Fpt University

TRƯỜNG ĐẠI HỌC FPT

Requirement & Design Specification

ONLINE LEARNING SYSTEM

Version: 1.0

– Hanoi, August 2022 –

Record of Changes

Version	Date	A* M, D	In charge	Change Description
V1.0	15/2	A	MINHTC47	

*A - Added M - Modified D - Deleted

Contents

I. Overview

1. User Requirements

1.1 Actors

#	Actor	Description
1	Admin	the organization leader/manager, acts as the system administrator,can do things including managing course information, subject, lesson,...
2	Guest	unregistered users,can view basic information about the course such as price and course descriptions
3	Customer	they are registered users who are actual customers or potential customers,they are the ones who can sign up for courses, learn the courses
4	Marketing	the marketing members of the organization
5	Sale	the sale members of the organization
6	Expert	access & prepare the course contents as assigned by admin

1.2 Use Cases

a. Diagram(s)

b. Descriptions

ID	Feature	Use Case	Use Case Description
01	User login	Login	Login to system
02	User Register	Register	Register a new account in the system
03	Forget Password	Forgot password	Create a new password for the account
04	Manager Profile	Edit profile	Edit user information previously registered with the system
05	Change Password	Change Password	Change the user's password
06	Slider List	Slider List	Show the list of sliders
07	Slider Details	Slider Details	Show detailed slider information
08	Registrations List	Registrations List	Show the list of users' registrations
09	Registration Details	Registration Details	Show detailed registration information
10	Common	View and search course	Displays a list of all active courses
11	Common	Course details	Displays detailed information of a course
12	Manage course content	View course content detail	admin,expert can view information of a course
13	Manage course content	Edit course	Admin can change overview information of a course
14	Manage course content	View and search list course	Admin can see all courses including basic information and status of the course along with a search bar including

			(status,Category,search by name).Here, admins can manipulate a course including adding, editing, updating, and deleting courses
15	Manage course content	Add new course	Admin can add courses
16	Manage course content	Delete course	Admin can delete the course contains all price package, all chapter, lessons of the course
17	Manage price package	View and search price package	Admin can view and search price package of a course
18	Manage price package	Add price package	Admin can add a price package for the course
19	Manage price package	Edit price package	Admin can edit a price package for the course
20	Manage price package	Delete price package	Admin can delete price package of the course
21	Manage chapter	View and search chapter	Admin can view listChapter of a Course
22	Manage chapter	Add chapter	Admin add chapters to a course, a course includes many chapters and a chapter includes many lessons
23	Manage chapter	Edit chapter	Admin can edit chapter
24	Manage chapter	Delete chapter	Admin can delete chapter, when delete chapter, all lesson in the chapter will be deleted
25	Manage lesson	View and search lesson	Admin can view list lesson of a Chapter
26	Manage lesson	Add lesson	Admin can create a new lesson.But the course will be in a chapter. If the chapter does not exist, you must create a new chapter
27	Manage lesson	Edit lesson	Edit the lesson information
28	Manage lesson	View lesson Detail	View the lesson information
29	Manage lesson	Delete lesson	Delete the lesson
30	Public	View post	View post
31	Public	Search post	Search name of post
32	Marketing	Add post	Add post
33	Marketing	Edit post	Edit existed post
34	Marketing	Delete post	Delete post
35	Customer	View my course	View my course

2. Overall Functionalities

2.1 Screens Flow

2.1.1. Customer

2.1.2.Marketing

2.2.3.Sale

2.2.4 Admin

2.2 Screen Descriptions

#	Feature	Screen	Description
1	Home	Home	View homepage of OLS

2	User Login	Login	Login to OLS
3	User Register	Register	User Register
4	Reset password	Reset password	User type email to receive code to reset password
5	Blog list	Blog list	List blogs
6	Blog detail	Blog detail	Show content of post
7	Course list	Course list	Show list of course
8	Course detail	Course detail	Show information of course
9	Course register	Course register	Course register
10	My course	My course	Show my course
11	Slider List	Slider List	Show slide list
12	Slider Detail	Slider Detail	Show slide Detail
13	Subject List	Subject List	Show subject list
14	Subject Detail	Subject Detail	Show subject detail
15	Add Subject	Add Subject	Create new subject
16	Course View	Lesson View	Learn course
17	Subject Lesson	Subject Lesson	List Lesson of subject
18	Lesson Detail	Lesson Details	Lesson Detail to create, edit
19	Registrations List	Registrations List	List registration
20	Registrations Detail	Registrations Detail	Registrations Detail

2.3 Screen Authorization

[Provide the system roles authorization to the system features (down to screens, and event to the screen activities if applicable) in the table form as below – replace Role1, Role2,… with your specific system user role names]

Screen	Guest	Consumer	Marketing	Seller	Expert	Admin
Home	X	X	X	X	X	X
User Login	X	X	X	X	X	X
User Register	X	X				
Reset password	X	X				
Blog list	X	X	X	X	X	X
Blog detail	X	X	X	X	X	X
Course list	X	X	X	X	X	X
Course detail	X	X	X	X	X	X
Course register		X				
My course		X				
My Register		X				
Slider List				X		X
Slider Detail				X		X

Subject List					X	X
Subject Detail					X	X
Add Subject						X
Course View	X	X	X	X	X	X
Subject Lesson					X	X
Lesson Detail					X	X
Registrations List				X		X
Registrations Detail				X		X

3. System High Level Design

3.1 Database Design

a. Database Schema

b. Table Descriptions

N o	Table	Description
1	users	- Primary key : user_id
2	users_roles	- Primary key: user_id, role_id - Foreign key: user_id, role_id

3	roles	- Primary key: role_id
4	posts	- Primary key: post_id - Foreign key: authod_id,category_id
5	courses	- Primary key: course_id - Foreign_key: expert_id,category_id
6	user_course	- Primary key: user_id, course_id - Foreign key: user_id, course_id
7	slider	- Primary key: slider_id - Foreign key: author_id chi den user_id[users]
8	lessons	- Primary key: lesson_id,user_id - Foreign key: chapter_id
9	categories	- Primary key: category_id
10	chapter	- Primary key: chapter_id - Foreign key: course_id
11	price_package	- Primary key : price_package_id - Foreign key :course_id
12	orders_register	- Primary key: order_id - Foreign key: user_id, course_id, price_package_id
13	user_lesson	- Primary key:lesson_id,user_id - Foreign key:lesson_id,user_id

3.2 Code Packages

Package descriptions

No	Package	Description
1	Controller	Controllers have classes related to the management of user requests, including navigation agents, control functions, routing methods, and error handling.
2	DAO	DAO has the processes in data processing, including methods to access the database and modify data in the database.
3	Entity	Entity has objects that represent tables in the database.
4	View	View is what the website displays to the user and interacts with the user.
5	Controller	Controllers have classes related to the management of user requests, including navigation agents, control functions, routing methods, and error handling.

