:** *"Teacher name is required."* Start date must be today or a future date **Error:** *"Start date must be today or a future date."* Capacity must be greater than 0 **Error:** *"Capacity must be greater than 0."* *Schedule info must not be empty (Đã thêm)* ***Error:*** *"Schedule information is required."* System must successfully save class **Error:** *"Unable to create class."*

Screen design	
Screen description	Update Class screen allows Admin to modify existing class information. Includes: • **Course dropdown** (editable) • Class Name input field • Teacher dropdown • Start Date picker • Capacity input field • **Save button** (update class) • **Cancel button** (return to Class List)

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes

teacher_id	assigned teacher	varchar	1	100	100	no
start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – Open Update Class Screen

Given Admin is on Class Management page
When Admin clicks Edit on a class
Then system displays Update Class screen
And shows existing class data

AC2 – Update Class Successfully

Given Admin updates valid class information
When Admin clicks Save
Then system updates class successfully
And redirects to Class List

AC3 – Class Name Required

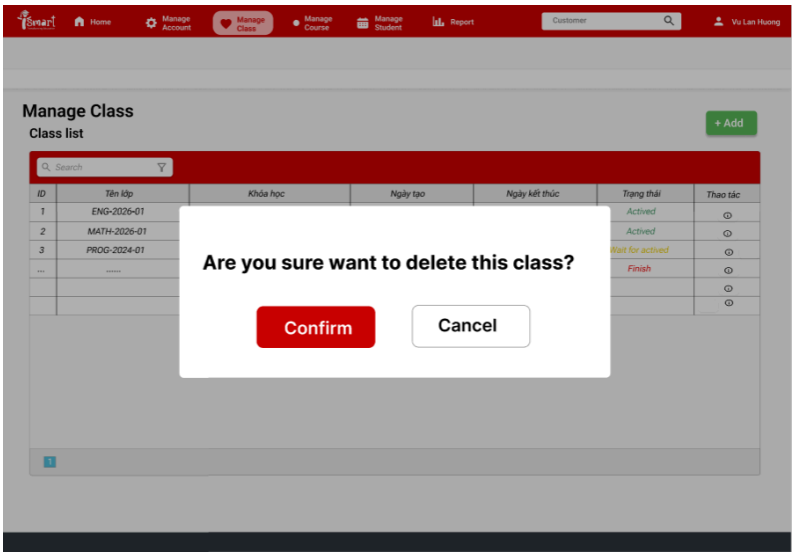
	Given Admin clears class_name When submitting form Then system shows error as defined in Business Rules **AC4 – Duplicate Class Name in Course** Given another class in the same course has the same name When submitting form Then system shows error as defined in Business Rules **AC5 – Invalid Course Selection** Given selected course does not exist When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Start Date** Given Admin selects a past date When submitting form Then system shows error as defined in Business Rules **AC7 – Invalid Capacity** Given Admin enters capacity ≤ 0 When submitting form

	Then system shows error as defined in Business Rules **AC8 – Schedule Info Required** Given Admin clears schedule_info When submitting form Then system shows error as defined in Business Rules. **AC9 – Activate Class / Update Status** Given class status is currently "Wait to active" When Admin changes Status to "Active" and clicks Save Then system updates the status successfully and makes the class available for enrollment operations. **AC10 – Cancel Update** Given Admin is on Update Class screen When Admin clicks Cancel Then system returns to Class List And no changes are saved **– System Error Handling** Given system fails to update class When submitting form

	Then system shows error as defined in Business Rules

8. USER STORY: Admin Delete Classes

Card	- As an Admin - I want to delete a class - So that unused or invalid classes are removed from the system
Summary	This user story allows Admin to delete a class, with validation to ensure no students are enrolled in the class.
In-Scope:	- Delete a class with strict constraint validation (blocked if students are enrolled).
Out of scope	- Recover deleted classes.
Trigger	Admin clicks Delete button on a class in Class Management screen
Pre-condition	- Admin must be logged into the system - Admin role must have permission to manage courses - System database must be available
Business rule and error message	Admin must confirm before deletion **Message:** "*Are you sure you want to delete this class?*" Class cannot be deleted if students are enrolled **Error:** "*Class cannot be deleted because students are enrolled.*" System must successfully delete class **Error:** "*Unable to delete class.*"

Screen design	

Screen description	Class Management screen allows Admin to delete a class.
	
	Includes:
	
	• Class table with list of classes
	• **Delete button** for each class
	• **Confirmation dialog**:
	  ○ Confirm button
	  ○ Cancel button

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes

teacher_id	assigned teacher	varchar	1	100	100	no
start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – Trigger Delete Action

Given Admin is on Class Management page
When Admin clicks Delete on a class
Then system displays confirmation dialog

AC2 – Confirm Deletion

Given confirmation dialog is displayed
When Admin clicks Confirm
Then system proceeds with deletion

AC3 – Cancel Deletion

Given confirmation dialog is displayed
When Admin clicks Cancel

	Then system closes dialog And no data is deleted **AC4 – Delete Class Successfully** Given class has no students enrolled When Admin confirms deletion Then system deletes class And removes it from the list **AC5 – Delete Class Failed (Constraint)** Given class has students enrolled When Admin attempts to delete Then system shows error as defined in Business Rules **AC6 – Data Persistence After Delete** Given class is deleted successfully When class list reloads Then deleted class no longer appears **AC7 – System Error Handling** Given system fails to delete class When Admin confirms deletion Then system shows error as defined in Business Rules

	AC8 – UI Update After Delete Given deletion is successful When system updates UI Then class list refreshes automatically

9. **USER STORY: Admin View Material**

Card	- As an Admin - I want to view the list of materials for a specific course - So that I can manage and review learning resources associated with that course.
Summary	This user story allows Admin to view all materials within a specific course, including searching by material title and viewing material details.
In-Scope:	- View and search materials strictly associated with a specific course.
Out of scope	
Trigger	Admin clicks the specific course and [Add] button Materail
Pre-condition	- Admin must be logged into the system - Materials may or may not exist in the selected course. - System database must be available
Business rule and error message	- System must retrieve material data from database for the currently selected course only. **Error:** "Unable to load material data."

<table>
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- If no materials exist for this course

Message: "No materials found for this course."

- Search keyword must match material title

Error: System returns matching results within the current course.

- If search returns no result

Message: "No materials match your search."

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<tr>
<td>Screen design</td>
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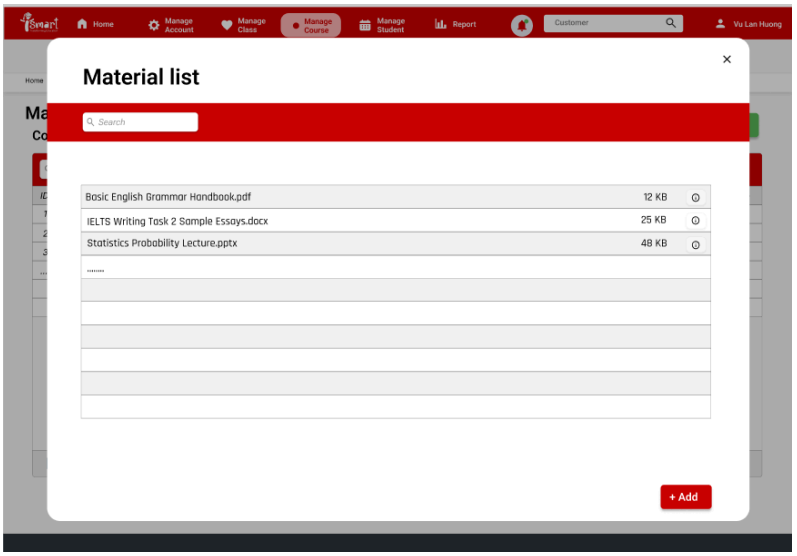


</td>
</tr>
<tr>
<td>Screen description</td>
<td>

Material Management tab allows Admin to view and search materials within a specific course.

<table>
<tr><th>Name</th><th>Description</th><th>Type</th><th>Min</th><th>Max</th><th>Maxlength</th><th>Required</th></tr>
<tr><td>title</td><td>Name of the material</td><td>varchar</td><td>1</td><td>255</td><td></td><td>yes</td></tr>
<tr><td>file_format</td><td>Format (PDF, PPTX, etc.)</td><td>varchar</td><td>1</td><td>10</td><td>10</td><td>yes</td></tr>
<tr><td>file_size</td><td>Size of the file</td><td>varchar</td><td>1</td><td>20</td><td>-</td><td>yes</td></tr>
<tr><td>file_url</td><td>Link to access file</td><td>varchar</td><td>-</td><td>-</td><td></td><td>yes</td></tr>
</table>

</td>
</tr>
</table>

<table>
<tr><td></td><td>
<table>
<tr><td>keyword</td><td>Search title</td><td>varchar</td><td>0</td><td>100</td><td>100</td><td>no</td></tr>
<tr><td>created_at</td><td>Creation date</td><td>datetime</td><td>-</td><td>-</td><td>-</td><td>yes</td></tr>
</table>
</td></tr>
<tr><td>Acceptance Criteria</td><td>

AC1 – View Contextual Material List

Given Admin opens the [All Materials] tab in Course Details

When the system loads

Then the system displays the list of materials for that specific course.

AC2 – Display Material Information

Given the material list is displayed

Then each material row includes title, file format, file size, and created date.

AC3 – View Material Detail

Given Admin selects a material

When Admin clicks View or selects a row

Then the system displays detailed information of the material.

AC4 – Search Material Within Course

Given Admin enters a keyword

When Admin performs search

Then the system displays materials matching the keyword within the current course.

</td></tr>
</table>

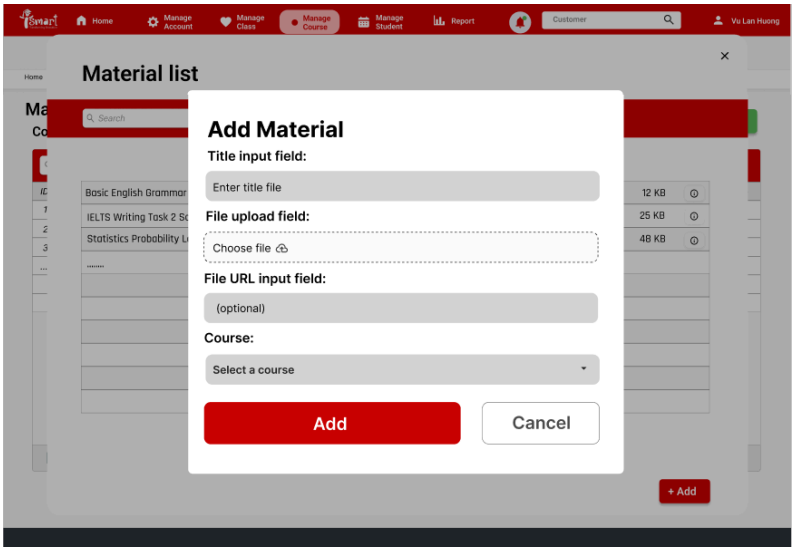
	AC5 – No Material Found (Search) Given no materials match the search keyword When the system returns results Then the system displays message as defined in Business Rules. **AC6 – Empty Material State** Given there are no materials in the selected course When Admin opens the tab Then the system displays message as defined in Business Rules. **AC7 – Data Load Failure** Given system fails to retrieve material data When loading the tab Then the system displays error as defined in Business Rules.

