

PROBLEM STATEMENT

An online course website is an interactive platform that allows users to access educational content and complete coursework remotely. The website includes a variety of resources such as videos, readings, quizzes, and assignments that too are an organised structure. Users can progress through the course at their own pace(a golden opportunity for slow bloomers), and may also have the ability to communicate with instructors and other students through live chats and dedicated doubt sessions. Websites offer features such as progress tracking, certification, etc. Some also include quizzes and tests that provide immediate feedback on a student's understanding of the material. There are several limitations in the current scenario:

- Offline teaching typically requires students to be present in a physical location, which can limit the number of students.
- Offline teaching typically follows a predefined schedule and has fixed time slots.
- Offline teaching can be difficult to scale up, as it requires additional resources such as classrooms, instructors, and equipment.
- Without technology, it can be harder for offline teachers to adapt the curriculum or teaching methods to different student needs or learning styles.
- Offline teaching may have limited options for assessment as it is harder for teachers to evaluate student progress and provide effective feedback.
- The idea behind interactive courses is that learners learn best when they're required to participate in the process actively, rather than simply reading a text or watching a video such as on a non-interactive online website.

So, to overcome the above said limitations we are proposing a website that has the following features:

- Our websites will have facilities such as forums, live chats, and dedicated doubt classrooms that allow students to communicate with instructors and other students.
- This feature allows students to test their understanding of the topic and receive immediate feedback on their performance.
- Our websites will offer certification upon completion of a course, which can be useful for professionals looking to advance their careers, or for students seeking to demonstrate their knowledge and skills.
- Our website will be responsive and can be accessed from any source such as smartphones, tablets, and laptops.

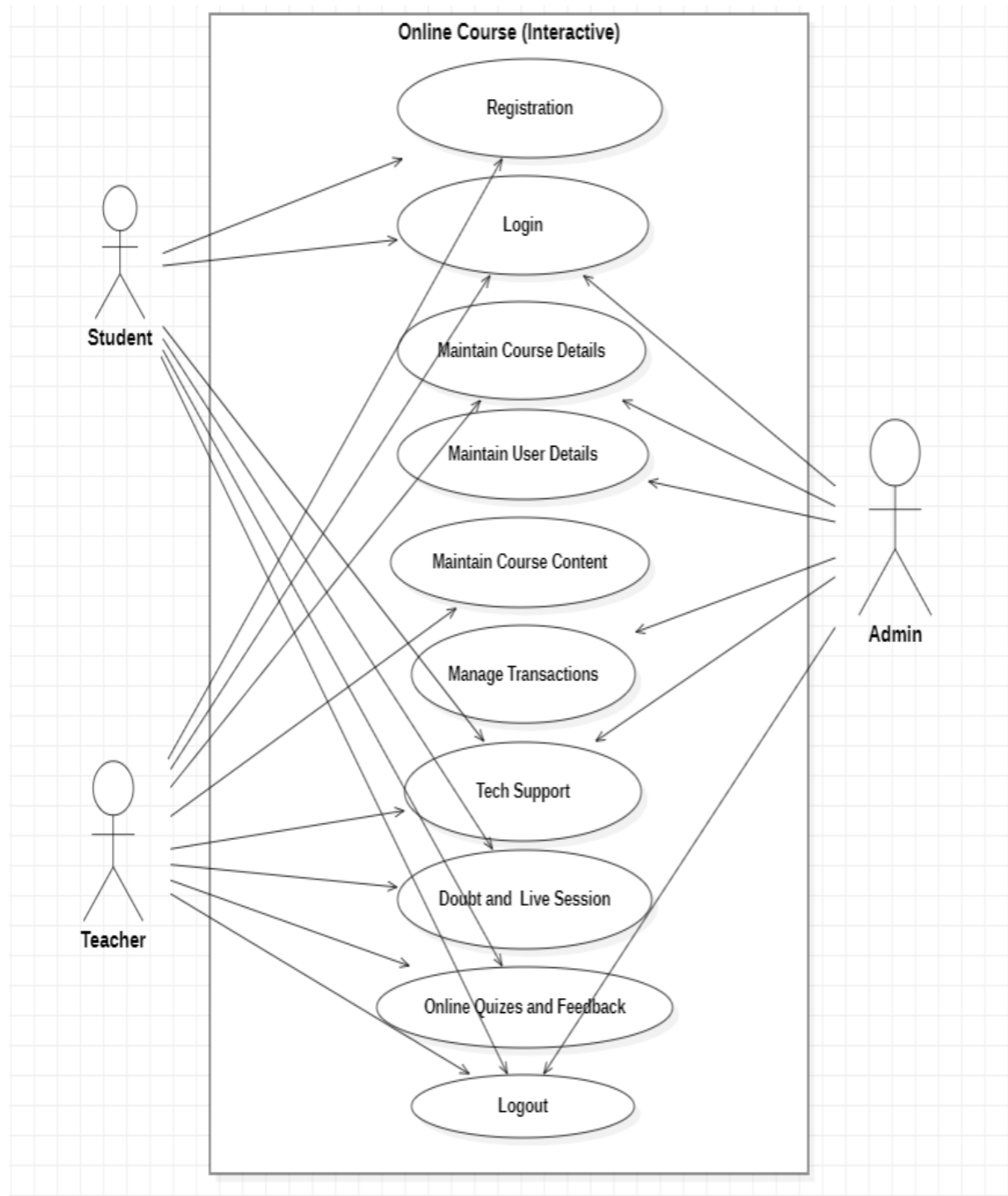
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Title Of Project	Online Course Interactive
Stakeholders Involved in Capturing Requirement	Teachers, Students, Admin, Tech Support
Techniques used for Requirement Capturing	Interviewing and Brainstorming
Name of the person along with Designations	Abhishek Goyal: Software Developer Aman Gupta: Software Developer
Date	2 February 2023
Version	1.0