II. Requirement Specifications

1. Public

1.1 View post

a. Functionalities

Provide the functional description for the use cases using the template/guides below

Functional Description Template

UC ID and Name:	30 - View post		
Created By:	MinhTC47	Date Created:	7/1
Primary Actor:	Guest, consumer	Secondary Actors:	Marketing, seller
Trigger:	User click to a post		
Description:	Show content of post		
Preconditions:	The system have at least one post		
Postconditions:	The post display		
Normal Flow:	1. User click to post button 2. System show the list of post 3. User click to a post 4. System show the post content		
Alternative Flows:	1. User click to hot post at the home page		
Exceptions:	None		
Priority:	High , Must Have		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:	The user's connection to the server is stable		

1.2 Search post

UC ID and Name:	31 - Search post		
Created By:	MinhTC47	Date Created:	7/1
Primary Actor:	Guest, consumer	Secondary Actors:	Marketing, seller
Trigger:	User click to search button		
Description:	User want to search post		
Preconditions:	The system have at least one post		
Postconditions:	The post display		
Normal Flow:	1.Users enter the name of the post you want to search for and click "Search 2.icon". 3.System will display the post the user wants to search. 4. Users click the Filter icon		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High , Must Have		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:	The user's connection to the server is stable		

1.3 Course Details

UC ID and Name	**UC-11_Course Details**		
Created By	HuuND	Date Created:	01/09/2024
Primary Actor	Customer	Secondary Actors:	none
Trigger	User clicks a course in course list		
Description	Users want to see detailed information about a course		
Preconditions	Pre1: Before viewing detailed information about the course, users need to access the Home page or Course List page of the system. Pre2: The system needs relevant data and information about courses to display to users.		
Postconditions	Post1: User Viewed Course Details Post2: System Display Details		
Normal Flow	1. User from the Home page or Course List page and clicks on the course 2. The system displays "Course details" with course information		

Alternative Flows	
Exceptions	None
Priority	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use	High
Business Rules	None
Other Information	None
Assumptions	

1.4 Course Register

UC ID and Name:	**UC_08 Course register**		
Created By:	HuuND	Date Created:	1/09/2024
Primary Actor:	Customer	Secondary Actors:	none
Trigger:	User clicks register button from Course Details page		
Description:	User wants to register for a particular course		
Preconditions:	Pre1: User is logged in Pre2: The system displays detailed information about the course Pre3: Courses available for registration		
Postconditions:	Post1: The user has successfully registered for the specific course Post2: Registration Information Recording System		
Normal Flow:	1. From the detail page, the user selects the package the user wants to subscribe to 2. User presses the "Register" button 3. The system displays a pop up screen confirming whether the user wants to register for the course or not 4. User press Yes to register for the course 5. The system records course registration for users		
Alternative Flows:	1. The user has not logged in to register for the course - When pressing the Register button, the system will transfer the user to the login page, the user logs in to register for the course 2. User cancels the course registration process - The registration confirmation screen appears, the user presses the No button to cancel the registration process - The system will close the pop-up and return to the Course Details screen		
Exceptions:	N/A		
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..		
Frequency of Use:	High		

Business Rules:	None
Other Information:	None
Assumptions:	

1.5 View and Search course

UC ID and Name:	UC-10_Search Box and category		
Created By:	LongVD	Date Created:	1/9/2024
Primary Actor:	Guest,customer	Secondary Actors:	N/A
Trigger:	Users click "Course" in the header		
Description:	Users want to search courses by using the search bar with the filter section in the OLS.		
Preconditions:	The system have at least one course on the list		
Postconditions:	The course user wants will display if users use search and filter to choose the right want.		
Normal Flow:	1. Users click "List Course" in the header 2. OLS will display all the courses the user wants to search. 3. User click to choose "Status sale" , "short by", "category" and "search name", after that user click button "filter" 4.OLS is based on the user's choices to sort the course according to instructions		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/a		
Assumptions:	The user's connection to server is stable		

2. Common

2.1 Login

UC ID and Name:	UC-01_Login		
Created by:	HuuND	Date Created:	1/9/2024

Primary Actor:	Guest, Customer, Sale	Secondary Actors:	Marketing, Expert, Admin
Trigger:	Users click "Login" in the header		
Descriptions:	Log in to your personal account in the system		
Preconditions:	The system already contains a personal account		
Postconditions:	Log in to that account's home page		
Normal Flow:	+) User clicks on the login +) User enters gmail and password to log in +) The system will check the account and password +) The user will be logged into the system		
Alternative Flows:	+) Users cannot log in if their password or gmail is wrong +) The user's Gmail is not registered (The system will report that the account does not exist)		
Exceptions:	None		
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:	The user's connection to server is stable		

2.2 Register

UC ID and Name:	UC-02_Register		
Created by:	HuuND	Date Created:	1/9/2024
Primary Actor:	Guest, Customer	Secondary Actors:	Marketing, Sale
Trigger:	Users click "Sign up" in the header		
Descriptions:	Register a new account in the system		
Preconditions:	The system does not have an email account that users use to register		
Postconditions:	Return to the login page to use the account just registered		

Normal Flow:	+) User clicks "sign up" on the title bar +) User enters gmail, name, date of birth, gender, phone number, password, confirm password. +) User will verify gmail with link sent to gmail +) The system will check whether the email has been registered or not, check whether the code the user entered matches the sent code and check whether the confirmation password is the same as the password. +) The system will create a new account and send a registration confirmation notice, returning to the home page.
Alternative Flows:	+) Users cannot register if the account's gmail is already in use +) User does not receive link +) The user enters the wrong confirmation password
Exceptions:	None
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to server is stable

2.3 Forget password

UC ID and Name:	UC-03_Forget Password		
Created by:	HuuND	Date Created:	1/9/2024
Primary Actor:	Guest, Customer, Sale	Secondary Actors:	Marketing, Expert, Admin
Trigger:	Users click "Forget Password" in the Login page		
Descriptions:	Reset password for account		
Preconditions:	The user enters the correct gmail registered with the account		
Postconditions:	Notice that the password has been reset and return to the login page		

Normal Flow:	+) The user will click "Forget Password" on the Login page +) The user will enter the account's gmail +) The system will check that gmail and send the link to gmail +) The user click the link was sent to gmail +) User enters new password and confirms password +) The system checks whether the entered password and the confirmation password are the same +) The system sends a notification that the password has been changed successfully and returns to the home page
Alternative Flows:	+) The user entered the wrong gmail +) User failed to confirm password
Exceptions:	None
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to server is stable

2.4 View profile

UC ID and Name:	UC-04_Manager Profile		
Created by:	HuuND	Date Created:	01/23/2024
Primary Actor:	Guest, Customer, Sale	Secondary Actors:	Marketing, Expert, Admin
Trigger:	Users click "manager profile" on the menu button		
Descriptions:	Edit your profile information		
Preconditions:	The system already contains a personal account		
Postconditions:	Edit the information that your account has registered on the system		
Normal Flow:	+) User clicks on "manager profile" +) Users view information registered with the system. If they want to edit, click the "Edit Profie" button. +) User edits user information registered with the system +) The system will update information and send a notification of successful information update		

Alternative Flows:	+)User skips certain optional fields during profile creation. +)User cancels the deletion process midway.
Exceptions:	None
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to server is stable

2.5 Change password

UC ID and Name:	UC-05_Change Password		
Created by:	HuuND	Date Created:	01/23/2024
Primary Actor:	Guest, Customer, Sale	Secondary Actors:	Marketing, Expert, Admin
Trigger:	Users click "Change Password" on the menu button		
Descriptions:	Edit profile password		
Preconditions:	The system already contains a personal account		
Postconditions:	Edit account password information registered on the system		
Normal Flow:	+) User click "manager profile" on home page +) User clicks "Change Password" +) The user enters the old password and has logged in with the system +) New import user (2 times) +) The system will update the information and send a successful update notification to the user		
Alternative Flows:	+) The user entered the wrong password to log in to the system +) User enters reset password twice but does not match		
Exceptions:	None		
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		