10. USER STORY: Admin Create Material

Card	- As an Admin - I want to create a new material for a specific course - So that learning resources can be added to the course and used for teaching or consultation.
Summary	This user story allows Admin to add new learning materials (either by uploading a file or providing a

	URL) while working within the Material tab of a specific course.
In-Scope:	- Upload file or input URL, auto-extract metadata (format/size), and link to a course.
Out of scope	
Trigger	Admin clicks the specific course and [Add] button Materail
Pre-condition	- Admin must be logged into the system - A specific course is currently selected. - System database must be available
Business rule and error message	- Material title must not be empty. **Error:** "Material title is required." - Material title length must be between 1 and 255 characters. **Message:** "Material title must be between 1 and 255 characters." - At least one source must be provided (File OR URL). **Error:** "Please upload a file or provide a URL." - If a file is uploaded, it must be in supported formats (PDF, DOC, DOCX, PPT, PPTX). **Message:** "Unsupported file format." - System must successfully save material data. **Message:** "Unable to create material."

Screen design



Screen description

Create Material screen (often a Modal/Popup within the Course Detail Hub).

Name	Description	Type	Min	Max	Maxlength	Required
title	Name of the material	varchar	1	255		yes
file_format	Format (PDF, PPTX, etc.)	varchar	1	10	10	system
file_size	Size of the file	varchar	1	20	-	system
file_url	Link to access file	varchar	-	-		system
created_at	Creation date	datetime	-	-	-	system
course_id	Linked course	int	-	-	-	system

Acceptance Criteria

AC1 – Open Create Material Screen

Given Admin is in the Material tab of a Course

When Admin clicks "Add New Material"

	Then system displays the Create Material screen/modal. **AC2 – Create Material Successfully** Given Admin provides valid title and a file (or URL) When Admin clicks Add Then system saves the material, extracts file_format and file_size, and associates it with the current course. **AC3 – Title Validation** Given Admin leaves the title empty or exceeds 255 characters When submitting Then system shows error as defined in Business Rules. **AC4 – Conditional Source Validation** Given both File upload and URL fields are empty When submitting Then system shows: "Please upload a file or provide a URL." **AC5 – File Format Validation** Given Admin uploads a file with an unsupported extension (e.g., .exe, .png) When submitting

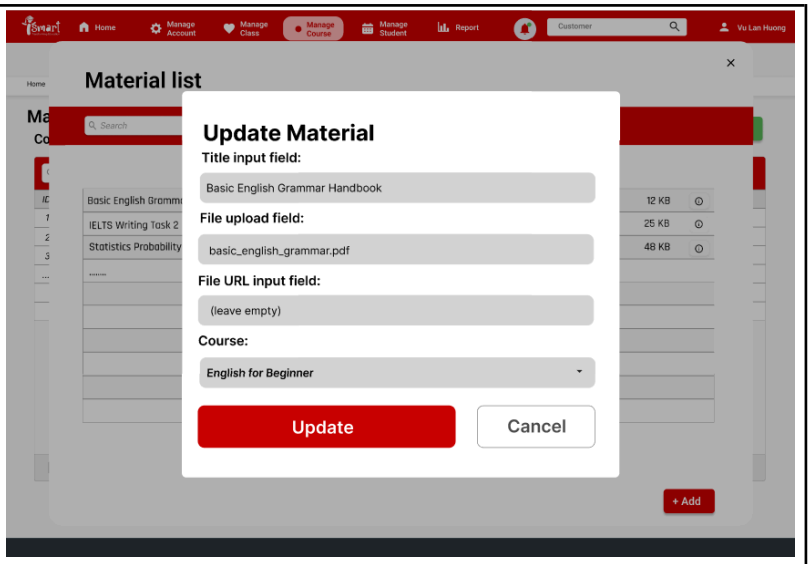
	Then system shows error: "Unsupported file format." **AC6 – Automatic Metadata Extraction** Given a successful file upload Then system must automatically identify the format (e.g., "PDF") and size (e.g., "4.5 MB") to store in the database. **AC7 – Cancel Action** Given Admin is on the Create Material screen When Admin clicks Cancel Then system closes the screen and no data is saved.

11. USER STORY: Admin Update Material

Card	- As an Admin - I want to update material information for a specific course - So that learning resources remain accurate, up-to-date, and correctly formatted for all users.
Summary	This user story allows Admin to modify existing material details, replace files, or update URLs while staying within the context of the specific course's material tab.
In-Scope:	- Replace file/URL, update title, and auto-re-extract metadata.
Out of scope	- Delete the material.

Trigger	Admin clicks the [Edit] icon on a specific material record.
Pre-condition	- Admin must be logged into the system - The material exists and is associated with the currently viewed course. - System database must be available
Business rule and error message	- Material title must not be empty. **Error:** "Material title is required." - Material title length must be between 1 and 255 characters. **Message:** "Material title must be between 1 and 255 characters." - At least one source must be provided (File OR URL). **Error:** "Please upload a file or provide a URL." - If a file is uploaded, it must be in supported formats (PDF, DOC, DOCX, PPT, PPTX). **Message:** "Unsupported file format." - System must successfully save material data. **Message:** "Unable to update material."

Screen design



Screen description

Update Material screen (Modal/Popup).

Name	Description	Type	Min	Max	Maxlength	Required
title	Name of the material	varchar	1	255		yes
file_format	Format (PDF, PPTX, etc.)	varchar	1	10	10	yes
file_size	Size of the file	varchar	1	20	-	yes
file_url	Link to access file	varchar	-	-		yes
keyword	Search title	varchar	0	100	100	no
created_at	Creation date	datetime	-	-	-	yes

Acceptance Criteria

AC1 – Open Update Screen with Data

Given Admin clicks Edit on a material

Then system displays Update Material modal with all current information pre-filled.

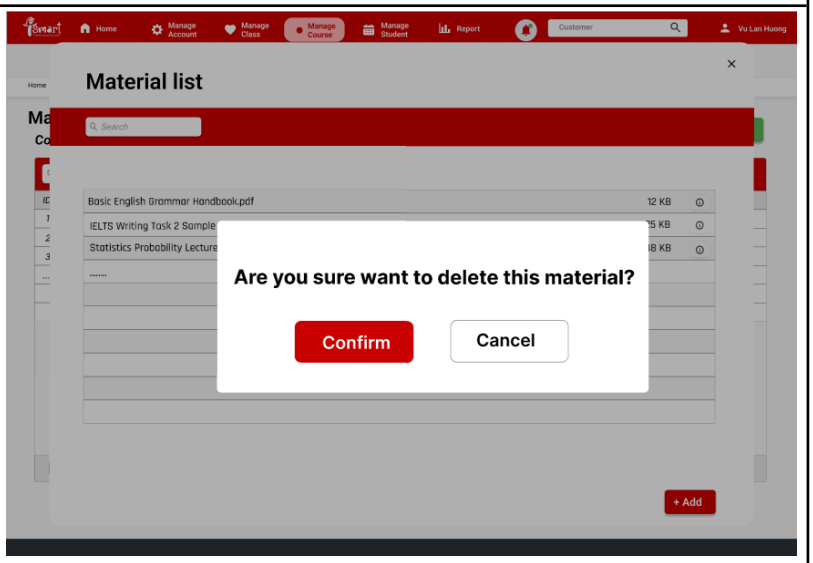
AC2 – Update Title Successfully

	Given Admin modifies the title and clicks Save Then system updates the title and keeps other file data unchanged. **AC3 – Replace File Successfully** Given Admin uploads a new file When Admin clicks Save Then system replaces the old file, re-extracts the new file_format and file_size, and updates the database. **AC4 – Switch from File to URL** Given Admin removes the existing file and provides a new URL When Admin clicks Save Then system updates the source to the URL and sets file_format to "Link" (or similar). **AC5 – Title Validation** Given Admin clears the title field When submitting Then system shows error: "Material title is required." **AC6 – File/Source Persistence** Given Admin attempts to remove both the file and the URL When submitting

	Then system shows error as defined in Business Rules. **AC7 – Cancel Changes** Given Admin makes changes but clicks Cancel Then the modal closes and the material remains in its original state. **AC8 – System Error Handling** Given system fails to update the database When submitting Then system shows error as defined in Business Rules.

12. Admin Delete Material

Card	- As an Admin - I want to delete a material - So that outdated or incorrect learning resources can be removed from the system
Summary	This user story allows Admin to delete an existing material from the system while ensuring data consistency
In-Scope:	- Permanently remove a material from a course.

Out of scope	- Recover deleted materials.
Trigger	Admin clicks the [Delete] icon on a specific material record.
Pre-condition	- Admin is logged into the system - Material exists in the system - System database is available
Business rule and error message	- Material must exist in the system → Error: **"Material does not exist."** - System must confirm before deletion → Message: **"Are you sure you want to delete this material?"** - Material deletion must be permanent (hard delete) - System must successfully delete material → Error: **"Unable to delete material."**
Screen design	
Screen description	Material Management screen includes:

Name	Description	Type	Min	Max	Maxlength	Required
title	Name of the material	varchar	1	255		yes
file_format	Format (PDF, PPTX, etc.)	varchar	1	10	10	yes
file_size	Size of the file	varchar	1	20	-	yes
file_url	Link to access file	varchar	-	-		yes
keyword	Search title	varchar	0	100	100	no
created_at	Creation date	datetime	-	-	-	yes

Acceptance Criteria

AC1 – Display Delete Option

Given material list is displayed
Then each material has a Delete button

AC2 – Trigger Delete Action

Given Admin clicks Delete on a material
When action is triggered
Then system displays confirmation dialog

AC3 – Confirm Delete Successfully

Given Admin confirms deletion
When system processes request
Then material is removed from the system
And no longer appears in the list

AC4 – Cancel Delete

Given confirmation dialog is displayed
When Admin clicks Cancel
Then system closes dialog
And no data is deleted

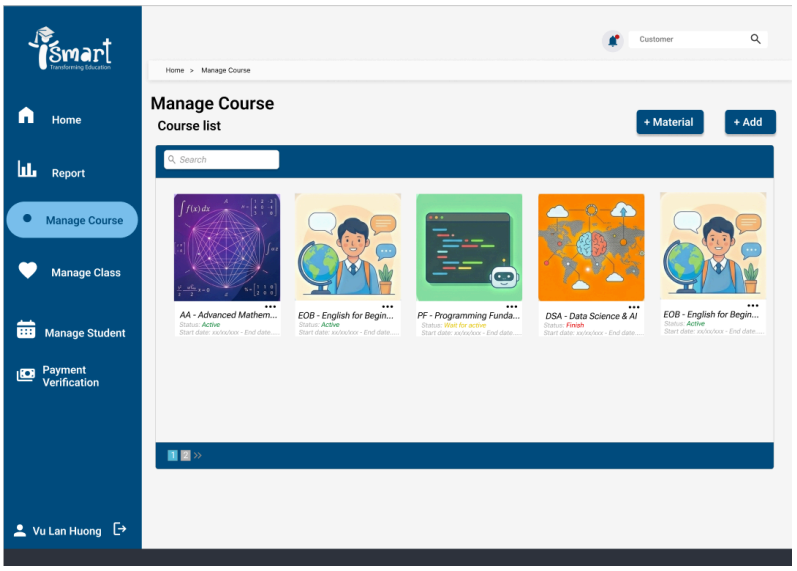
	AC5 – Material Not Found Given material does not exist When Admin attempts to delete Then system shows error as defined in Business Rules **AC6 – System Error Handling** Given system fails to delete material When Admin confirms deletion Then system shows error as defined in Business Rules **AC7 – Refresh Material List After Delete** Given material is deleted successfully When system updates UI Then material list is refreshed And deleted item is not displayed **AC8 – Multiple Delete Attempts** Given material has already been deleted When Admin attempts to delete again Then system shows error as defined in Business Rules **AC9 – Delete Without Affecting Other Data** Given material is deleted When system processes deletion Then no other materials or course data are affected