Consolidated list of Initial Requirement:-

1. The software should be compatible with multiple devices and browsers.
2. A secure system for users to **create their accounts and log in** to access the website's features and content.
3. Live video streaming and live chat, including features for screen sharing, video access, mic access, jam board, and class recording
4. Allows users to **manage their personal information and preferences**, including their profile picture, name, and contact information.
5. **Keeps track of each user's progress** through the courses they are enrolled in, including the completion of assignments and exams.
6. The software should allow educators to **block a student** creating nuisance in the classroom or chat section.
7. The software should enable students to access and complete online courses, including viewing course content, taking quizzes, and submitting assessments.
8. The software should be scalable to accommodate a large number of users and courses.
9. Automates the grading process for quizzes and exams and provides immediate feedback to students.
10. Allows students and instructors to communicate directly, including the ability to send and receive messages and attachments.
11. Build and manage a database for storing user data as well as content data
12. The software should integrate with third-party tools for practical learning, like codeSandbox and graph plotters.
13. The software should support multiple languages for international access and engagement.
14. The software should facilitate the automation of attendance taking for teachers.
15. All users will be given Random UserID to identify them
16. Admin:-
 - a. Managing Student & Teacher
 - b. Creating New Course
17. Teacher:-
 - a. Uploading Course
 - b. Taking Live Classes
 - c. Creating Quiz and doubt Forms
 - d. One-to-one interaction with premium enrollers
18. Student:-
 - a. Accessing Course content
 - b. Giving online tests