3. Marketing

3.1 Add Post

UC ID and Name:	UC32 - Add post		
Created By:	MinhTC47	Date Created:	21/1

Primary Actor:	Marketing	Secondary Actors:	Admin
Trigger:	User click to a add post button		
Description:	Add post to system		
Preconditions:	User login to system		
Postconditions:	The post added to system		
Normal Flow:	1. User click to marketing button 2. System show the Blog List 3. User click to Add Post Button 4. System show the form add post 5. User fills form 6. User click to add Button 7. System show the post is added.		
Alternative Flows:	none		
Exceptions:	None		
Priority:	High , Must Have		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:	The user's connection to the server is stable		

3.2 Edit post

UC ID and Name:	UC33 - Edit post		
Created By:	MinhTC47	Date Created:	21/1
Primary Actor:	Marketing	Secondary Actors:	Admin
Trigger:	User click to a Edit post button		
Description:	Add post to system		
Preconditions:	User login to system		
Postconditions:	The post id edited		
Normal Flow:	1. User click to marketing button 2. System show the Blog List 3. User click to Edit Post Button 4. System show the form edit post 5. User fills form 6. User click to Save Button 7. System show the post is Saved.		
Alternative Flows:	none		
Exceptions:	None		

Priority:	High , Must Have
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to the server is stable

3.3 Delete post

UC ID and Name:	UC34 - Delete post		
Created By:	MinhTC47	Date Created:	21/1
Primary Actor:	Marketing	Secondary Actors:	Admin
Trigger:	User click to a delete post button		
Description:	Add post to system		
Preconditions:	User login to system		
Postconditions:	The post added to system		
Normal Flow:	1. User click to marketing button 2. System show the Blog List 3. User click to Delete Post Button 4. System show the confirm pop up 5. User click OK 6. System show the post is deleted		
Alternative Flows:	1. User click cancel to cancel action		
Exceptions:	None		
Priority:	High , Must Have		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:	The user's connection to the server is stable		

3.4 View Slider List

UC ID and Name:	UC-06_Slider List		
Created by:	HuuND	Date Created:	01/23/2024
Primary Actor:	Marketing	Secondary Actors:	
Trigger:	Users click "Home" on the menu button		
Descriptions:	Show the paginated list of sliders		
Preconditions:	The system already has a personal marketing account		

Postconditions:	Show the information of paginated list of sliders (including sliders' id, title, image, backlink, status)
Normal Flow:	+) User clicks "Home" +) Users perform operations with the slider +) With some changes, after making changes, the user presses save to update +) The system will update the information and send a successful update notification to the user then return to the "slider list page"
Alternative Flows:	+) The user cannot find the slider that needs to be edited
Exceptions:	None
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to server is stable

3.5 View Slider Detail

UC ID and Name:	UC-07_Slider Details		
Created by:	HuuND	Date Created:	01/23/2024
Primary Actor:	Marketing	Secondary Actors:	
Trigger:	The user clicks on the sliders displayed on the home button		
Descriptions:	Show detailed slider information		
Preconditions:	The system already has a personal marketing account		
Postconditions:	Shows detailed information of each slider (image, title, backlink, status, notes)		
Normal Flow:	+) Users from the "slider list page" click on each displayed slider +) Users will see the information displayed sliders +) The user returns to the "slider list page"		
Alternative Flows:	+) The user wants to cancel the slider viewing process +) While viewing the slider, the user wants to edit the slider again		
Exceptions:	None		
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:	The user's connection to server is stable		

4. Manage course content

4.1 View and Search List Course

UC ID and Name:	UC14_View and Search List Course		
Created By:	LongVD	Date Created:	24/1/2024
Primary Actor:	Admin,Expert	Secondary Actors:	Customer
Trigger:	When admin want to view List course and they can edit it		
Description:	View and search list course manage		
Preconditions:	Course information is available		
Postconditions:	Find the course they want		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Use search box to find the course:
	  + Search name: input name course
	  + Category: combo box to choose category
	  + Status: combo box to choose Status		

Alternative Flows:	- AF-2 It will show the message "No course found" if the course you need find not exist		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:			
Other Information:	N/A		
Assumptions:	N/A		

4.2 Add Course

UC ID and Name:	UC15_ Course		
Created By:	LongVD	Date Created:	24/1/2024
Primary Actor:	Admin,Expert	Secondary Actors:	Customer
Trigger:	When admin want to Add new course information		
Description:	Add Overview Information Course for new course		
Preconditions:	Course information is not available		
Postconditions:	New course information added		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on "Add new course" and the pop-up will be showed
	- NF-4 Fill in the information you want to add, information contains:
	+ Course Name(Text box)
	+ Category(Combo box)
	+ Tagline(Text box)
	+ Expert(Combo box)
	+ Feature (Combo box)
	+ Publish
	+ Description(Text area)
	+ Thumbnail(choose file)
	- NF-5 Save information and it will show an alert Add success
Alternative Flows:	- AF-5 Click cancel if you don't want to add anymore
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	- Publish when course is added always inactive
Other Information:	None
Assumptions:	The user's connection to server is stable

4.3 Edit Course

UC ID and Name:	UC13_Edit course		
Created By:	LongVD	Date Created:	24/1/2024
Primary Actor:	Admin,Expert	Secondary Actors:	Customer
Trigger:	When admin want to Edit course information		
Description:	Edit Overview Information Course		
Preconditions:	Course information is available		
Postconditions:	Course information will be edit		
Normal Flow:	- NF-1 Login with admin,expert role - NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status - NF-3 Click on "Edit" in one course you want to update and it will go to page edit - NF-4 Fill in the information you want to add, information contains: + Course Name(Text box)		

	+ Category(Combo box) + Tagline(Text box) + Expert(Combo box) + Feature (Combo box) + Publish(Combo box) + Description(Text area) + Thumbnail(choose file) - NF-5 Save information and it will show an alert Edit success		
Alternative Flows:	- AF-5 Click cancel if you don't want to Edit anymore		
Exceptions:	- N/A		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	- If you want to "Publish active", you need to at least one price package and one lesson		
Other Information:	None		
Assumptions:	The user's connection to server is stable		

4.4 Delete Course

UC ID and Name:	UC16_Delete course		
Created By:	LongVD	Date Created:	24/1/2024
Primary Actor:	Admin,Expert	Secondary Actors:	Customer
Trigger:	When admin want to Add new course information		
Description:	Add Overview Information Course for new course		
Preconditions:	Course information is not available		
Postconditions:	New course information added		
Normal Flow:	- NF-1 Login with admin,expert role - NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status - NF-3 Click on "Delete" in one course you want to delete and it will show the pop-up edit - NF-4 Click on "Delete" in the pop up and it will delete the course, all price package of the course, all chapter, lesson of the course		
Alternative Flows:	- AF-4 Click cancel if you don't want to delete anymore		

Exceptions:	- N/A
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	- You cannot delete a course that someone is studying, it will display the message "Delete this course failed! There are still people learning this course."
Other Information:	N/A
Assumptions:	The user's connection to server is stable