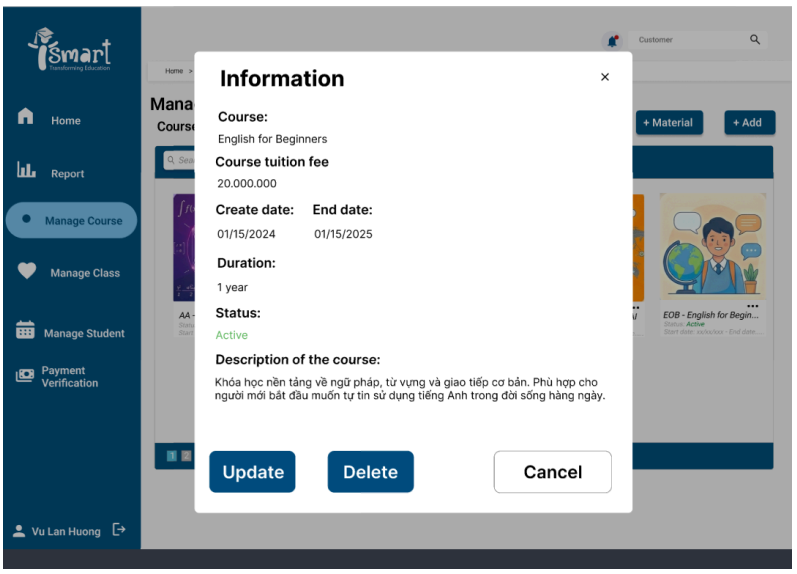
Staff

1. **USER STORY: Staff View Course**

Card	- As a Staff - I want to view and search courses - So that I can access course information for operations or consultation
Summary	This user story allows users to view the list of courses, search courses, and view detailed course information
In-Scope:	- View the course list, search by keyword, and view specific course details.
Out of scope	- Modify course data.
Trigger	Staff clicks the [Manage Course] menu on the Sidebar.
Pre-condition	- User is logged in - Courses exist in the system - System database is available
Business rule and error message	- System must retrieve course data from database → **Error:** "Unable to load course data." - Search keyword must be applied to course name → **Behavior:** return matching results - If no course matches search result → **Message:** "No courses found." - Session must be valid → **Error:** "Session expired. Please log in again."

Screen design





Screen description

Course List screen allows User to view and search courses.

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar(100)	-	-	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes

fee	Course tuition fee	Decimal	0	-	-	yes
status	Course status	varchar	-	-	20	yes
created_at	Created date	datetime	-	-	-	System

Acceptance Criteria

AC1 – View course list

Given Staff opens Course List page
When system loads
Then system displays list of courses

AC2 – Display Course Information

Given course list is displayed
When viewing the list
Then each course shows name, status, start date and end date

AC3 – View Course Detail

Given course list is displayed
When Staff clicks a course
Then system displays course detail

AC4 – Search Course

Given Staff enters keyword
When Staff clicks Search
Then system displays matching courses

AC5 – Search Result Accuracy

Given keyword matches course name
When search is performed
Then system returns correct results

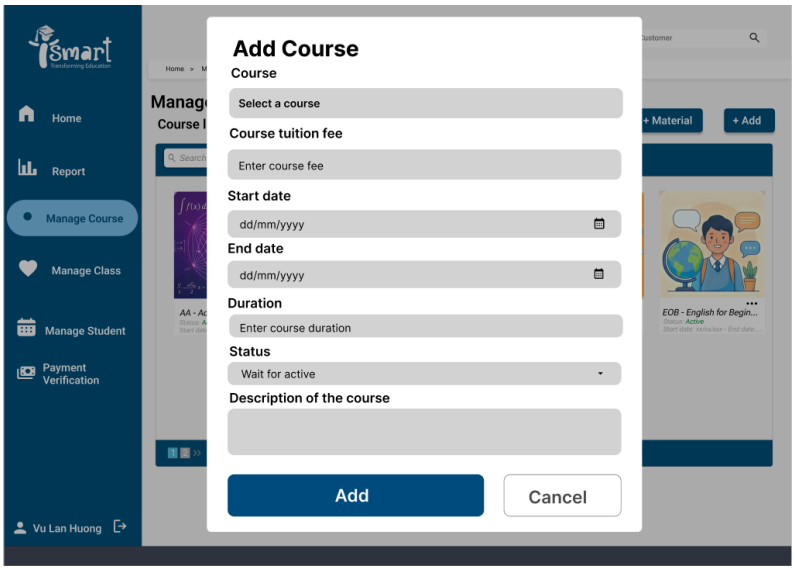
AC6 – No Course Found

	Given no course matches keyword When search is performed Then system shows message as defined in Business Rules **AC7 – Empty Course List** Given no courses exist in system When Staff opens Course List Then system shows message as defined in Business Rules **AC8 – Session Expired** Given session is expired When Staff accesses Course List Then system redirects to login page And shows error as defined in Business Rules **AC9 – System Error Handling** Given system fails to retrieve data When loading course list Then system shows error as defined in Business Rules

2. USER STORY: Staff Create Course

Card	- As an Staff - I want to create a new course - So that courses can be added for class organization and material assignment

Summary	This user story allows Staff to create a new course by entering required course information into the system
In-Scope:	- Input and validate new course details (name, duration, fee, operational status).
Out of scope	- Assign classes or learning materials directly.
Trigger	Staff clicks the [Add] button on the Course Management screen.
Pre-condition	- Staff is logged in - Staff has permission to create course - System database is available
Business rule and error message	- Course name must not be empty → **Error:** "Course name is required." - Course name must be unique in the system → **Error:** "Course name already exists." - Duration must be greater than 0 → **Error:** "Duration must be greater than 0." - Fee must be a valid positive number → **Error:** "Course fee must be greater than 0."

<table>
<tr><td></td><td>- System must successfully create course
→ Error: "Unable to create course."</td></tr>
<tr><td>Screen design</td><td> 
</td></tr>
<tr><td>Screen description</td><td>Create Course screen allows Staff to add new course information.
<table>
<tr><th>Name</th><th>Description</th><th>Type</th><th>Min</th><th>Max</th><th>Maxlength</th><th>Required</th></tr>
<tr><td>course_name</td><td>Name of the course</td><td>varchar (100)</td><td>-</td><td>-</td><td>100</td><td>yes</td></tr>
<tr><td>description</td><td>Description of the course</td><td>text</td><td>-</td><td>-</td><td>500</td><td>no</td></tr>
<tr><td>duration</td><td>Course duration</td><td>number</td><td>1</td><td>999</td><td>-</td><td>yes</td></tr>
<tr><td>fee</td><td>Course tuition fee</td><td>Decimal</td><td>0</td><td>-</td><td>-</td><td>yes</td></tr>
<tr><td>status</td><td>Course status</td><td>varchar</td><td>-</td><td>-</td><td>20</td><td>yes</td></tr>
<tr><td>created_at</td><td>Created date</td><td>datetime</td><td>-</td><td>-</td><td>-</td><td>System</td></tr>
</table></td></tr>
<tr><td>Acceptance Criteria</td><td>AC1 – Open Create Course Screen</td></tr>
</table>

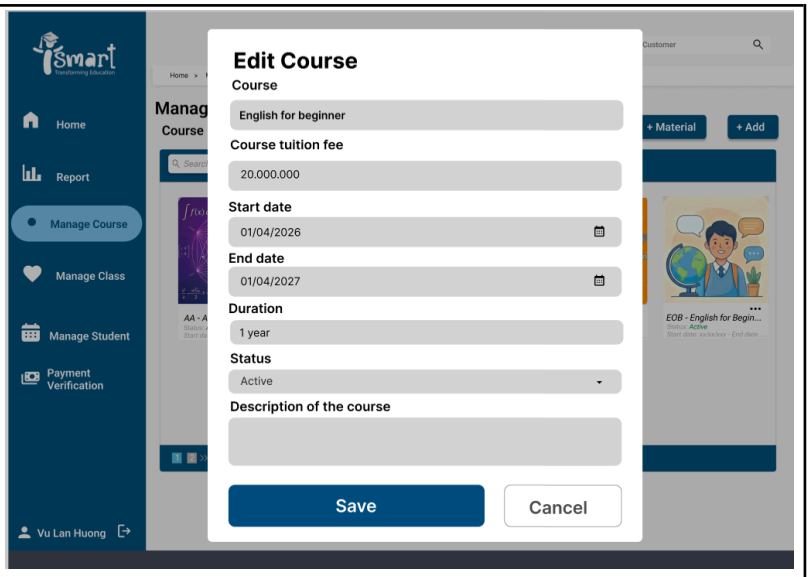
	Given Staff is on Course Management page When Staff clicks Add New Course Then system displays Create Course screen **AC2 – Create Course Successfully** Given Staff enters valid course information When Staff clicks Add Then system saves course successfully And redirects to Course List **AC3 – Course Name Required** Given Staff leaves course_name empty When submitting form Then system shows error as defined in Business Rules **AC4 – Duplicate Course Name** Given a course with the same name already exists When Staff submits form Then system shows error as defined in Business Rules **AC5 – Invalid Duration** Given Staff enters duration ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Fee** Given Staff enters invalid or negative fee When submitting form

	Then system shows error as defined in Business Rules **AC7 – Status Selection Required** Given Staff does not select a status When submitting form Then system shows error as defined in Business Rules. **AC8 – Cancel Create** Given Staff is on Create Course screen When Staff clicks Cancel Then system returns to Course List And no data is saved **AC9 – System Error Handling** Given system fails to save course When Staff submits form Then system shows error as defined in Business Rules

3. **USER STORY: Staff Update Course**

Card	- As an Staff - I want to update course information - So that course data remains accurate for class organization and material usage
Summary	This user story allows Staff to edit existing course information such as course name, description, duration, and fee

In-Scope:	- Modify existing course details and toggle its operational status.
Out of scope	
Trigger	Admin clicks the [Edit] icon on a specific course record.
Pre-condition	- Staff is logged in - Course exists in the system - Staff has permission to update course - System database is available
Business rule and error message	- Course name must not be empty → **Error:** "Course name is required." - Course name must be unique (excluding current course) → **Error:** "Course name already exists." - Duration must be greater than 0 → **Error:** "Duration must be greater than 0." - Fee must be a valid positive number → **Error:** "Course fee must be greater than 0." - System must successfully update course → **Error:** "Unable to update course."
Screen design	



Screen description

Update Course screen allows Staff to modify existing course information.