Use Case Diagram



Use Case Description

Registration
Introduction: This use case covers the process for students and teachers to register on the online course website.
Actors: Student, Teacher
Preconditions: None
Postconditions: The user has a registered account on the online course website.
Flow of Events: Basic Flow: <ul style="list-style-type: none">• The user clicks the "Register" button on the website.• The user selects whether they are registering as a student or a teacher.• The user fills out a form with their personal information, such as name, email address, and password.• The user submits the form.• The website verifies the information and creates an account for the user.• The website sends a confirmation email to the user's email address.• The user clicks the confirmation link in the email to activate their account. Alternative Flow: Alternative Flow 1: Incorrect Information If the user provides incorrect information in the registration form, they receive an error message and are unable to complete the registration process. Alternative Flow 2: Duplicate account: If the user tries to create an account with an email address that has already been registered, the website displays an error message and does not allow the user to create a duplicate account. Alternative Flow 3: Incorrect email format: If the user enters an email address in the incorrect format, the website displays an error message and does not allow the user to complete the registration process until they enter a valid email address. Alternative Flow 4: Incorrect email format: Shutdown, Disturbance in Internet Connectivity and exit Website
Special Requirements: None
Associated Use case: None

Login
Introduction: To allow a registered user to access their account on the online course website.
Actors: Student, Teacher, Admin
Preconditions: Users must have an account on the online course website.
Postconditions: Users get logged in to their account and then can access the courses and other information related to their account.
Flow of Events: Basic Flow: <ul style="list-style-type: none"> • User enters their email address and password. • The website checks the entered credentials against the registered user accounts. • If the entered credentials are correct, the website grants the user access to their account. • The website displays the user's dashboard, which shows the courses they are enrolled in, the progress of each course, and other account information. Alternative Flow: Alternative Flow 1: Incorrect credentials: If the entered credentials are incorrect, the website displays an error message and does not grant the user access to their account. Alternative Flow 2 : Forgotten password: If the user forgets their password, they can click on the "Forgot password" link, which will initiate the password reset flow.
Special Requirements: Login Credentials
Associated Use case: None

Maintain Course Details
Introduction: This use case covers the process for a teacher or admin to manage the details of a course offered on the online course website.
Actors: Teacher, Admin
Preconditions: The teacher or admin is logged in to the website. The course has already been created on the website.
Postconditions: The course information on the online course website is up-to-date.
<p>Flow of Events:</p> <p>Basic Flow:</p> <ul style="list-style-type: none"> ● The teacher or admin accesses the course management page of the website. ● The teacher or admin selects the course they want to manage. ● The teacher or admin is taken to the course details page where they can view and update the following information: <ul style="list-style-type: none"> ○ Course title ○ Course description ○ Course content (e.g. lectures, assignments, exams) ○ Course schedule (e.g. start and end dates) ○ Enrollment information (e.g. number of students enrolled) ● The teacher or admin makes the desired updates to the course information. ● The teacher or admin clicks on a "Save" button to save the updates. ● If the updates were successful, a confirmation message is displayed to the teacher or admin. ● If the updates were unsuccessful, an error message is displayed to the teacher or admin with instructions on how to resolve the issue. <p>Alternative Flow:</p> <p>Alternative Flow 1: Invalid Access: If the teacher does not have permission to access the course management page, they are redirected to their dashboard with an error message.</p> <p>Alternative Flow 2 : Update Conflict: If the teacher or admin tries to make an update that conflicts with another course, they are prompted to resolve the conflict before proceeding.</p>
<p>Special Requirements: Login Credentials</p>
<p>Associated Use case: Login</p>

Maintain User Details
Introduction: This use case covers the process for an admin to manage the details of students and teachers registered on the online course website.
Actors: Admin
Preconditions: The admin is logged in to the website. The students and teachers have already registered on the website.
Postconditions: The user information on the online course website is up-to-date.
<p>Flow of Events:</p> <p>Basic Flow:</p> <ul style="list-style-type: none"> ● The admin accesses the user management page of the website. ● The admin selects the student or teacher whose details they want to manage. ● The admin is taken to the user details page where they can view and update the following information: <ul style="list-style-type: none"> ○ User profile information (e.g. name, email address, phone number) ○ User role (student or teacher) ○ User enrollment information (e.g. courses enrolled in, waitlist status) ○ User progress information (e.g. grades, completion status) ● The admin makes the desired updates to the user information. ● The admin clicks on a "Save" button to save the updates. ● If the updates were successful, a confirmation message is displayed to the admin. ● If the updates were unsuccessful, an error message is displayed to the admin with instructions on how to resolve the issue. <p>Alternative Flow:</p> <p>Alternative Flow 1: Invalid Access: If the admin does not have permission to access the user management page, they are redirected to their dashboard with an error message.</p> <p>Alternative Flow 2 : Update Conflict: If the admin tries to make an update that conflicts with another user, they are prompted to resolve the conflict before proceeding.</p>
<p>Special Requirements:</p> <p>Login Credentials</p>
<p>Associated Use case:</p> <p>Login</p>