4.5 View Course content detail

UC ID and Name:	UC12_View course content detail		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to view course information		
Description:	View Overview Information Course		
Preconditions:	Course information is available		
Postconditions:	Course information will be show		

Normal Flow:	- NF-1 Login with admin,expert role
	 - NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	 - NF-3 Click on "View" in one course you want to View and it will go to page edit
	 - NF-4 View in the information you want to add, information contains, you can view price package, lesson by click "Price package" and "Manage lesson"
	  + Course Name(Text box)
	  + Category(Combo box)
	  + Tagline(Text box)
	  + Expert(Combo box)
	  + Feature (Combo box)
	  + Publish(Combo box)
	  + Description(Text area)
	  + Thumbnail(choose file)		

Alternative Flows:	- AF-5 Click cancel if you don't want to Edit anymore		
Exceptions:	- N/A		

Priority:	Medium
Frequency of Use:	Medium
Business Rules:	- If you want to "Publish active", you need to at least one price package and one lesson
Other Information:	None
Assumptions:	The user's connection to server is stable

5. Customer

5.1 View My course

UC ID and Name:	UC-36_My course		
Created By:	minhtc	Date Created:	1/24/2024
Primary Actor:	Customer	Secondary Actors:	none
Trigger:	User clicks to "My Courses" button		
Description:	As a user, I want to view all my access-allowed courses		
Preconditions:	Pre1: Before viewing user's course, user need to loggin the system.		
Postconditions:	Post1: User Viewed all course that user can allowed Post2: System Display all access course information.		
Normal Flow:	1. User clicking on "My Courses" button to join in My Courses page 2. The system show the list of course that user can access/allowed, 3. User can click on each course to view course details if he/she want to		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:			

5.2 View Lesson

UC ID and Name:	UC37-View lesson		
Created By:	Minh	Date Created:	2/24/2024
Primary Actor:	Customer	Secondary Actors:	none
Trigger:	User clicks to "Go to Courses" button		
Description:	As a user, I want to view lesson of my courses		
Preconditions:	Pre1: Before viewing user's course, user need to loggin the system.		
Postconditions:	Post1: User Viewed list lessons of that course		
Normal Flow:	1. User clicking on "Go to course" button to join in Cousre Detail page 2. The system show the list of lesson of that course 3. User click to a lesson to watch 4. System display lesson content		
Alternative Flows:	none		
Exceptions:	None		
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..		
Frequency of Use:	High		
Business Rules:	None		
Other Information:	None		
Assumptions:			

6. Sale

6.1 Registrations List

UC ID and Name:	UC-08_Registrations List		
Created by:	HuuND	Date Created:	02/17/2024
Primary Actor:	Sale	Secondary Actors:	
Trigger:	Users click "List User" on the menu button		

Descriptions:	View, add new or edit user information
Preconditions:	The system already has a personal sale account
Postconditions:	Show user subscription list including: id, email, subscription time, subject, package, total cost, status, valid from, valid to, last updated by
Normal Flow:	+) User clicks "Registration List" on menu button +) Users perform operations of viewing, editing and adding new information +) With some changes, after making changes, users click "Save" to update +) The system updates information and sends a successful update notification to the user, then returns to the Registration List page
Alternative Flows:	+) Users ignore certain optional fields during the process of editing user information +) The user cancels the "edit" process midway
Exceptions:	None
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to server is stable

6.2 Registration Details

UC ID and Name:	UC-09_Registration Details		
Created by:	HuuND	Date Created:	02/17/2024
Primary Actor:	Sale	Secondary Actors:	
Trigger:	The user clicks on each user displayed on the Registrations List page		
Descriptions:	View, add new or edit user information		
Preconditions:	The system already contains a sale account		
Postconditions:	Show detailed registration information (subject, package with list price/sale price, full name, gender, email, mobile, registration time, sale, status, valid from, valid to, notes)		
Normal Flow:	+) User clicks "View" for each registration displayed on the Registration List page +) Users perform operations to view and edit information +) With some changes, after making changes, users click "Save" to update +) The system updates information and sends a successful update notification to the user, then returns to the Registration Details page		
Alternative Flows:	+) Users ignore certain optional fields during the process of editing user information +) The user cancels the "edit" process midway		

Exceptions:	None
Priority:	High (Medium, Low), Must Have (Should Have, Could Have),..
Frequency of Use:	High
Business Rules:	None
Other Information:	None
Assumptions:	The user's connection to server is stable

7. Manage price package

7.1 View and search price package

UC ID and Name:	UC17_View and search price package		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to view List price package and they can edit it
Description:	View and search list price package manage
Preconditions:	Price package
Postconditions:	Find the price package they want
Normal Flow:	- NF-1 Login with admin,expert role - NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status - NF-3 Click on Edit/View of a course - NF-4 Click on Price Package and it will show price package active - NF-5 You can use search box to find the price package you need, fill the information and click Filter to find price package: Search name: Name price package Durations: Combo box(1-3 months, 3-6 months,6-12 months) Status: Combo box(Active/Inactive)
Alternative Flows:	AF-5 You can click on "Reset" to reset the form price package
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A

Assumptions:	N/A

7.2 Add Price package

UC ID and Name:	UC-18_ Add new Price_package		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to add new Price_package		
Description:	Add new price_pagekage		
Preconditions:	Price_package you want to add		
Postconditions:	New price_package is added		

Normal Flow:	- NF-1 Login with role admin, expert
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Price Package and it will show price package active
	- NF-5 Click on "add Price package"
	- NF-6 Fill in the the information you want to add
	    + Name: textbox
	    + Duration: textbox(number, 1->12)
	    + Price: textbox(number)
	    + Price sale: textbox(number)
	    + Status sale: Combo box(Active/Inactive)
	    + Status: Combo box(Active/Inactive)
	- NF-7 Click on "Add" when you fill all
	- NF-8 The price package will be added,you will be back to the price package list and show message "Add successful!"		

Alternative Flows:	- AF-7 Click cancel if you don't want to add anymore - AF-8 .a.If the status you want to add is "Active" and the course have 3 price packages, the price package will not be added,you will be back to the price package list and show message "At one time, there can only be a maximum of 3 and at least 1 price package active!" - AF-8 .b.If the course you want to add has a sale price greater than or equal to the normal price, the price package will not be added,you will be back to the price package list and show message "Add failed! Sale price needs to be cheaper than normal price" appears.		
Exceptions:	N/A		

Priority:	Medium
Frequency of Use:	High
Business Rules:	- Maximum 3 price package can be active at the same time - Sale price must be cheaper than Normal Price
Other Information:	None
Assumptions:	The user's connection to server is stable

7.3 Edit Price package

UC ID and Name:	UC-19_ EditPrice package		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to edit a Price_package		
Description:	Edit price_pagekage		
Preconditions:	Price_package you want edit is available		
Postconditions:	price_package will be edited		

Normal Flow:	- NF-1 Login with role admin, expert
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Price Package and it will show price package active
	- NF-5 Click on "Edit" button of the price package you want to edit
	- NF-6 Fill in the the information you want to edit
	    + Name: textbox
	    + Duration: textbox(number, 1->12)
	    + Price: textbox(number)
	    + Price sale: textbox(number)
	    + Status sale: Combo box(Active/Inactive)
	    + Status: Combo box(Active/Inactive)
	- NF-7 Click on "Save" when you fill all
	- NF-8 The price package will be edited and back to the price package list page and show a notification message"Update successful!"		