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar(100)	-	-	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	0	-	-	yes
status	Course status	varchar	-	-	20	yes
created_at	Created date	datetime	-	-	-	System

Acceptance Criteria

AC1 – Open Update Course Screen

Given Staff is on Course Management page
When Staff clicks Edit on a course
Then system displays Update Course screen
And shows existing course data

AC2 – Update Course Successfully

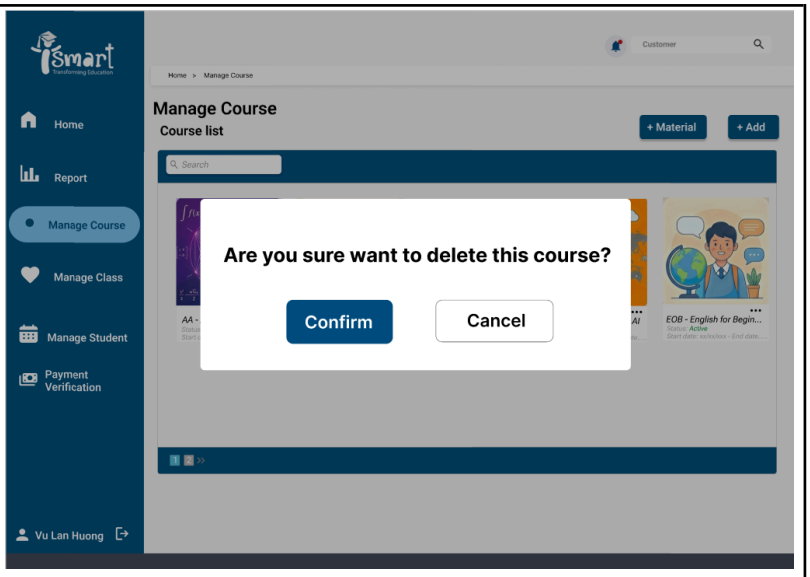
	Given Staff updates valid course information When Staff clicks Save Then system updates course successfully And redirects to Course List **AC3 – Course Name Required** Given Staff clears course_name When submitting form Then system shows error as defined in Business Rules **AC4 – Duplicate Course Name** Given another course with the same name exists When submitting form Then system shows error as defined in Business Rules **AC5 – Invalid Duration** Given Staff enters duration ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Fee** Given Staff enters invalid or negative fee When submitting form Then system shows error as defined in Business Rules **AC7 – Change Course Status** Given Staff changes the status from Active to Inactive (or vice versa)

	When Staff clicks Save Then system updates the status and reflects it in the Course List. **AC8 – Cancel Update** Given Staff is on Update Course screen When Staff clicks Cancel Then system returns to Course List And no changes are saved **AC9 – Data Persistence After Update** Given course is updated successfully When returning to Course List Then updated data is displayed correctly **AC10 – System Error Handling** Given system fails to update course When Staff submits form Then system shows error as defined in Business Rules

4. USER STORY: Staff Delete Course

Card	- As a Staff - I want to delete a course - So that unused or invalid courses are removed from the system
Summary	This user story allows Staff to delete a course with validation to ensure no classes are associated with it

In-Scope:	- Delete a course with strict constraint validation (blocked if classes exist).
Out of scope	- Recover deleted courses.
Trigger	Staff clicks the [Delete] icon on a specific course record.
Pre-condition	- Staff is logged in - Course exists in the system - Staff has permission to delete course - System database is available
Business rule and error message	- Staff must confirm before deletion → **Message:** "Are you sure you want to delete this course?" - Course cannot be deleted if there are classes associated with it → **Error:** "Course cannot be deleted because classes are associated with it." - System must successfully delete course → **Error:** "Unable to delete course."
Screen design	



Screen description

Course Management screen allows Staff to delete courses.

Includes:

- Course table
- **Delete button** for each course
- **Confirmation dialog**:
  - Confirm button
  - Cancel button

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar(100)	-	-	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	0	-	-	yes
status	Course status	varchar	-	-	20	yes
created_at	Created date	datetime	-	-	-	System

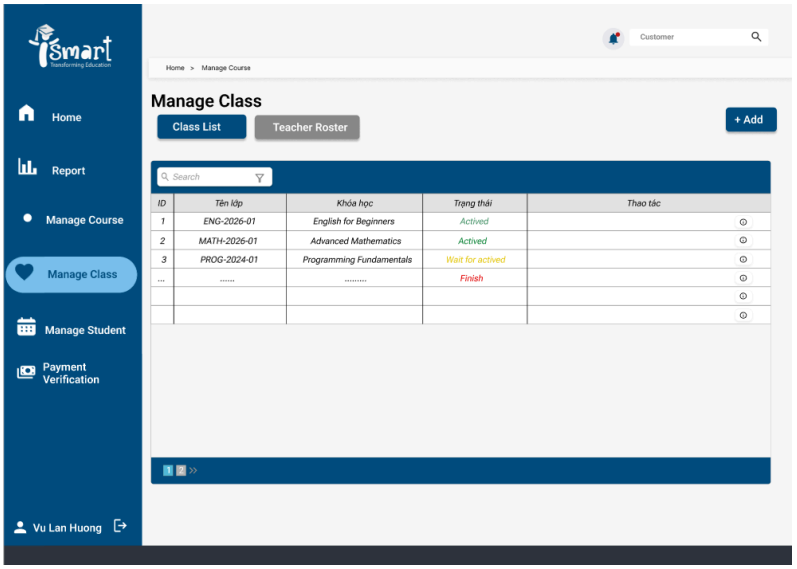
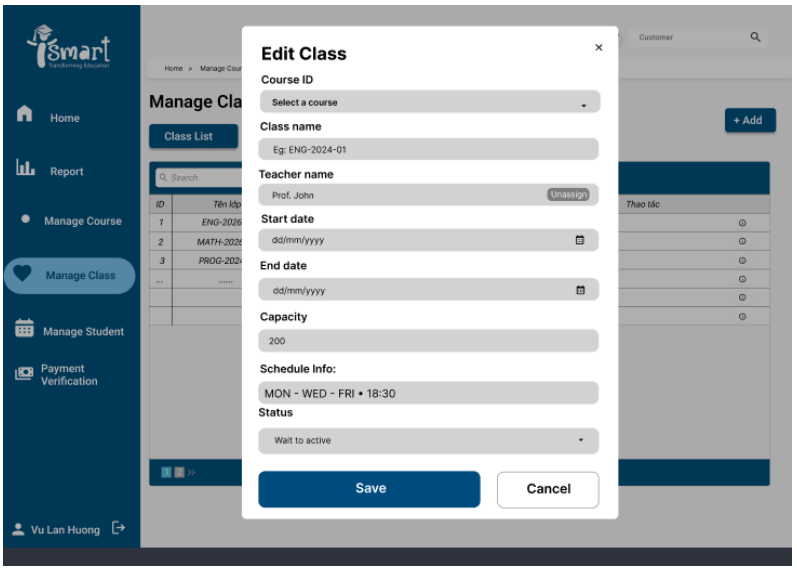
Acceptance Criteria	**AC1 – Trigger Delete Action** Given Staff is on Course Management page When Staff clicks Delete on a course Then system displays confirmation dialog **AC2 – Confirm Deletion** Given confirmation dialog is displayed When Staff clicks Confirm Then system proceeds with deletion **AC3 – Cancel Deletion** Given confirmation dialog is displayed When Staff clicks Cancel Then system closes dialog And no data is deleted **AC4 – Delete Course Successfully** Given course has no associated classes When Staff confirms deletion Then system deletes course And removes it from the list **AC5 – Delete Course Failed (Constraint)** Given course has associated classes When Staff attempts to delete Then system shows error as defined in Business Rules **AC6 – Data Persistence After Delete**

	Given course is deleted successfully When list reloads Then deleted course no longer appears **AC7 – System Error Handling** Given system fails to delete course When Staff confirms deletion Then system shows error as defined in Business Rules **AC8 – UI Update After Delete** Given deletion is successful When system updates UI Then course list refreshes automatically

5. USER STORY: Staff Create Class

Card	- As a Staff - I want to create a new class - So that classes can be organized under courses for student enrollment
Summary	This user story allows Staff to create a class associated with a course by entering required class information
In-Scope:	- Input class details, schedule info, and assign the class to a specific course.

Out of scope	
Trigger	Staff clicks the [Add New] button on the Class Management screen.
Pre-condition	- Staff is logged in - Staff has permission to manage classes - At least one course exists in the system - System database is available
Business rule and error message	- Class must belong to an existing course → **Error:** "Selected course does not exist." - Course must be selected → **Error:** "Please select a course." - Class name must not be empty → **Error:** "Class name is required." - Class name must be unique within the same course → **Error:** "Class name already exists for this course." - Teacher name must not be empty → **Error:** "Teacher name is required." - Capacity must be greater than 0 → **Error:** "Capacity must be greater than 0." - Start date must be today or future → **Error:** "Start date must be today or a future date." - *Schedule info must not be empty*

	Error: *"Schedule information is required."* - System must successfully save class **Error:** *"Unable to create class."*
Screen design	 
Screen description	Create Class screen allows Staffto enter class information.

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes
teacher_id	Name of assigned teacher	varchar	1	100	100	no
start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – Open Create Class Screen

Given Staff is on Class Management page
When Staff clicks "Add New"
Then system displays Create Class screen

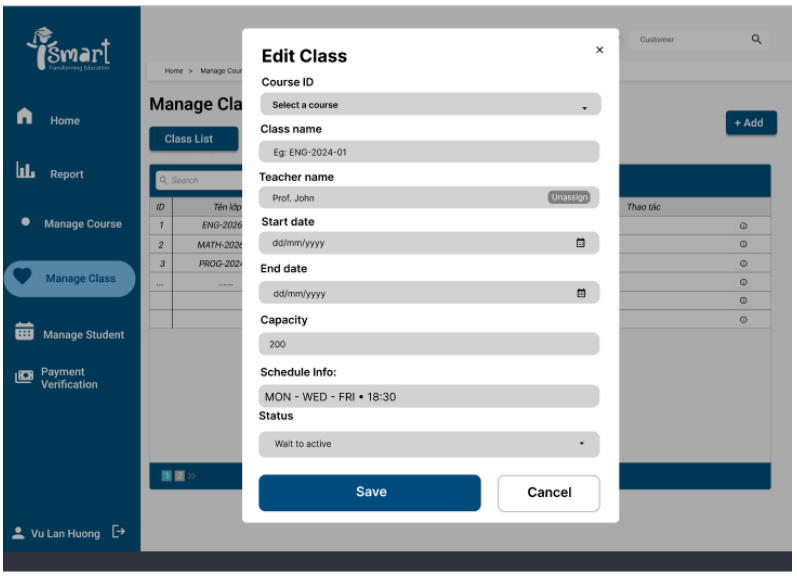
AC2 – Create Class Successfully

	Given Staff enters valid class information When Staff clicks Create Then system saves class successfully And redirects to Class List **AC3 – Class Name Required** Given Staff leaves class_name empty When submitting form Then system shows error as defined in Business Rules **AC4 – Duplicate Class Name in Course** Given class name already exists in selected course When submitting form Then system shows error as defined in Business Rules **AC5 – Invalid Course Selection** Given selected course does not exist When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Start Date** Given Staff selects a past date When submitting form

	Then system shows error as defined in Business Rules **AC7 – Invalid Capacity** Given Staff enters capacity ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC8 – Schedule Info Required** Given Staff leaves schedule_info empty When submitting form Then system shows error as defined in Business Rules. **AC9 – Cancel Create Class** Given Staff is on Create Class screen When Staff clicks Cancel Then system returns to Class List And no data is saved **AC10 – System Error Handling** Given system fails to save class When submitting form Then system shows error as defined in Business Rules

6. **USER STORY: Staff Update Class**

Card	- As a Staff - I want to update class information - So that class data remains accurate for course organization
Summary	This user story allows Staff to update existing class information such as class name, assigned course, teacher, start date, and capacity
In-Scope:	- Modify existing class details, schedule, capacity, and change operational status.
Out of scope	- Delete a class
Trigger	Staff clicks the [Edit] icon on a specific class record.
Pre-condition	- Staff is logged in - Class exists in the system - Staff has permission to update class - System database is available
Business rule and error message	- Class must belong to an existing course → **Error:** "Selected course does not exist." - Course must be selected → **Error:** "Please select a course." - Class name must not be empty → **Error:** "Class name is required." - Class name must be unique within the same course (excluding current class)