Maintain Course Content
Introduction: This use case covers the process for a teacher to manage the content of a course offered on the online course website.
Actors: Teacher
Preconditions: The teacher is logged in to the website. The course has already been created on the website.
Postconditions: The course content on the online course website is up-to-date.
<p>Flow of Events:</p> <p>Basic Flow:</p> <ul style="list-style-type: none"> • The teacher accesses the course management page of the website. • The teacher selects the course whose content they want to manage. • The teacher is taken to the course content page where they can view and update the following information: <ul style="list-style-type: none"> o Course lectures (e.g. video, audio, text) o Course assignments (e.g. homework, quizzes, projects) • The teacher makes the desired updates to the course content. • The teacher clicks on a "Save" button to save the updates. • If the updates were successful, a confirmation message is displayed to the teacher. • If the updates were unsuccessful, an error message is displayed to the teacher with instructions on how to resolve the issue. <p>Alternative Flow:</p> <p>Alternative Flow 1: Invalid Access: If the teacher does not have permission to access the course management page, they are redirected to their dashboard with an error message.</p> <p>Alternative Flow 2 : Update Conflict: If the teacher tries to make an update that conflicts with another course, they are prompted to resolve the conflict before proceeding.</p>
<p>Special Requirements: Login Credentials</p>
<p>Associated Use case: Login</p>

Manage Transactions
Introduction: This use case covers the process for an admin to manage the transactions made on the online course website.
Actors: Admin
Preconditions: The admin is logged in to the website. The students have made transactions (e.g. course enrollments, exam registrations) on the website.
Postconditions: The transaction information on the online course website is up-to-date.
Flow of Events: Basic Flow: <ul style="list-style-type: none"> • The admin accesses the transaction management page of the website. • The admin selects the transaction they want to manage. • The admin is taken to the transaction details page where they can view and update the following information: <ul style="list-style-type: none"> o Transaction information (e.g. date, amount, payment method) o User information (e.g. name, email address, phone number) o Course information (e.g. course name, instructor name) • The admin makes the desired updates to the transaction information. • The admin clicks on a "Save" button to save the updates. • If the updates were successful, a confirmation message is displayed to the admin. • If the updates were unsuccessful, an error message is displayed to the admin with instructions on how to resolve the issue. Alternative Flow: Alternative Flow 1: Invalid Access: If the admin does not have permission to access the transaction management page, they are redirected to their dashboard with an error message. Alternative Flow 2: Update Conflict: If the admin tries to make an update that conflicts with another transaction, they are prompted to resolve the conflict before proceeding.
Special Requirements: Login Credentials
Associated Use case: None

Request Tech Support
Introduction: This use case covers the process for a user to request technical support on the online course website.
Actors: Student, Teacher, Admin
Preconditions: The user is logged in to the website.
Postconditions: The tech support team is aware of the user's issue and can take appropriate action.
<p>Flow of Events:</p> <p>Basic Flow:</p> <ul style="list-style-type: none"> • The user encounters a technical issue while using the website. • The user clicks on a "Tech Support" button on the website. • The user is taken to a form where they can enter the following information: <ul style="list-style-type: none"> o Description of the issue o Contact information (e.g. email address, phone number) • The user clicks on a "Submit" button to send the support request. • If the support request was submitted successfully, a confirmation message is displayed to the user. • If the support request was unsuccessful, an error message is displayed to the user with instructions on how to resolve the issue. <p>Alternative Flow:</p> <p>Alternative Flow 1: Invalid Access: If the user is not logged in, they are prompted to log in before submitting the support request.</p> <p>Alternative Flow 2: Incomplete Information: If the user does not provide the required information, they are prompted to complete the form before proceeding.</p>
Special Requirements: Login Credentials
Associated Use case: Login