Alternative Flows:	- AF-7 Click cancel if you don't want to Edit anymore - AF-8 .a.If the status you want to Edit is "Active" and the course have 3 price packages, the price package will not be edited and back to the price package list page and show notification status		

	"At one time, there can only be a maximum of 3 and at least 1 price package active!"
	- AF-8 .b.If the course you want to edit has a sale price greater than or equal to the normal price, the price package will not be edited and back to the price package list page and show a notification "Update failed! Sale price needs to be cheaper than the normal price." appears.
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	High
Business Rules:	- Maximum 3 price package can be active at the same time - Sale price must be cheaper than Normal Price
Other Information:	None
Assumptions:	The user's connection to server is stable

7.4 Delete Price package

UC ID and Name:	UC-20_ DeletePrice package		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to delete a Price_package		
Description:	Edit price_pagekage		
Preconditions:	Price_package you want delete is available		
Postconditions:	price_package will be deleted		
Normal Flow:	- NF-1 Login with role admin, expert - NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status - NF-3 Click on Edit/View of a course - NF-4 Click on Price Package and it will show price package active - NF-5 Click on "Delete" button of the price package you want to Delete and it will show the pop-up delete - NF-6 Click on "Delete" on the pop-up - NF-7 The price package will be deleted, back to the Price package list page and Show notification status "Delete successful!"		
Alternative Flows:	- AF-6 Click cancel if you don't want to Delete anymore - AF-7 If the price package you want to delete has an active status and is the last price package, it will not be deleted, back		

	to the Price package list page and the message "There must be at least one active price package!" will appear.
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	High
Business Rules:	- There must be at least one active course
Other Information:	None
Assumptions:	The user's connection to server is stable

8. Manage Chapter

8.1 View and search chapter

UC ID and Name:	UC21_View and search chapter		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to view List chapter and they can edit it		
Description:	View and search list chapter manage		
Preconditions:	- Login with admin,expert role		
Postconditions:	- Show the chapter of the course		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 You can use search box to find the chapter you need, fill the information and click Filter to find chapter:
	      Search name chapter : Name chapter
	      Status: Combo box(Active/Inactive)		

Alternative Flows:	- AF-5 You can click on "Reset" to reset the form chapter		
Exceptions:	N/A		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

8.2 Add chapter

UC ID and Name:	UC22_Add Chapter		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to add Chapter for course		
Description:	Add name of Chapter		
Preconditions:	- Course information is available		
Postconditions:	- Add chapter information		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 Click on the button "Add chapter" and it will show the pop-up
	- NF-6 Fill the form to add the Chapter:
	    + Name(text box): input name of chapter
	    + Status(combo box): select status of chapter
	- NF-7 Click button "add" to add the chapter
	- NF-8 The system will add the chapter,back to the chapters list and show the message "add Chapter successful!"		

Alternative Flows:	- AF-7 Click Cancel if you don't want to delete anymore and you will back to chapter list		
Exceptions:	N/A		
Priority:	N/A		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:	None		
Assumptions:	The user's connection to server is stable		

8.3 Edit chapter

UC ID and Name:	UC23_Edit Chapter		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to Edit Chapter for course		

Description:	Edit name of Chapter
Preconditions:	Chapter information is available
Postconditions:	Edit chapter information

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 Click on the button "Edit" of a chapter you want to edit and it will show the pop-up
	- NF-6 Fill the form to Edit the Chapter:
	    + Name(text box): input name of chapter
	    + Status(combo box): select status of chapter
	- NF-7 Click button "Edit" to Edit the chapter
	- NF-8 The system will add the chapter, back to the chapters list page and show the message "edit Chapter successful!"

Alternative Flows:	- AF-7 Click Cancel if you don't want to delete anymore and you will back to chapter list
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	- Chapter information is available
Other Information:	None
Assumptions:	The user's connection to server is stable

8.4 Delete chapter

UC ID and Name:	UC24_Delete Chapter		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to delete Chapter of course		
Description:	Delete Chapter and all lesson of the chapter		
Preconditions:	Chapter information is available		
Postconditions:	Delete chapter information		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 Click on the button "Delete" on the chapter and it will show the pop-up to delete chapter
	- NF-6 Click on the button "Delete" on the pop-up to delete the chapter
	- NF-7 The system will delete all lessons of the chapter and the chapter, back to the chapter lists page and show the message "Delete chapter successful!"
Alternative Flows:	- AF-6 Click Cancel if you don't want to delete anymore and you will back to chapter list
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	- Chapter information is available
Other Information:	None
Assumptions:	N/A

9. Manage Lesson

9.1 View and search lesson

UC ID and Name:	UC25_View and search lesson		
Created By:	LongVD		
Primary Actor:	Admin,Expert		
Trigger:	When admin want to view List lesson and they can edit it		
Description:	View and search list lesson manage		
Preconditions:	- Login with admin,expert role		
Postconditions:	- Show the lesson of the chapter		
Normal Flow:	- NF-1 Login with admin,expert role		
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status		
	- NF-3 Click on Edit/View of a course		
	- NF-4 Click on Manage Lessons and it will show List chapter active		
	- NF-5 Click on the button "Lesson" on the chapter and it will show the go to the Lesson List page		

	- NF-6 You can use search box to find the lesson you need, fill the information and click Filter to find lesson:
	      Search lesson : Name the lesson
	      Status: Combo box(Active/Inactive)
	
	-

Alternative Flows:	- AF-6 You can click on "Reset" to reset the form lesson
Exceptions:	N/A
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

9.2 Add lesson

UC ID and Name:	UC26_ Add lesson		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to add Lesson		
Description:	Add lesson		
Preconditions:	Course, chapter information is available		
Postconditions:	Add Lesson information		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 Click on the button "Lesson" on the chapter and it will show the go to the Lesson List page
	- NF-6 Click on the button "Add lesson" and it will go to add lesson page
	- NF-7 Fill in the information you want to add, information contains:
	    + Lesson Name(Text box)
	    + Category(Combo box)
	    + Status(Combo box)
	    + Link youtube(Text box)(you will go to the video on youtube, copy the link on youtube and paste it here)		

	+ Content(Text area)
	- NF-8 Click on "Save" button
	- NF-9 The system will add the Lesson and back to the Lesson List page, showing the message "Add Lesson successful!"
Alternative Flows:	- AF-8 Click button "Back"if you don't want to add anymore
Exceptions:	N/A
Priority:	N/A
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	None
Assumptions:	The user's connection to server is stable

9.3 Edit lesson

UC ID and Name:	UC27_ Edit lesson		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to Edit Lesson
Description:	Edit lesson information
Preconditions:	Course, chapter,lesson information is available
Postconditions:	Edit Lesson information
Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 Click on the button "Lesson" on the chapter and it will show the go to the Lesson List page
	- NF-6 Click on the button "Edit" on the lesson and it will go to Edit lesson page
	- NF-7 Fill in the information you want to edit, information contains:
	+ Lesson Name(Text box)
	+ Category(Combo box)
	+ Status(Combo box)
	+ Link youtube(Text box)(you will go to the video on youtube, copy the link on youtube and paste it here)
	+ Content(Text area)