	→ **Error:** "Class name already exists for this course." - Teacher name must not be empty → **Error:** "Teacher name is required." - Capacity must be greater than 0 → **Error:** "Capacity must be greater than 0." - Start date must be today or future → **Error:** "Start date must be today or a future date." - *Schedule info must not be empty* ***Error:*** *"Schedule information is required."* - System must successfully update class → **Error:** "Unable to update class."
Screen design	
Screen description	Update Class screen allows Staff to modify existing class information. **Name** | **Description** | **Type** | **Min** | **Max** | **Maxlength** | **Required**

course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes
teacher_id	assigned teacher	varchar	1	100	100	no
start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – Open Update Class Screen

Given Staff is on Class Management page
When Staff clicks Edit on a class
Then system displays Update Class screen
And shows existing class data

AC2 – Update Class Successfully

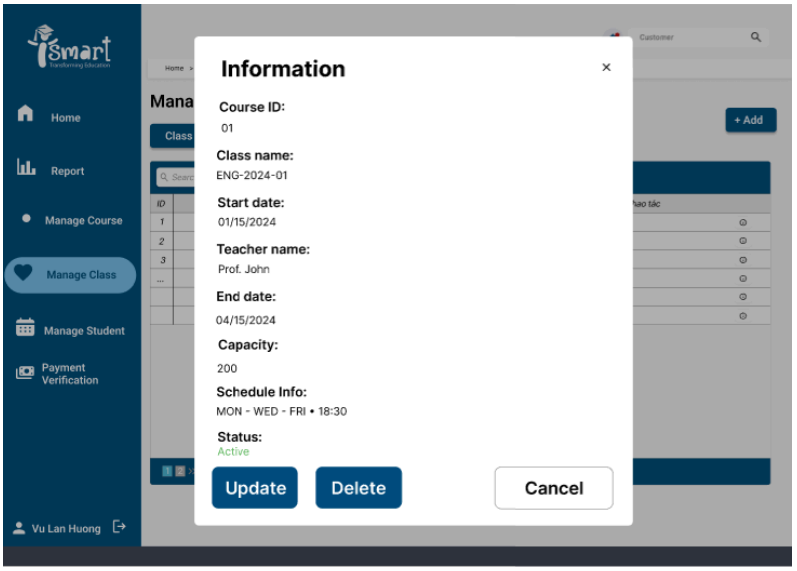
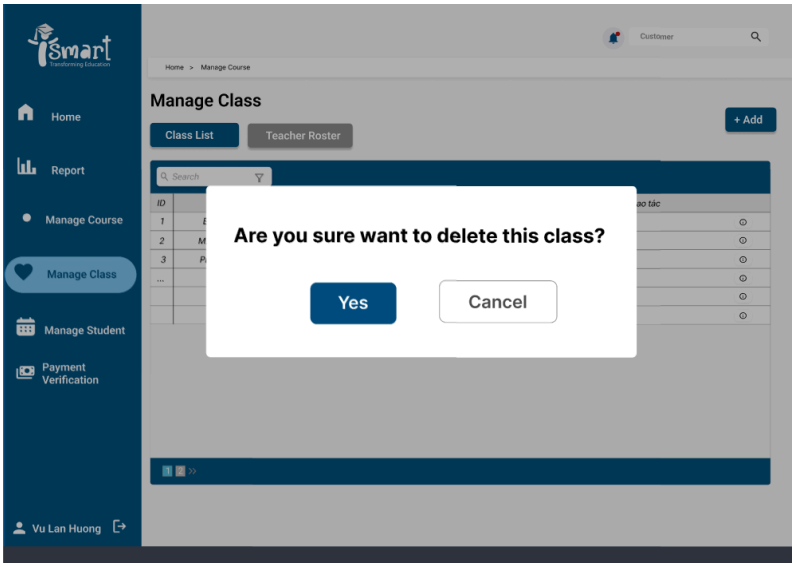
	Given Staff updates valid class information When Staff clicks Save Then system updates class successfully And redirects to Class List **AC3 – Class Name Required** Given Staff clears class_name When submitting form Then system shows error as defined in Business Rules **AC4 – Duplicate Class Name in Course** Given another class in the same course has the same name When submitting form Then system shows error as defined in Business Rules **AC5 – Invalid Course Selection** Given selected course does not exist When submitting form Then system shows error as defined in Business Rules **AC6 – Invalid Start Date** Given Staff selects a past date When submitting form

	Then system shows error as defined in Business Rules **AC7 – Invalid Capacity** Given Staff enters capacity ≤ 0 When submitting form Then system shows error as defined in Business Rules **AC8 – Schedule Info Required** Given Staff clears schedule_info When submitting form Then system shows error as defined in Business Rules. **AC9 – Activate Class / Update Status** Given class status is currently "Wait to active" When Staff changes Status to "Active" and clicks Save Then system updates the status successfully and makes the class available for enrollment operations. **AC10 – Cancel Update** Given Staff is on Update Class screen When Staff clicks Cancel Then system returns to Class List And no changes are saved **AC11 – System Error Handling**

	Given system fails to update class When submitting form Then system shows error as defined in Business Rules

7. **USER STORY: Staff Delete Class**

Card	- As a Staff - I want to delete a class - So that unnecessary or unused classes are removed from the system
Summary	This user story allows Staff to delete a class with validation to ensure that no students are enrolled in the class
In-Scope:	- Delete a class with strict constraint validation (blocked if students are enrolled).
Out of scope	- Recover deleted classes.
Trigger	Staff clicks **Delete button** on a class in Class Management screen
Pre-condition	- Staff is logged in - Class exists in the system - Staff has permission to delete class - System database is available

Business rule and error message	- Staff must confirm before deletion → **Message:** "Are you sure you want to delete this class?" - Class cannot be deleted if students are enrolled → **Error:** "Class cannot be deleted because students are enrolled." - System must successfully delete class → **Error:** "Unable to delete class."
Screen design	 

Screen description	Class Management screen allows Staff to delete classes.
	
	Includes:
	
	● Class table
	● **Delete button** for each class
	● **Confirmation dialog**:
	  ○ Confirm button
	  ○ Cancel button

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes
teacher_id	assigned teacher	varchar	1	100	100	no
start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria	**AC1 – Trigger Delete Action**

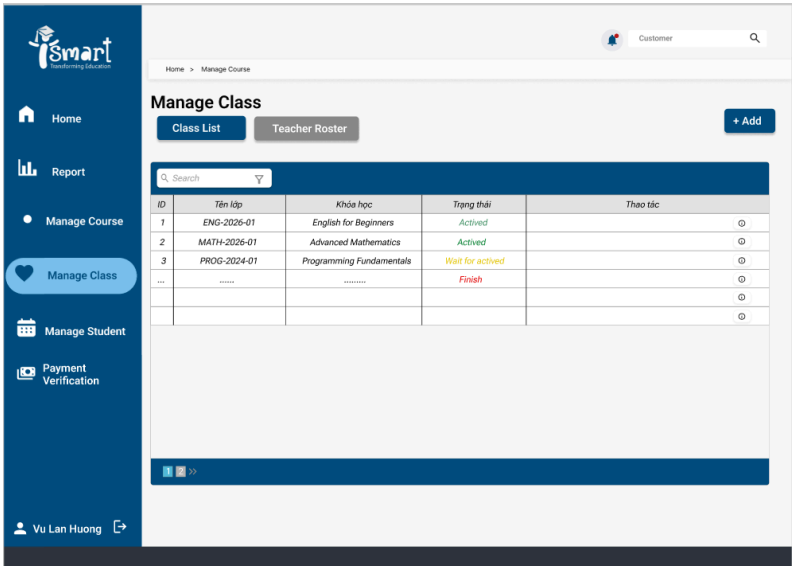
	Given Staff is on Class Management page When Staff clicks Delete on a class Then system displays confirmation dialog **AC2 – Confirm Deletion** Given confirmation dialog is displayed When Staff clicks Confirm Then system proceeds with deletion **AC3 – Cancel Deletion** Given confirmation dialog is displayed When Staff clicks Cancel Then system closes dialog And no data is deleted **AC4 – Delete Class Successfully** Given class has no students enrolled When Staff confirms deletion Then system deletes class And removes it from the list **AC5 – Delete Class Failed (Constraint)** Given class has students enrolled When Staff attempts to delete Then system shows error as defined in Business Rules **AC6 – Data Persistence After Delete** Given class is deleted successfully When list reloads Then deleted class no longer appears **AC7 – UI Refresh After Delete**

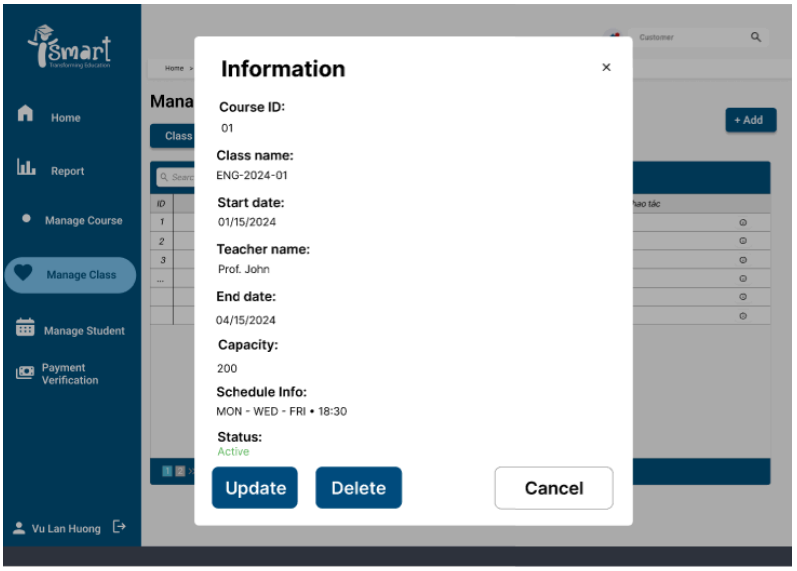
	Given deletion is successful When system updates UI Then class list refreshes automatically **AC8 – System Error Handling** Given system fails to delete class When Staff confirms deletion Then system shows error as defined in Business Rules **AC9 – Delete Non-existing Class** Given class does not exist in system When Staff attempts to delete Then system shows error as defined in Business Rules

8. USER STORY: Staff View Class

Card	- As a Staff - I want to view and filter classes - So that I can access class information for operations or consultation
Summary	This user story allows users to view class list, search classes, filter by course, and view detailed class information
In-Scope:	- View class list, view detailed information, search by name, and filter by course.

Out of scope	- Modify class data.
Trigger	Staff clicks the [Manage Class] menu on the Sidebar.
Pre-condition	- User is logged in - Classes exist in the system - System database is available
Business rule and error message	- System must retrieve class data from database → **Error:** "Unable to load class data." - Search keyword must be applied to class name → **Behavior:** return matching results - Filter must be based on valid course → **Error:** "Invalid course filter." - If no class matches search/filter → **Message:** "No classes found." - Only authorized users can access class list → **Error:** "You do not have permission to perform this action." - Session must be valid → **Error:** "Session expired. Please log in again."
Screen design	





Screen description

Class Management screen allows Staff to view and search class information.