Doubt and Live Session
Introduction: This use case covers the process for a student to ask a doubt or attend a live session on the online course website.
Actors: Student, Teacher
Preconditions: The student is logged in to the website. The student is enrolled in a course that offers live sessions or doubt resolution sessions.
Postconditions: The teacher or tech support team is aware of the student's doubt or live session request and can take appropriate action.
<p>Flow of Events:</p> <p>Basic Flow:</p> <ul style="list-style-type: none"> • The student accesses the course page on the website. • The student clicks on a "Doubt" or "Live Session" button on the course page. • The student is taken to a form where they can enter the following information: <ul style="list-style-type: none"> o Description of the doubt or topic for the live session o Contact information (e.g. email address, phone number) • The student clicks on a "Submit" button to send the doubt or request for a live session. • If the doubt or live session request was submitted successfully, a confirmation message is displayed to the student. • If the doubt or live session request was unsuccessful, an error message is displayed to the student with instructions on how to resolve the issue. <p>Alternative Flow:</p> <p>Alternative Flow 1: Invalid Authentication: If the student is not logged in, they are prompted to log in before submitting the doubt or live session request.</p> <p>Alternative Flow 2: Incomplete Information: If the student does not provide the required information, they are prompted to complete the form before proceeding.</p>
<p>Special Requirements:</p> <p>Login Credentials</p>
<p>Associated Use case:</p> <p>Login</p>

Quizzes and Feedback
Introduction: This use case covers the process for a student to take a quiz and receive feedback on the online course website.
Actors: Student, Teacher
Preconditions: The student is logged in to the website. The student is enrolled in a course that includes quizzes.
Postconditions: The student has taken the quiz and received feedback on their performance.
Flow of Events: Basic Flow: <ul style="list-style-type: none"> • The student accesses the course page on the website. • The student clicks on a "Doubt" or "Live Session" button on the course page. • The student is taken to a form where they can enter the following information: <ul style="list-style-type: none"> o Description of the doubt or topic for the live session o Contact information (e.g. email address, phone number) • The student clicks on a "Submit" button to send the doubt or request for a live session. • If the doubt or live session request was submitted successfully, a confirmation message is displayed to the student. • If the doubt or live session request was unsuccessful, an error message is displayed to the student with instructions on how to resolve the issue. Alternative Flow: Alternative Flow 1: Invalid Authentication: If the student is not logged in, they are prompted to log in before taking the quiz. Alternative Flow 2: Exit Confirmation Prompt: If the student leaves the quiz page, they may be prompted to confirm if they want to save their progress or exit the quiz.
Special Requirements: Login Credentials
Associated Use case: Login

Logout
Introduction: This use case covers the process for a student to end their current session and secure their personal information
Actors: Student, Teacher, Admin
Preconditions: The student must have a valid account and be logged into the online course website.
Postconditions: The student's session is terminated, and their personal information, such as their progress in the course, is secured from unauthorized access.
Flow of Events: Basic Flow: <ul style="list-style-type: none"> • The student logs into the online course website and starts working on a lesson. • The student decides to log out and clicks on the "Logout" button located in the upper right-hand corner of the screen. • The website displays a confirmation prompt, asking the student if they are sure they want to log out. • The student confirms the logout request by clicking "Yes" or "Logout". • The student's session is ended, and they are redirected to the login page. Alternative Flow: Alternative Flow 1: Session continues: If the student does not confirm the logout request, their session remains active, and they can continue working on the lesson. Alternative Flow 2: Automatic session end: If the student closes the browser window or navigates away from the website without clicking the "Logout" button, their session will end automatically, but their personal information will not be secured. In this case, the student will need to log in again to continue their work on the course.
Special Requirements: Login Credentials
Associated Use case: Login