	- NF-8 Click on "Save" button - NF-9 The system will edit the Lesson and back to the Lesson List page, showing the message "Edit Lesson successful!"
Alternative Flows:	- AF-8 Click button "Back"if you don't want to edit anymore
Exceptions:	N/A
Priority:	N/A
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	None
Assumptions:	The user's connection to server is stable

9.4 Delete lesson

UC ID and Name:	UC28_ Delete lesson		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to Delete Lesson
Description:	Delete lesson information
Preconditions:	Course, chapter,lesson information is available
Postconditions:	Delete Lesson information
Normal Flow:	- NF-1 Login with admin,expert role - NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status - NF-3 Click on Edit/View of a course - NF-4 Click on Manage Lessons and it will show List chapter active - NF-5 Click on the button "Lesson" on the chapter and it will show the go to the Lesson List page - NF-6 Click on the button "Delete" on the lesson and it will show the pop-up delete lesson - NF-7 Click on the button "Delete" on the pop-up - NF-8 The system will delete the Lesson and go back to the Lesson List page, showing the message "Delete Lesson successful!"
Alternative Flows:	- AF-7 Click button "Back"if you don't want to edit anymore
Exceptions:	N/A
Priority:	N/A

Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	None
Assumptions:	The user's connection to server is stable

9.5 View lesson detail

UC ID and Name:	UC29_ View lesson detail		
Created By:	LongVD		
Primary Actor:	Admin,expert		
Trigger:	When admin want to view lesson information		
Description:	View lesson information		
Preconditions:	Course, chapter,lesson information is available		
Postconditions:	View Lesson information		

Normal Flow:	- NF-1 Login with admin,expert role
	- NF-2 Click on name of account on navbar and choose "Manage Course Content" and it will show all Course with active status
	- NF-3 Click on Edit/View of a course
	- NF-4 Click on Manage Lessons and it will show List chapter active
	- NF-5 Click on the button "Lesson" on the chapter and it will show the go to the Lesson List page
	- NF-6 Click on the button "View" on the lesson and it will go to view lesson page
	- NF-7 Lesson information contains:
	    + Lesson Name
	    + Category
	    + Status
	    + Link youtube(Video)
	    + Content		

Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	N/A		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:	None		
Assumptions:	The user's connection to server is stable		

III. Design Specifications

1. View course

1.1 View List Course

a.UI design

Field Name	Field Type	Description
Name course	Button	Click to show the detail of course

b.Database access

Table	CRUD	Description
Courses	R	Show courses and details

1/ Show courses list

Select * from courses where status = 1

1.2 SearchCourse

a.UI design

Search course

Search course...

Category

Show All

Short By

Latest

On sale ☐

Filter

Field Name	Field Type	Description
Search course	Text box	This is for user to type the course which user is looking for
Short By	Combo box	This is for user to select type of users want to arrange: Low to high, high to low, latest
Category	Combo box	This is for user to choose by category
On sale	Check box	This is for user to choose course on sale

b.Database access

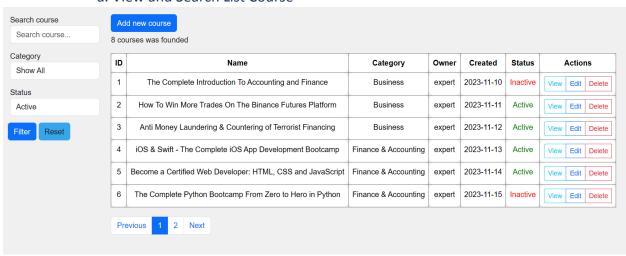| Table	CRUD	Description
Courses	R	Find courses and course prices,category, sorted by user

SQL Commands:

1/ Search course by keyword

select * from courses where name like '%' + 'keyword' + '%' order by created_at desc

2. Manage course

a. View and Search List Course
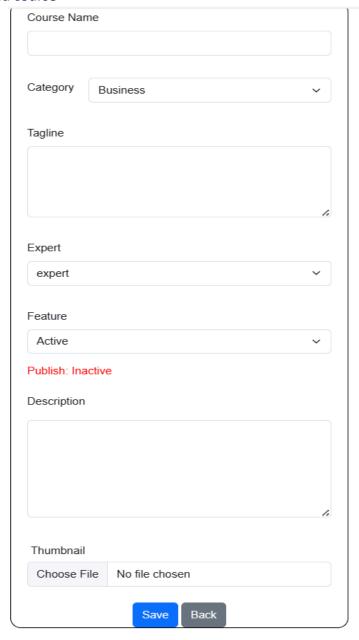
ID	Name	Category	Owner	Created	Status	Actions
1	The Complete Introduction To Accounting and Finance	Business	expert	2023-11-10	Inactive	View Edit Delete
2	How To Win More Trades On The Binance Futures Platform	Business	expert	2023-11-11	Active	View Edit Delete
3	Anti Money Laundering & Countering of Terrorist Financing	Business	expert	2023-11-12	Active	View Edit Delete
4	iOS & Swift - The Complete iOS App Development Bootcamp	Finance & Accounting	expert	2023-11-13	Active	View Edit Delete
5	Become a Certified Web Developer: HTML, CSS and JavaScript	Finance & Accounting	expert	2023-11-14	Active	View Edit Delete
6	The Complete Python Bootcamp From Zero to Hero in Python	Finance & Accounting	expert	2023-11-15	Inactive	View Edit Delete

Search course

Search course...

Category

Show All

Status

Active

Filter Reset

Add new course

8 courses was founded

Previous 1 2 Next

Field Name	Field Type	Description
View	Button	This is for user to view the course detail information
Edit	Button	Click will open the new screen to Edit course
Delete	Button	Click will open the pop-up to delete course
Add course	Button	Click will open the pop-up to create course
Search course	Text box	Input your course you want to find
Category	Combo box	Choose your category you want to find
Status	Combo box	Choose your status of course you want to find
Filter	Button	After choose all information, click to find
Reset	Button	Click to reset the search box

b. Add course

Course Name

Category   Business ⌄

Tagline

Expert

    expert ⌄

Feature

    Active ⌄

Publish: Inactive

Description

Thumbnail

Choose File   No file chosen

Save   Back

Field Name	Field Type	Description
Course name	Text box	This is for user to input the name course
Category	Combo box	This is for user to choose category
Tag line	Text box	This is for user to input the tagline
Expert	Combo box	This is for user to choose Expert
Feature	Combo box	This is for user to choose status feature
Description	Text area	This is for user to input the Description
Choose file	File	This is for user to choose the image
Save	Button	This is for user to add new course

Back	Button	This is for user to back to page "List Course Manage"

c. Edit course

Field Name	Field Type	Description
Course name	Text box	This is for user to input the name course
Category	Combo box	This is for user to choose category
Tag line	Text box	This is for user to input the tagline
Expert	Combo box	This is for user to choose Expert
Feature	Combo box	This is for user to choose status feature
Publish	Combo box	This is for user to choose status publish
Description	Text area	This is for user to input the Description
Choose file	File	This is for user to choose the image
Save	Button	This is for user to update the overview course information
Back	Button	This is for user to back to page "List Course Manage"

d. Delete course

Field Name	Field Type	Description

Delete	Button	Click it will delete Course
Cancel	Button	Click it will cancel your process