Name	Description	Type	Min	Max	Maxlength	Required
course_id	Course that class belongs to	int	-	-	-	Yes
class_name	Name of class	varchar	1	100	100	Yes
teacher_id	assigned teacher	varchar	1	100	100	no

start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
capacity	Maximum number of students	number	1	200	-	Yes
schedule_info	Class schedule (e.g., Mon-Wed 18:00)	varchar	1	100	100	yes
status	Class status (Active/Inactive)	varchar	-	-	20	Yes

Acceptance Criteria

AC1 – View Class List

Given Staff opens Class Management page
When the system loads
Then system displays list of classes

AC2 – Display Class Information

Given class list is displayed
Then each class shows class name, course name, teacher name, start date, end date, capacity, schedule info and status.

AC3 – View Class Details

	Given Staff is on class list When Staff selects a class Then system displays detailed class information **AC4 – Search Class** Given Staff enters keyword When performing search Then system displays matching classes **AC5 – Filter Class by Course** Given Staff selects a course in filter When filter is applied Then system displays classes belonging to that course **AC6 – No Class Available** Given no classes exist When page loads Then system shows message as defined in Business Rules **AC7 – No Search/Filter Result** Given no classes match search/filter When action is performed Then system shows message as defined in Business Rules

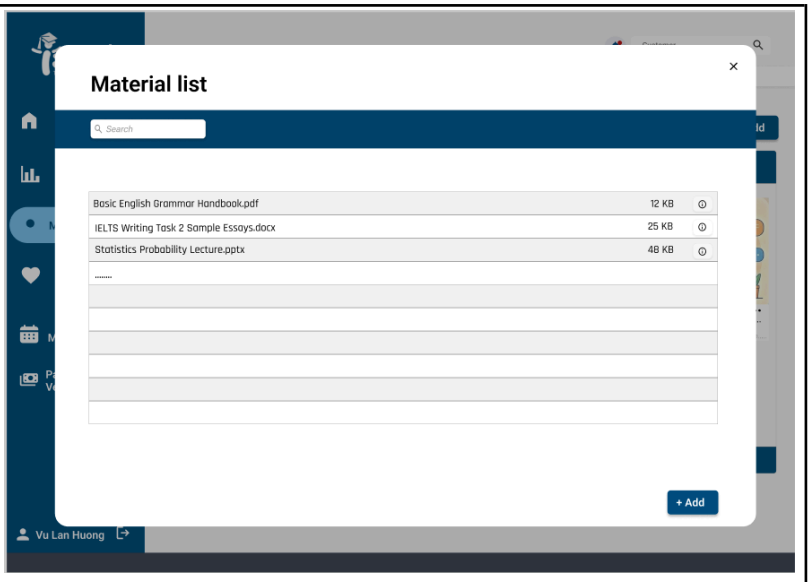
	AC8 – Navigate to Create Class Given Staff clicks "Add" Then system navigates to Create Class screen **AC9 – System Error Handling** Given system fails to load class data When page loads Then system shows error as defined in Business Rules

9. **USER STORY: Staff View Material**

Card	- As a Staff - I want to view the list of materials - So that I can access learning resources for consultation and support purposes
Summary	This user story allows Users (Staff and Sale) to view materials in the system, including searching, filtering, and viewing material details by course
In-Scope:	- View and search materials strictly associated with a specific course.

Out of scope	
Trigger	Staff clicks the specific course and [Add] button Materail
Pre-condition	- User is logged into the system - Materials may or may not exist - System database is available
Business rule and error message	- User role is only allowed to view material information → Error: **"You do not have permission to modify material information."** - System must retrieve material data from database → Error: **"Unable to load material data."** - If no materials exist → Message: **"No materials found."** - If search/filter returns no result → Message: **"No materials found."** - Search keyword must match material title or course name → System returns matching results - Course filter must reference existing course → Error: **"Invalid course selection."** - Only active session users can access this screen → Error: **"Session expired. Please log in again."**

Screen design



Screen description

Material List screen allows User to view and search materials.

Includes:

- Search bar (by material title)
- Course filter dropdown
- Material table
- Clickable row / View button → open material detail

No Add / Edit / Delete buttons

Name	Description	Type	Min	Max	Maxlength	Required
title	Material title	varchar	1	255	255	yes
file_url	File link or material URL	varchar	1	500	500	yes
course_id	Course of the material	int	-	-	-	yes
created_by	Creator	int	-	-	-	yes
created_date	Material creation date	datetime	-	-	-	yes

keyword	Search keyword	varchar	0	100	100	no
filter_course	Selected course for filtering	int	-	-	-	no

Acceptance Criteria

AC1 – View Material List
Given Staff opens Material List page
When the system loads
Then the system displays the list of materials

AC2 – Display Material Information
Given material list is displayed
Then each material shows title, course

AC3 – View Material Detail
Given Staff selects a material
When clicking View or row
Then system displays material detail

AC4 – Search Material
Given Staff enters a keyword
When performing search
Then system displays matching materials

AC5 – Filter by Course
Given Staff selects a course
When filter is applied
Then system displays materials belonging to that course

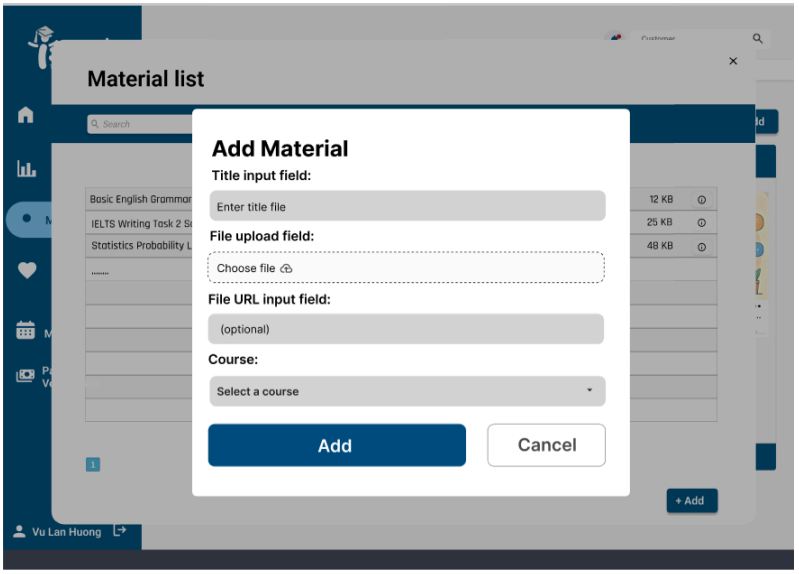
AC6 – No Material Found
Given no materials match search/filter
When system returns result
Then system shows message as defined in Business Rules

	AC7 – Data Load Failure Given system fails to retrieve material data When loading page Then system shows error as defined in Business Rules **AC8 – Session Expired** Given Staff session has expired When accessing the page Then system redirects to login page And shows message as defined in Business Rules

10. USER STORY: Staff Create Material

Card	- As an Staff - I want to create a new material - So that learning resources can be added to courses and used by all classes
Summary	This user story allows Staff to create a new material by entering required information and assigning it to a course
In-Scope:	- Upload file or input URL, auto-extract metadata (format/size), and link to a course.
Out of scope	

Trigger	Staff clicks the specific course and [Add] button Materail.
Pre-condition	- Staff is logged into the system - At least one course exists in the system - System database is available
Business rule and error message	- Material title must not be empty → Error: **"Material title is required."** - Material title length must be within allowed range (1–255) → Error: **"Material title must be between 1 and 255 characters."** - At least one source must be provided (file OR file_url) → Error: **"Material file or URL is required."** - If both file and file_url are provided → System prioritizes file upload (or accept both based on implementation – chọn 1 và giữ consistent) - File must be in supported formats (PDF, DOC, DOCX, PPT, PPTX) → Error: **"Unsupported file format."** - File size must not exceed system limit (e.g., 20MB) → Error: **"File size exceeds allowed limit."** - Course must be selected and must exist in the system → Error: **"Selected course does not exist."**

<table>
<tr><td></td><td>- System must successfully save material
→ Error: "Unable to create material."</td></tr>
<tr><td>Screen design</td><td> 
</td></tr>
<tr><td>Screen description</td><td>Create Material screen allows Staff to add new learning materials.

Includes:

• Title input field
• File upload field
• File URL input field
• Course dropdown (assign material to course)
• Add button
• Cancel button

Admin must provide:

• File OR URL (at least one)

<table>
<tr><th>Name</th><th>Description</th><th>Type</th><th>Min</th><th>Max</th><th>Maxlength</th><th>Required</th></tr>
<tr><td>title</td><td>Name of the material</td><td>varchar</td><td>1</td><td>255</td><td></td><td>yes</td></tr>
<tr><td>file_format</td><td>Format (PDF, PPTX, etc.)</td><td>varchar</td><td>1</td><td>10</td><td>10</td><td>yes</td></tr>
</table></td></tr>
</table>

file_size	Size of the file	varchar	1	20	-	yes
file_url	Link to access file	varchar	-	-		yes
keyword	Search title	varchar	0	100	100	no
created_at	Creation date	datetime	-	-	-	yes

Acceptance Criteria

AC1 – Open Create Material Screen

Given Staff is on Material Management page
When Staff clicks Add New Material
Then system displays Create Material screen

AC2 – Create Material Successfully

Given Staff enters valid material information
When Staff clicks Add
Then system saves the material
And redirects to Material List
And displays the new material in the list

AC3 – Title Required

Given Staff leaves title empty
When submitting the form
Then system shows error as defined in Business Rules

AC4 – Title Length Validation

Given title length is less than 1 or greater than 255
When submitting the form
Then system shows error as defined in Business Rules

AC5 – Missing File and URL

Given both file and file_url are empty
When submitting the form
Then system shows error as defined in Business Rules

	AC6 – Invalid Course Selection Given selected course does not exist When submitting the form Then system shows error as defined in Business Rules **AC7 – Unsupported File Format** Given Staff uploads an unsupported file When submitting the form Then system shows error as defined in Business Rules **AC8 – Cancel Create** Given Staff is on Create Material screen When Staff clicks Cancel Then system returns to Material List And no data is saved **AC9 – System Error Handling** Given system fails to save material When Staff submits the form Then system shows error as defined in Business Rules

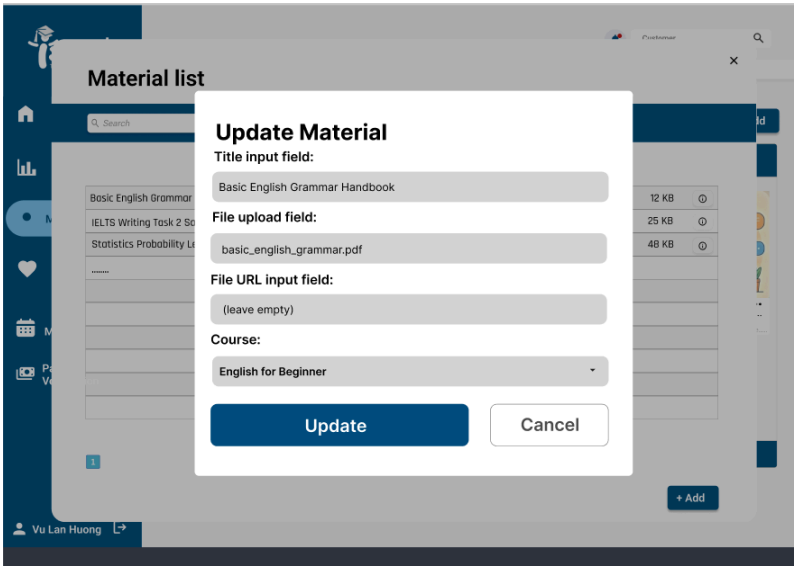
11. USER STORY: Staff Update Material

Card	- As an Staff - I want to update material information - So that learning resources remain accurate and up to date
Summary	This user story allows Staff to modify existing material information including title, file (or URL), and assigned course

In-Scope:	- Replace file/URL, update title, and auto-re-extract metadata.
Out of scope	- Delete material
Trigger	Staff clicks the [Edit] icon on a specific material record.
Pre-condition	- Staff is logged into the system - Material exists in the system - System database is available
Business rule and error message	- Material title must not be empty → Error: **"Material title is required."** - Material title length must be within allowed range (1–255) → Error: **"Material title must be between 1 and 255 characters."** - At least one source must exist (existing file OR new file OR file_url) → Error: **"Material file or URL is required."** - If both new file and file_url are provided → System prioritizes file upload (hoặc define rõ rule, miễn consistent) - File must be in supported formats (PDF, DOC, DOCX, PPT, PPTX) → Error: **"Unsupported file format."** - File size must not exceed system limit (e.g., 20MB) → Error: **"File size exceeds allowed limit."**

<table>
<tr>
<td></td>
<td>

- Course must be selected and must exist
  → Error: **"Selected course does not exist."**
- System must successfully update material
  → Error: **"Unable to update material."**

</td>
</tr>
<tr>
<td>Screen design</td>
<td>


</td>
</tr>
<tr>
<td>Screen description</td>
<td>

Update Material screen allows Staff to edit material information.