1. Introduction

1.1 Purpose

The purpose of an online course that is interactive is to provide learners with an engaging and dynamic learning experience that allows them to actively participate in the learning process. Interactivity in an online course involves the use of multimedia elements such as videos, graphics, and audio to enhance the learning experience. It also involves the use of interactive tools such as quizzes, discussion boards, and online simulations to encourage learner engagement and collaboration.

1.2 Scope

DOs:-

- Use multimedia elements: Incorporate a variety of multimedia elements such as videos, images, and audio to enhance the learning experience.
- Provide interactive tools: Use interactive tools such as quizzes, discussion forums, and simulations to encourage learner engagement and participation.
- Encourage collaboration: Foster a collaborative learning environment by providing opportunities for learners to connect with each other and share ideas.
- Offer feedback and support: Provide learners with feedback and support throughout the course to help them stay motivated and on track.
- Make it mobile-friendly: Ensure the course is mobile-friendly so that learners can access it from anywhere, anytime.

DONTs:-

- Overload with content: Avoid overloading the course with too much content as this can overwhelm learners and hinder their learning experience.
- Neglect accessibility: Ensure the course is accessible to learners with different needs, such as those with visual or hearing impairments.
- Ignore feedback: Take into account learner feedback and make necessary changes to the course to improve the learning experience.
- Use outdated technology: Use up-to-date technology to ensure that the course runs smoothly and is accessible to all learners.
- Disregard time management: Provide learners with a realistic timeline for completing the course and avoid overwhelming them with too much work.

Benefits:-

- Increased engagement: Interactive elements in the course make it more engaging for learners, keeping them motivated and interested in the content.
- Enhanced learning outcomes: Interactive tools can help learners retain information better, leading to improved learning outcomes.

- **Greater flexibility:** Online courses offer greater flexibility in terms of when and where learners can access the content, making it easier for them to fit learning into their busy schedules.
- **Collaborative learning:** Interactive tools such as discussion forums and group projects facilitate collaborative learning, which can lead to a richer learning experience.
- **Personalised learning:** Interactive tools can be used to offer personalised learning experiences tailored to the needs and preferences of individual learners.

1.3 Definitions, Acronyms, and Abbreviations

Definition

- **Online Course Website:** A website that provides access to online courses for students to learn at their own pace and convenience.
- **Course Catalogue:** A comprehensive list of all available courses offered on the website.
- **Course Materials:** Any digital content provided to students to help them learn, including videos, presentations, ebooks, quizzes, and assignments.
- **Enrollment:** The process by which students sign up and pay for a course.
- **User Profile:** A personal account on the website where a user can manage their personal information and view their course progress.
- **Course Progress:** The tracking of a user's progress through a course, including completed assignments and quizzes.
- **Customer Support:** The assistance provided to users with any technical or customer service issues they may encounter on the website.

Acronyms

- SRS: Software Requirements Specification
- UI: User Interface
- UX: User Experience
- CMS: Content Management System
- API: Application Programming Interface

Abbreviations

- FAQ: Frequently Asked Questions
- SSL: Secure Sockets Layer
- HTTP: Hypertext Transfer Protocol
- HTML: Hypertext Markup Language
- CSS: Cascading Style Sheets
- JS: JavaScript
- SQL: Structured Query Language

1.4 References

- Software Engineering by K.K. Aggarwal & Yogesh Singh, New Age Publishing House, 3rd Edition, 2008.
- IEEE Recommended Practice for Software Requirements Specifications IEEE Std 830-1998.
- IEEE Standard for Software Test Documentation—IEEE Std. 829-1998

1.5 Overview

An Online Course Website is a website that offers online courses that can be accessed by students at their own pace and convenience. The website provides a course catalogue, enrollment, course materials, user profiles, course progress tracking, ratings, reviews, and course recommendations. The website should be user-friendly, responsive, secure, and provide excellent customer support. The benefits include increased accessibility, flexibility, affordability, and convenience for both students and instructors.