3. Login
a. UI design

Field Name	Field Type	Description
Email	Text box	This is for user to input the email
Password	Text box	This is for user to input the password
Login	button	Used for users to log into the system
Forgot password	Link	Leads to the forgot password page

4. Register
a. UI design

Field Name	Field Type	Description
Email	Text box	This is for user to input the email
Username	Text box	This is for user to input the username
Fullname	Text box	This is for user to input the fullname
Phone Number	Text box	This is for user to input the phone number
Created_at	Combo box	Use to user choose the date login
Gender	Combo box	Use to user choose the gender
Password	Text box	This is for user to input the password
Re-pass	Text box	This is for the user to enter the password again
Sign Up	button	Used for users to register into the system

b. Database access

Table	CRUD	Description
Sign Up	C	Create a new account in system

5. Manager Profile
5.1. Manager profile
a. UI design

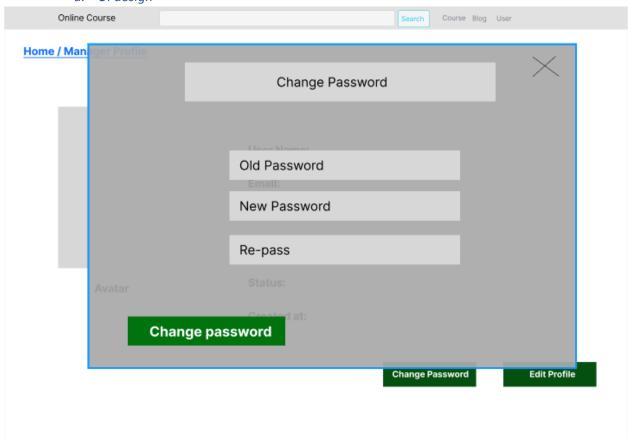| Field Name	Field Type	Description
Change Password	Button	Go to the "change password popup" screen
Edit Profile	Button	Go to the "Edit profile popup" screen

b. Database access

Table	CRUD	Description

Manager Profile	R	View user information registered with the system

5.2. Change password

a. UI design

Field Name	Field Type	Description
Old pass word	Text box	This is for user to input the old password
New password	Text box	This is for user to input the new password
Re-pass	Text box	This is for user to input the new password again
Change password	Button	Change the new password for the account

b. Database access

Table	CRUD	Description
Change password	U	Update the new password for the account

5.3. Edit profile

a. UI Design

Field Name	Field Type	Description
Username	Text box	This is for user to input the username
Avatar	Text box	This is for user to input the image' link
Fullname	Text box	This is for user to input the fullname
Phone Number	Text box	This is for user to input the phone number
Created_at	Combo box	Use to user choose the date login
Gender	Combo box	Use to user choose the gender
Save	button	Update the new user's information for the account

b. Database access

Table	CRUD	Description
Edit Profile	U	Update the new user's information for the account

6. Slider List

6.1. View Slider List

a.   UI design

Field Name	Field Type	Description
Search slider	Text box	This is for user to input the slider to search
Search backlink	Text box	This is for user to input the backlink to search
Status	Combo box	Use to user choose the status to search
Search	Button	Search slider by name, backlink and status
Title	Button	Leads to the slider detail page
Edit	Button	Leads to the slider edit page

b.   Database access

Table	CRUD	Description
Slider List	R	View slider list information

6.2. Edit Slider

a. UI design

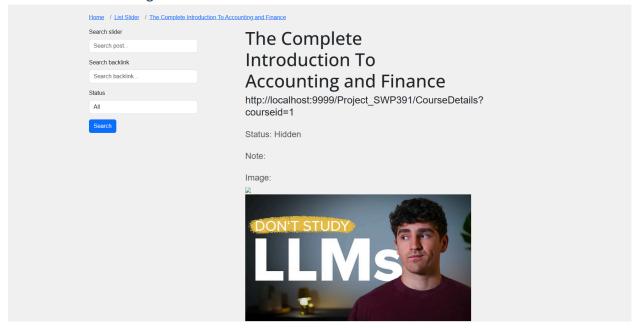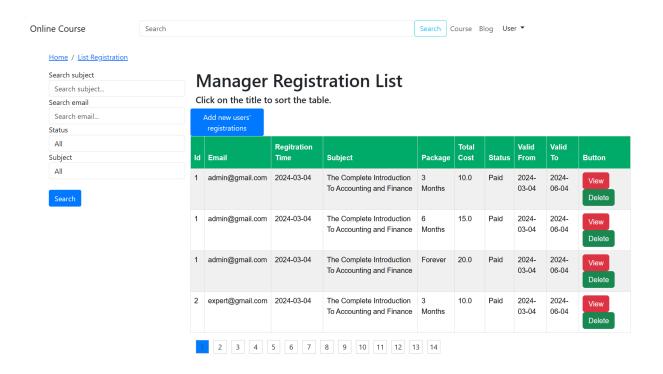| Field Name	Field Type	Description
Title	Text box	This is for user to input the title
Backlink	Text box	This is for user to input the backlink
Status	Combo box	Use to user choose the status
Note	Text Box	This is for user to input the note
Image	Text Box	This is for user to input the picture link
Save	Button	Update Slider information

b. Database access

Table	CRUD	Description
Edit Slider	U	Update Slider Information

7. View Slider Detail

a. UI design

Field Name	Field Type	Description
Search slider	Text box	This is for user to input the slider to search
Search backlink	Text box	This is for user to input the backlink to search
Status	Combo box	Use to user choose the status to search
Search	Button	Search slider by name, backlink and status

b. Database access

Table	CRUD	Description
Slider Detail	R	View detailed information of each slider

8. Registration List

8.1 Registration List

a. UI Design

Field Name	Field Type	Description
Search subject	Text box	This is for user to input the slider to search
Search email	Text box	This is for user to input the backlink to search
Status	Combo box	Use to user choose the status to search
Subject	Button	Use to user choose the subject to search
Search	Button	Search registration by subject and backlink
Add new user' registration list	Button	Add a new user's registration
View	Button	View Registration detail
Delete	Button	Delete a registration

b. Database access

Table	CRUD	Description
Registration List	R, D	View list of registration, delete the registration

8.2 Add new User Registration
    a. UI Design
    b. Database access

Table	CRUD	Description
Add new User Registration	C	Create a new user registration by course

9. Registration Details

a. UI Design

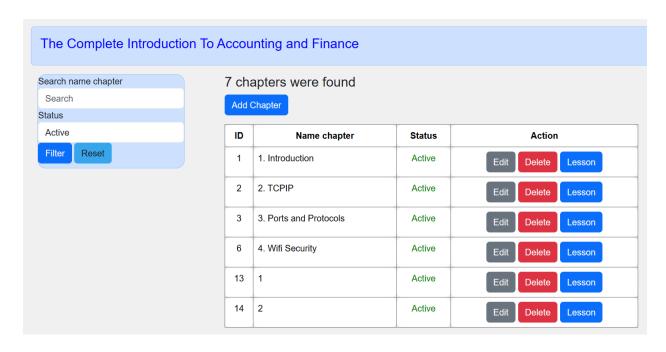| Field Name	Field Type	Description
Status	Combo box	Use to user choose the subject
Change the status	Button	Used to change status from paid to unpaid or vice versa

b. Database access

Table	CRUD	Description
Registration Details	U. R	View the registration course information; Update status