<table>
<tr><th>Name</th><th>Description</th><th>Type</th><th>Min</th><th>Max</th><th>Maxlength</th><th>Required</th></tr>
<tr><td>title</td><td>Name of the material</td><td>varchar</td><td>1</td><td>255</td><td></td><td>yes</td></tr>
<tr><td>file_format</td><td>Format (PDF, PPTX, etc.)</td><td>varchar</td><td>1</td><td>10</td><td>10</td><td>yes</td></tr>
<tr><td>file_size</td><td>Size of the file</td><td>varchar</td><td>1</td><td>20</td><td>-</td><td>yes</td></tr>
<tr><td>file_url</td><td>Link to access file</td><td>varchar</td><td>-</td><td>-</td><td></td><td>yes</td></tr>
<tr><td>keyword</td><td>Search title</td><td>varchar</td><td>0</td><td>100</td><td>100</td><td>no</td></tr>
<tr><td>created_at</td><td>Creation date</td><td>datetime</td><td>-</td><td>-</td><td>-</td><td>yes</td></tr>
</table>

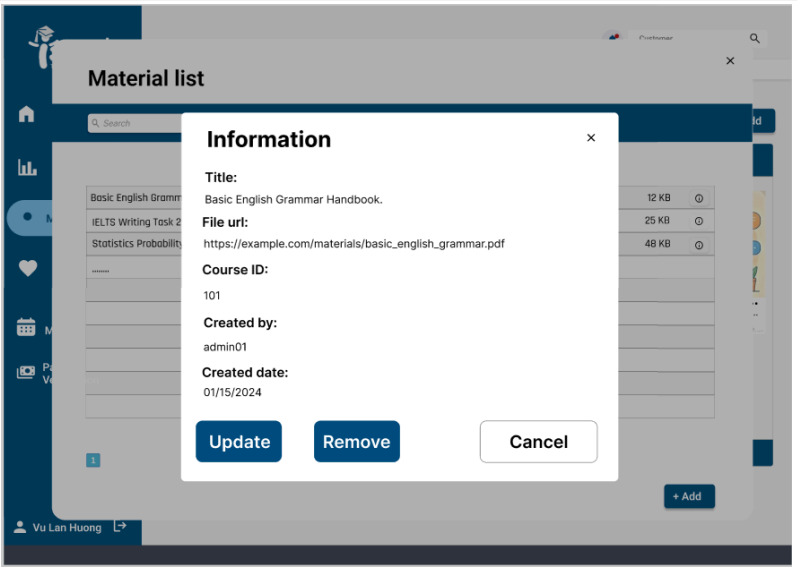
</td>
</tr>
</table>

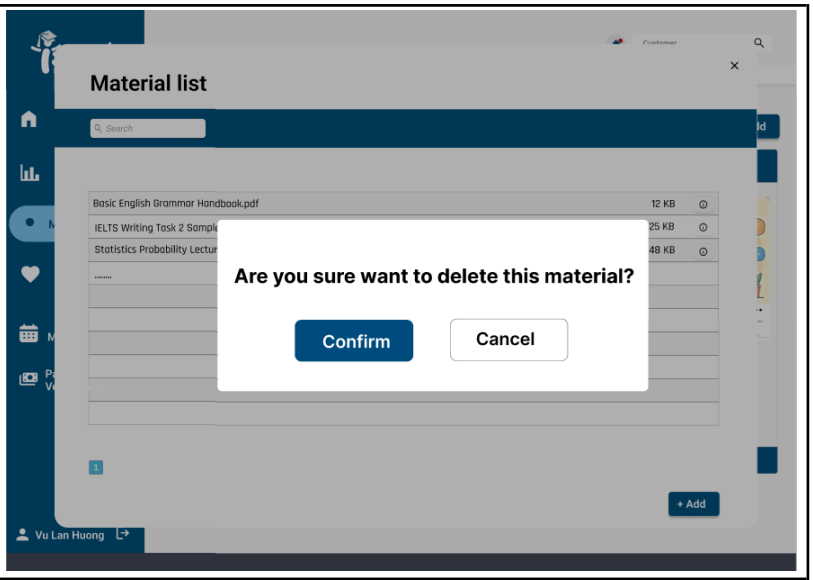
Acceptance Criteria	**AC1 – Open Update Material Screen** Given Staff is on Material Management page When Staff clicks Edit on a material Then system displays Update Material screen And shows existing material information **AC2 – Update Material Successfully** Given Staff updates valid information When Staff clicks Save Then system updates the material successfully And redirects to Material List **AC3 – Title Required** Given Staff clears title When submitting the form Then system shows error as defined in Business Rules **AC4 – Title Length Validation** Given title is less than 1 or greater than 255 characters When submitting the form Then system shows error as defined in Business Rules **AC5 – Missing File Source** Given no existing file and no new file or URL provided When submitting the form Then system shows error as defined in Business Rules **AC6 – Invalid Course Selection** Given selected course does not exist When submitting the form

	Then system shows error as defined in Business Rules **AC7 – Unsupported File Format** Given Staff uploads unsupported file When submitting the form Then system shows error as defined in Business Rules **AC8 – Cancel Update** Given Staff is on Update Material screen When Staff clicks Cancel Then system returns to Material List And no changes are saved **AC9 – System Error Handling** Given system fails to update material When Staff submits the form Then system shows error as defined in Business Rules

12. USER STORY: Staff Delete Material

Card	- As an Staff - I want to delete a material - So that outdated or incorrect learning resources can be removed from the system
Summary	This user story allows Staff to delete an existing material from the system while ensuring data consistency
In-Scope:	- Permanently remove a material from a course.

Out of scope	- Recover deleted materials.
Trigger	Staff clicks the [Delete] icon on a specific material record.
Pre-condition	- Staff is logged into the system - Material exists in the system - System database is available
Business rule and error message	- Material must exist in the system → Error: **"Material does not exist."** - System must confirm before deletion → Message: **"Are you sure you want to delete this material?"** - Material deletion must be permanent (hard delete) - System must successfully delete material → Error: **"Unable to delete material."**
Screen design	



Screen description

Material Management screen includes:

Name	Description	Type	Min	Max	Maxlength	Required
title	Name of the material	varchar	1	255		yes
file_format	Format (PDF, PPTX, etc.)	varchar	1	10	10	yes
file_size	Size of the file	varchar	1	20	-	yes
file_url	Link to access file	varchar	-	-		yes
keyword	Search title	varchar	0	100	100	no
created_at	Creation date	datetime	-	-	-	yes

Acceptance Criteria

AC1 – Display Delete Option

Given material list is displayed

Then each material has a Delete button

AC2 – Trigger Delete Action

Given Staff clicks Delete on a material

When action is triggered

Then system displays confirmation dialog

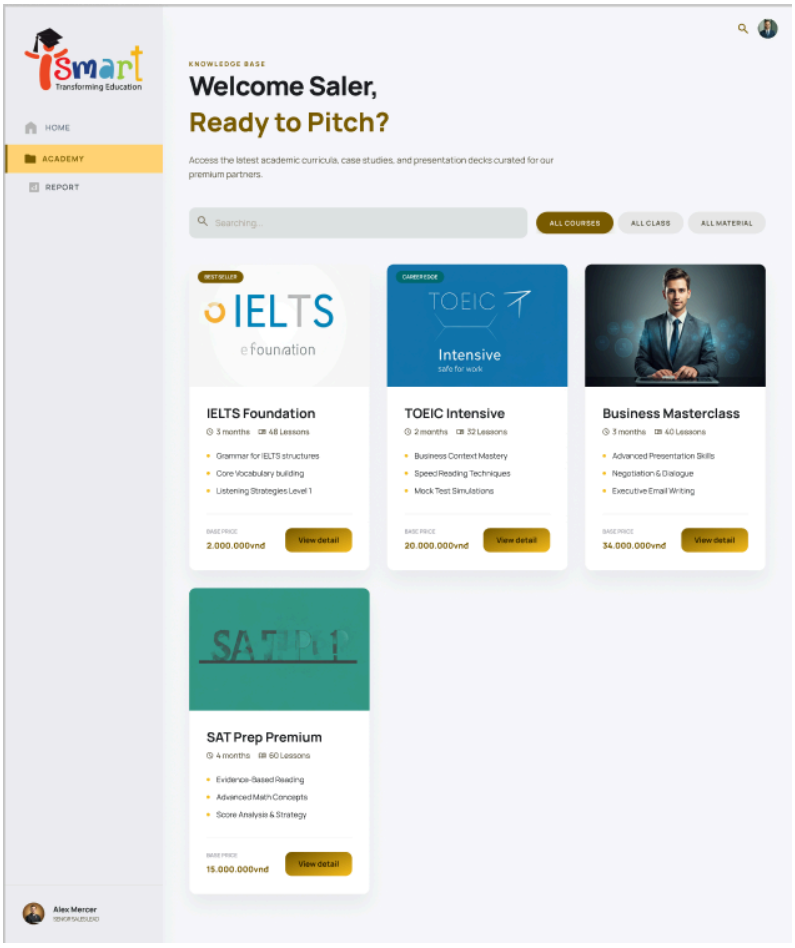
	AC3 – Confirm Delete Successfully Given Staff confirms deletion When system processes request Then material is removed from the system And no longer appears in the list **AC4 – Cancel Delete** Given confirmation dialog is displayed When Staff clicks Cancel Then system closes dialog And no data is deleted **AC5 – Material Not Found** Given material does not exist When Staff attempts to delete Then system shows error as defined in Business Rules **AC6 – System Error Handling** Given system fails to delete material When Staff confirms deletion Then system shows error as defined in Business Rules **AC7 – Refresh Material List After Delete** Given material is deleted successfully When system updates UI Then material list is refreshed And deleted item is not displayed **AC8 – Multiple Delete Attempts** Given material has already been deleted When Staff attempts to delete again Then system shows error as defined in Business Rules

	AC9 – Delete Without Affecting Other Data Given material is deleted When system processes deletion Then no other materials or course data are affected

Sale

1. **USER STORY: Sale View Course**

Card	- As a Sale - I want to view and search courses in a catalog format - So that I can quickly access course information and open the Course Detail Hub for customer consultation
Summary	This user story allows Sale users to view the list of courses in a visual Card layout, search for specific courses, and click to access the centralized Course Detail Hub.
In-Scope:	- View the course catalog in Card layout, search by keyword, and click to open specific Course Details.
Out of scope	- Create, update, or delete course data.
Trigger	Sale clicks the **[Academy]** menu on the left Sidebar (defaults to the "ALL COURSES" tab).
Pre-condition	- Sale is logged in - Courses exist in the system - System database is available
Business rule and error message	- System must retrieve course data from database → **Error:** "Unable to load course data."