2. Overall description

This section provides an overview of the online course website, including its product perspective, functions, user characteristics, constraints, and dependencies.

2.1 Product perspective

This section describes how the online course website fits into the larger system or environment in which it operates.

2.1.1 System interfaces

The online course website should have a smooth integration with popular Learning Management Systems (LMS) such as Blackboard, Canvas, Moodle, and other similar systems. Additionally, the system should integrate with payment gateways such as Stripe, PayPal, and other similar payment processing platforms.

2.1.2 User interfaces

The user interface should be easy to use, interactive, and aesthetically pleasing. The website should be responsive and provide a seamless experience across all devices and screen sizes. The user interface should include features such as search, filtering, sorting, and pagination for ease of use.

2.1.3 Hardware interfaces

The online course website should be accessible from any device with internet connectivity, including desktops, laptops, tablets, and smartphones. The website should be optimized for performance and load quickly on all devices.

2.1.4 Software interfaces

The website should be developed using a reliable programming language and framework, such as PHP, Python, or Ruby on Rails. The website should integrate with popular web technologies such as HTML5, CSS3, and JavaScript.

2.1.5 Communications interfaces

The website should be able to communicate with external systems and services, such as email services, payment gateways, and social media platforms.

2.1.6 Memory constraints

The online course website should be designed to handle a large number of users simultaneously. The website should be optimized for speed and should not have any memory constraints that would limit its performance.

2.1.7 Operations

The website should be easy to maintain, with regular updates and patches to fix any security vulnerabilities or bugs. The website should also be scalable, allowing for the addition of new features and functionality as the website grows.

2.1.8 Site adaptation requirements

The online course website should be adaptable to different languages and cultures to make it accessible to a broader audience. The website should also be accessible to users with disabilities, complying with international web accessibility standards.

2.2 Product functions

This section of the SRS outlines the core functions and features that the online course website will provide to its users. These may include functions such as course enrollment, content delivery, communication tools, assessment and evaluation tools, and administrative functions. By defining the product functions clearly, the SRS ensures that all stakeholders have a shared understanding of what the system is supposed to do.

2.3 User characteristics

This section of the SRS describes the intended users of the online course website, including their demographics, educational background, technical skills, and other relevant characteristics. Understanding the characteristics of the users is important for designing a system that meets their needs and is accessible to them. This section also helps stakeholders to identify potential issues or challenges that users may face in using the system.

2.4 Constraints

This section of the SRS identifies any constraints or limitations that may affect the design and development of the online course website. Constraints may include factors such as budget, time, technical resources, regulatory requirements, and user privacy concerns. By identifying these constraints upfront, stakeholders can better plan and allocate resources to ensure that the system is developed within the defined constraints.

2.5 Assumptions and dependencies

This section of the SRS identifies any assumptions or dependencies that may impact the development or operation of the online course website. Assumptions are factors that are believed to be true but have not been validated, while dependencies are factors that are outside the control of the development team but are necessary for the system to work. By identifying these factors upfront, stakeholders can better plan for potential risks or issues that may arise during development and operation of the system.

2.6 Apportioning of requirements

This section of the SRS outlines how the product requirements will be prioritized and implemented over time. This may include identifying requirements that are critical for the initial release of the system, as well as requirements that can be deferred to later releases. By apportioning requirements in this way, stakeholders can better plan and allocate resources to ensure that the system is developed and released in a way that meets the needs of its users and stakeholders.

3. Specific requirements

This section of the SRS outlines the detailed requirements that the online course website must meet to satisfy the needs of its stakeholders. The specific requirements are typically broken down into various sub-sections, as outlined below.

3.1 External interfaces

This section of the SRS describes the interfaces between the online course website and other external systems or services. These interfaces may include hardware or software systems, such as payment gateways, messaging services, or learning management systems.