10. Manage Chapter

a. View and search chapter

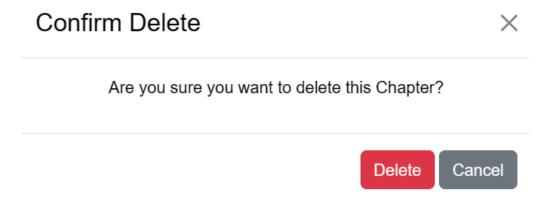| Field Name	Field Type	Description
Add chapter	Button	Click will display a pop up used to add chapters
Edit	button	Click will open a pop-up to change the Chapter name and status
Delete	Button	Click will open a pop-up to delete the chapter
Lesson	Button	Click will go to manage lesson screen
Filter	Button	Click to find chapter you want
Reset	Button	Click to reset the search box
Search name chapter	Search box	Input your name chapter you want to find
Status	Combo box	Choose status chapter you want to find

b. Pop up add/edit chapter

Edit Chapter ✕

Name

1. Introduction

Status

Active ⌄

Update Cancel

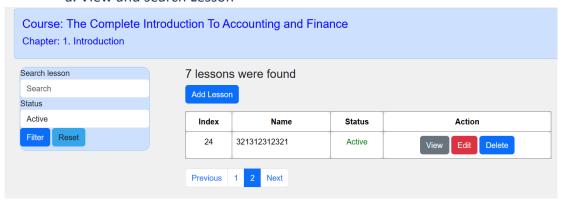| Field Name	Field Type	Description
Name	Text box	Input name of chapter
Status	Combo box	Choose status of chapter
Update/Add	Button	Click it will add/update your chapter
Cancel	Button	Click it will cancel your process

c. Pop up Delete chapter

Confirm Delete ✕

Are you sure you want to delete this Chapter?

Delete Cancel

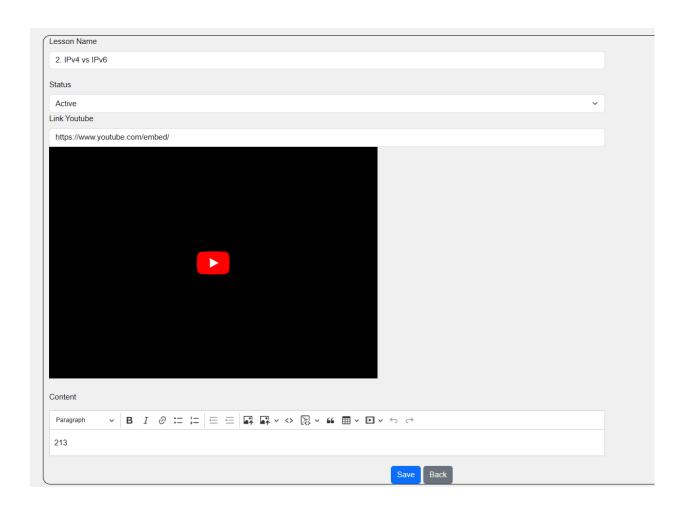| Field Name	Field Type	Description
Delete	Button	Click it will delete all lesson of your chapter and your chapter
Cancel	Button	Click it will cancel your process

11. Manage Lesson

a. View and search Lesson

Field Name	Field Type	Description
Add Lesson	Button	Click will display a Screen to add lesson
Edit	button	Click will open a Screen to edit lesson
Delete	Button	Click will open a pop-up to delete the Lesson
View	Button	Click will go to a Screen to see lesson
Filter	Button	Click to find Lesson you want
Reset	Button	Click to reset the search box
Search Lesson	Search box	Input your name lesson you want to find
Status	Combo box	Choose status Lesson you want to find

b. Add/Edit Lesson

Field Name	Field Type	Description
Lesson Name	Text box	Input your name lesson
Status	Combo box	Choose status Lesson
Link Youtube	Text box	Copy and paste link youtube
Content	Text area	Input your information
Save	Button	Click to add/edit your information
Back	Button	Click to back to Lesson List

c. Pop-up Delete Lesson

Field Name	Field Type	Description
Delete	Button	Click it will delete lesson
Cancel	Button	Click it will cancel your process

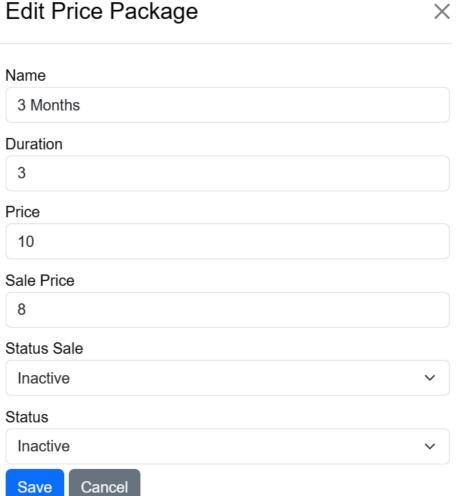## 12. Manage Price Package

a. View and search Price Package

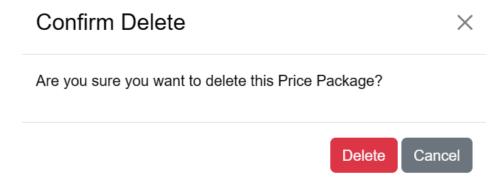| Field Name	Field Type	Description
Add Price Package	Button	Click will display a pop-up to add Price package
Edit	button	Click will open a pop-up to edit Price package
Delete	Button	Click will open a pop-up to delete the Price package
Filter	Button	Click to find Price package you want
Reset	Button	Click to reset the search box
Search name	Search box	Input your name Price package you want to find
Status	Combo box	Choose status Price package you want to find
Duration	Combo box	Choose time duration of Price package you want to find

b. Edit/Add

Edit Price Package ✕

Name

    3 Months

Duration

    3

Price

    10

Sale Price

    8

Status Sale

    Inactive   ⌄

Status

    Inactive   ⌄

[Save] [Cancel]

Field Name	Field Type	Description
Name	Text box	In put name of price package
Duration	Text box	Input duration of price package (months)
Price	Text box	Input price
Sale price	Text box	Input sale price
Status sale	Combo box	Choose status sale of Price package
Status	Combo box	Choose status of Price package
Save	Button	Click to add/edit price package
Cancel	Button	Click to cancel your process

c. Delete

Field Name	Field Type	Description
Delete	Button	Click it will delete Price package
Cancel	Button	Click it will cancel your process

13. View Lesson

a.UI design

Field Name	Field Type	Description
Chater name	Button	Click it will show lesson of chapter

Lesson name	Button	Click it will the lesson content

b. Database access

Table	CRUD	Description
Chapter List	R	View list of chapter
Lesson List	R	View list of lesson

14. View Blog

a.UI design

b. Database access

Table	CRUD	Description
Blog Detail	R	View post

15. Edit Blog
a.UI design

Field Name	Field Type	Description
Title	Text box	In put name of post
Thumbnail	Text box	Input thumbnail
Category	ComboBox	Choose category
Subtitle	Text box	Input subtitle
Content	Textarea	Input content
Save	Button	Click to save change
Create new	Button	Click to create new post
Delete	Button	Click to delete post