	- Search keyword must be applied to course name → **Behavior:** return matching results - If no course matches search result → **Message:** "No courses found." - Session must be valid → **Error:** "Session expired. Please log in again."
Screen design	
Screen description	Search input field & Search button Course Card View (Grid layout) Includes: • Course Name

- Duration
- Fee
- Status
- Course detail view (popup or separate page)

Name	Description	Type	Min	Max	Maxlength	Required
course_name	Name of the course	varchar	1	100	100	yes
description	Description of the course	text	-	-	500	no
duration	Course duration	number	1	999	-	yes
fee	Course tuition fee	Decimal	1	-	-	yes
keyword	Search keyword	varchar	0	100	100	no
status	Course status	varchar	-	-	-	yes

Acceptance Criteria

AC1 – View Course Catalog

Given Sale opens Course page

When system loads

Then system displays courses in a visual Card format

AC2 – Display Course Card Information

Given course catalog is displayed

When viewing the cards

Then each course card shows name, duration, fee, and status

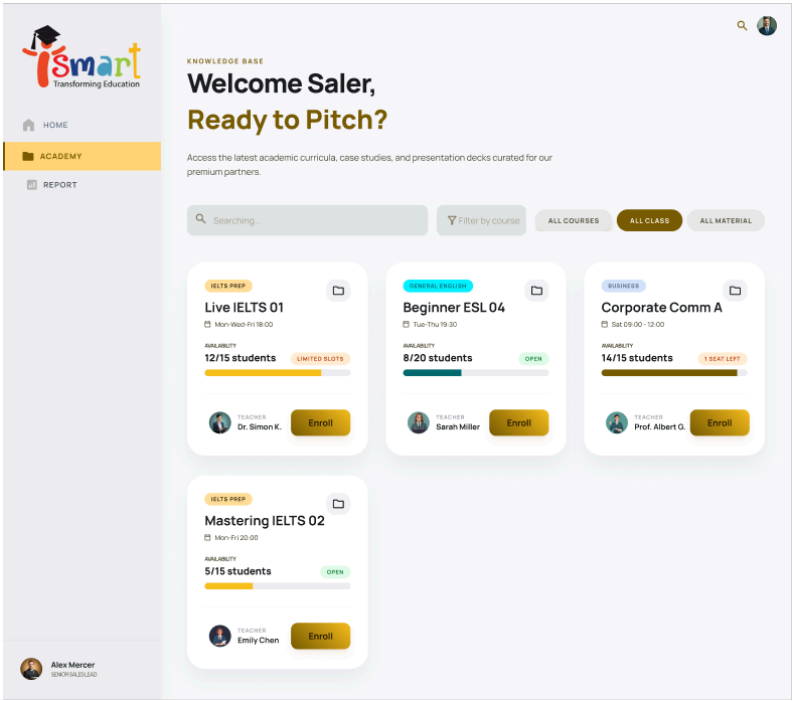
	AC3 – Navigate to Course Detail Hub Given course catalog is displayed When Sale clicks a Course Card or Course Then system navigates to the Course Detail Hub (displaying related classes and materials) **AC4 – Search Course** Given Sale enters keyword When Sale clicks Search Then system displays matching course cards **AC5 – Search Result Accuracy** Given keyword matches course name When search is performed Then system returns correct results **AC6 – No Course Found** Given no course matches keyword When search is performed Then system shows message as defined in Business Rules

	AC7 – Empty Course Catalog Given no courses exist in system When Sale opens Course page Then system shows message as defined in Business Rules **AC8 – System Error Handling** Given system fails to retrieve data When loading course catalog Then system shows error as defined in Business Rules

2. USER STORY: Sale View Classes

Card	- As a Sale - I want to view classes in "Wait to active" or "Open" status within the Course Detail Hub - So that I can identify which classes need more students and consult customers to fill those slots
Summary	This user story allows Sale users to focus on upcoming and recruiting classes. It provides

	visibility into the "Wait to active" classes where enrollment is still possible, helping Sale drive revenue.
In-Scope:	- View global or course-specific class lists, check real-time capacity, and identify "Wait to active"/"Open" classes.
Out of scope	- Modify class data or operational statuses.
Trigger	Sale clicks the **[ALL CLASS]** toggle on the Academy screen, OR views the Classes section inside a Course Detail Hub.
Pre-condition	- Sale is logged in - System database is available - The selected course exists and may have associated classes
Business rule and error message	- System must retrieve classes of the selected course, prioritizing those NOT YET started. Display clear status labels: "Wait to active" (Chờ khai giảng), "Recruiting" (Đang tuyển), or "Full"
Screen design	



Screen description

Wait to active/ Full/ Active

Capacity Tracking

Course Card View (Grid layout)

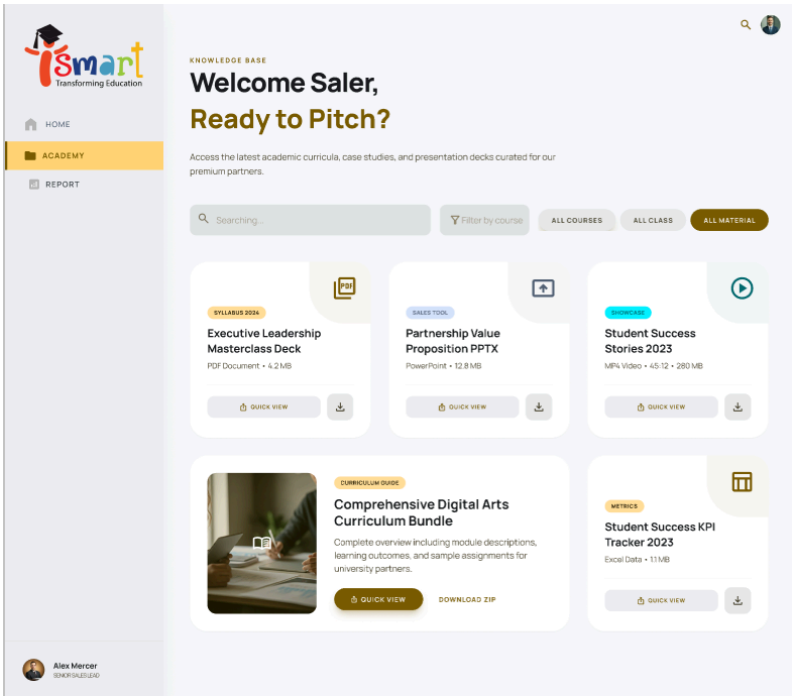
Name	Description	Type	Min	Max	Maxlength	Required
class_name	Name of the class	varchar	1	100	100	yes
schedule info	Time/Days	text	1	100	100	yes
teacher_name	Name of teacher	varchar	1	100	100	Yes
start_date	Class start date	date	-	-	-	Yes
end_date	Class end date	date	-	-	-	Yes
available_slots	max capacity - current_enrollment	number				yes
status	Course status	varchar	-	-	-	yes

Acceptance Criteria	**AC1 – Display Upcoming Classes** Given Sale is in the Course Detail Hub When the class list loads Then the system must show classes that are "Wait to active" or "Open" at the top. **AC2 – Urgent Capacity Display** Given Sale views classes, Then the system displays the number of Available Slots, Teacher Name, Schedule, and Start/End dates clearly **AC3 – Identify Full Classes** Given a class has reached its max capacity Then its status must change to "Full" And Sale should see it as "Not available for enrollment" to avoid consulting wrong info. **AC4 – Historical/Active Reference** Given a class is already "Open" Then Sale can still view its info (teacher, schedule) but it is marked as "Open". **AC5 – Quick Enrollment** Given class status is Wait to active or Recruiting, When the card is displayed,

	Then system provides an [Enroll] button to quickly trigger the Enrollment Form.

3. **USER STORY: Sale View Materials**

Card	- As a Sale - I want to view learning materials directly within the Course Detail Hub - So that I can quickly showcase or share syllabus and brochures to convince potential customers
Summary	This user story allows Sale users to view, search, and access materials (files/links) specifically associated with the course they are consulting. It prioritizes quick access and visual file information.
In-Scope:	- View global or course-specific learning materials, search by title, and access quick-share links/files.
Out of scope	- Upload, update, or delete materials.
Trigger	Sale clicks the **[ALL MATERIAL]** toggle on the Academy screen, OR views the Materials section inside a Course Detail Hub.
Pre-condition	- Sale is logged in - The selected course exists and has materials assigned in the database - System database is available

<table>
<tr>
<td>Business rule and error message</td>
<td>
- System must retrieve materials ONLY belonging to the current course_id → Error: "Unable to load materials for this course."
- If no materials are found for the course Error: "No materials available for this course yet."
- If search keyword returns no match → Error: "No materials match your search."
</td>
</tr>
<tr>
<td>Screen design</td>
<td>


</td>
</tr>
<tr>
<td>Screen description</td>
<td>
Materials Section (Grid/Card layout within Course Detail Hub).
<table>
<tr><th>Name</th><th>Description</th><th>Type</th><th>Min</th><th>Max</th><th>Maxlength</th><th>Required</th></tr>
<tr><td>title</td><td>Name of the material</td><td>varchar</td><td>1</td><td>255</td><td></td><td>yes</td></tr>
<tr><td>file_format</td><td>Format (PDF, PPTX, etc.)</td><td>varchar</td><td>1</td><td>10</td><td>10</td><td>yes</td></tr>
<tr><td>file_size</td><td>Size of the file</td><td>varchar</td><td>1</td><td>20</td><td>-</td><td>yes</td></tr>
<tr><td>file_url</td><td>Link to access file</td><td>varchar</td><td>-</td><td>-</td><td></td><td>yes</td></tr>
</table>
</td>
</tr>
</table>

	keyword | Search title | varchar | 0 | 100 | 100 | no
Acceptance Criteria	**AC1 – Display Contextual Materials** Given Sale is viewing a Course Detail Hub When the Material section loads Then the system displays ONLY materials linked to that specific course **AC2 – Visual File Identification** Given materials are displayed Then each item must show a specific icon corresponding to its **file_format** (PDF, Video, etc.) **AC3 – Display File Details** Given a material card is visible Then Sale can see the title, file format **AC4 – Search within Course** Given Sale enters a keyword in the material search bar When searching Then system filters materials by title within that course ONLY **AC5 – Quick Access/Sharing** Given a material is displayed When Sale clicks [Open Link] or [Download]

	Then the system provides the file/link for sharing with customers **AC6 – Permission Guardrail** Given Sale is viewing materials Then no options to "Upload", "Edit title", or "Delete" are visible **AC7 – Empty State Handling** Given the course has no materials assigned When the page loads Then system shows: "No materials available for this course yet."