3.2 Functions

This section of the SRS details the specific functions and features that the online course website must provide to its users. This may include functions such as course registration, content delivery, discussion forums, and assessment tools.

3.3 Performance requirements

This section of the SRS outlines the specific performance requirements that the online course website must meet. These requirements may include factors such as response times, user concurrency, and system availability.

3.4 Logical database requirements

This section of the SRS describes the requirements for the logical organization and management of data within the online course website's database. This may include requirements for data storage, retrieval, and security.

3.5 Design constraints

This section of the SRS outlines any constraints or limitations on the design and development of the online course website.

3.5.1 Standards compliance

This sub-section of the SRS specifies any standards or regulations that the online course website must comply with. This may include accessibility standards, security standards, or industry-specific regulations.

3.6 Software system attributes

This section of the SRS outlines the desired attributes or qualities of the online course website's software system. These attributes may include factors such as reliability, availability, security, maintainability, and portability.

3.6.1 Reliability

This sub-section of the SRS specifies the desired level of reliability for the online course website's software system. This may include requirements for system uptime, error handling, and fault tolerance.

3.6.2 Availability

This sub-section of the SRS describes the desired level of availability for the online course website's software system. This may include requirements for system uptime, system maintenance, and disaster recovery.

3.6.3 Security

This sub-section of the SRS outlines the desired security features and measures for the online course website's software system. This may include requirements for data encryption, access control, and user authentication.

3.6.4 Maintainability

This sub-section of the SRS specifies the desired level of maintainability for the online course website's software system. This may include requirements for code modularity, documentation, and testing.

3.6.5 Portability

This sub-section of the SRS outlines the desired level of portability for the online course website's software system. This may include requirements for cross-platform compatibility, scalability, and ease of deployment.

3.7 Organizing the specific requirements

This section of the SRS outlines the methodology for organizing the specific requirements according to various factors, such as system mode, user class, objects, features, stimulus, and response.

3.7.1 System mode

This sub-section of the SRS specifies the different system modes or states that the online course website may operate in, such as login mode, course mode, or administrative mode.

3.7.2 User class

This sub-section of the SRS describes the different classes or types of users who will interact with the online course website, such as students, instructors, or administrators.

3.7.3 Objects

This sub-section of the SRS outlines the specific objects or entities within the online course website's system, such as courses, assignments, users and discussions.

3.7.4 Feature

This sub-section of the SRS outlines the specific features or functions that the online course website must provide to its users, such as course registration, content delivery, assessment tools, and discussion forums.

3.7.5 Stimulus

This sub-section of the SRS specifies the various types of input or stimuli that the online course website's software system may receive, such as user requests, system alerts, or error messages.

3.7.6 Response

This sub-section of the SRS outlines the specific responses or outputs that the online course website's software system must provide in response to different types of stimuli, such as displaying course content, sending confirmation messages, or generating error reports.

3.7.7 Functional hierarchy

This sub-section of the SRS outlines the functional hierarchy of the online course website's software system, such as the different layers of the

software architecture or the sequence of operations required to complete specific functions.

3.8 Additional comments

This section of the SRS provides any additional comments or information that is relevant to the development of the online course website's software system but is not covered by the other sections of the SRS. This may include any concerns or considerations related to the development process, user experience, or system scalability.

4. Supporting information

This section of the SRS provides any additional supporting information that is relevant to the online course website's software system, such as technical specifications, diagrams, use cases, user manuals, or any other documents that may help to clarify or supplement the requirements outlined in the SRS. It may also include any legal, regulatory, or ethical considerations that need to be taken into account during the development process. The purpose of this section is to provide stakeholders with a comprehensive understanding of the online course website's software system and to ensure that all necessary information is available for the successful development, implementation, and maintenance of the system.

Class Diagram

Class:

User

Course

Lesson

Enrollment

Payment

Communication

Content

Quiz

Progress

Administrator