**CourseTide WebSite**

1. Mohammed Abdur Rasheed - 22BD1A0538
2. Nehith Sayini - 22BD1A053F
3. Laksh Vijayvargiya - 22BD1A050X
4. Jyothi Swaroop - 22BD1A050D

**Problem Statement:**

Online education has become a crucial part of learning, offering students flexibility and convenience. However, many course reservation platforms focus only on enabling users to enroll in courses, neglecting critical aspects such as peer collaboration and personalized support. This lack of engagement and guidance can hinder students' overall learning experience, as they often struggle to find study partners or receive real-time assistance with course-related queries. CourseTide aims to address these issues by providing a unique, feature-rich online course reservation system that emphasizes both collaborative learning and interactive support.

One of the primary challenges students face in existing systems is the inability to engage with peers who are enrolled in the same course. Collaborative learning is a proven method for enhancing knowledge retention and motivation, yet many platforms fail to facilitate group interaction. CourseTide’s Collaborative Learning Spaces provide a solution by allowing students to form study groups, participate in forums, and collaborate on course-related discussions. This feature encourages knowledge sharing, group problem-solving, and helps students stay connected throughout the course duration. It also enables the exchange of ideas and resources, making learning more dynamic and engaging.

Another key issue is the lack of personalized, real-time support for students navigating the platform or managing their course selections. Many users have difficulty choosing the right course or need quick help with specific queries, yet traditional course systems do not provide an efficient way to address these needs. To solve this, CourseTide will integrate an AI-powered Interactive Course Chatbot. This chatbot will assist users with personalized course recommendations based on their learning history, preferences, and career goals. Additionally, it will provide real-time support for course-related questions, technical issues, and scheduling, helping students make informed decisions and resolve issues quickly.

By addressing both collaboration and personalized assistance, CourseTide sets itself apart from existing platforms that focus solely on course enrollment. The combination of Collaborative Learning Spaces and the Interactive Course Chatbot ensures that students not only reserve courses but also engage deeply with the learning process. The platform is designed to be more than just a booking system; it offers a holistic learning experience that supports students from enrollment to course completion.

Moreover, CourseTide will offer a user-friendly, responsive interface that allows students to easily navigate through course options, interact with peers, and access chatbot assistance seamlessly. The system will also provide real-time notifications, ensuring that students are updated on their course progress, upcoming sessions, and any collaborative group activity. This will keep users engaged and help them stay on track throughout their educational journey.

In conclusion, CourseTide is designed to enhance the traditional online course reservation system by integrating essential features for collaboration and personalized support. The Collaborative Learning Spaces foster peer interaction and teamwork, while the Interactive Course Chatbot ensures students receive the guidance they need when navigating the platform. By offering these features, CourseTide aims to provide a more interactive, engaging, and supportive learning environment that caters to the needs of modern students.

**Software Requirement Specifications**

For

CourseTide WebSite

Version 1.0 approved

Prepared by:

1. Mohammed Abdur Rasheed - 22BD1A0538
2. Nehith Sayini - 22BD1A053F
3. Laksh Vijayvargiya - 22BD1A050X
4. Jyoti Swaroop - 22BD1A0553

**Keshav Memorial Institute of Technology**

**05-09-2024.**

**Table of Contents**

**1.Introduction** **........................................................................................**

1.1 Purpose....................................................................................................

1.2 DocumentConventions.............................................................................

1.3 Intended Audience and Reading Suggestions...........................................

1.4 Product Scope...........................................................................................

1.5 References................................................................................................

**2.Overall Description** **........................................................................................**

2.1 Product Perspective……………………………………………………………...................

2.2 Product Functions………………………………………………………………...................

2.3 Operating Environment…………………………………………………………................

2.4 User Characteristics……………………………………………………………………………...

2.5 Design and Implementation Constraints……………………………………………….

2.6 User documentation………………………………………………………………...............

2.7 Assumptions and Dependencies……………………………………………….............

**3.Specific Requirements**

3.1 Functional Requirements………………………………………………………….

3.2 Non-Functional Requirements…………………………………………

**4. Appendix Diagram**

4.1 Use Case Diagram

4.2 Use Case Template

4.3 Sequence Diagram

4.4 Class Diagram

4.5 State Chart Diagram

4.6 Activity Diagram

4.7 Package Diagram

4.8 Component Diagram

4.9 Deployment Diagram

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason for changes** | **Version** |
| Week-1 | 05-09-2024 | SRS creation(Introduction) | 1.0 |
| Week-2 | 06-09-2024 | SRS updation | 2.0 |
| Week-3 |  |  |  |
| Week-4 |  |  |  |
| Week-5 |  |  |  |

**1. Introduction**

The CourseTide project aims to streamline the process of enrolling in educational courses by providing a user-friendly platform. This system is designed to simplify course registration, manage scheduling conflicts, and facilitate communication between students and instructors. The introduction will cover the background of the project, its significance in the educational sector, and an overview of the features and functionalities of the reservation system.

**1.1 Purpose**

The primary purpose of this project is to create a comprehensive, efficient, and reliable course reservation system that enhances the enrollment experience for both students and administrators. It will address the challenges associated with manual registration processes, such as scheduling conflicts, overbooked classes, and administrative inefficiencies. By automating these processes, the system aims to reduce errors, save time, and provide a seamless user experience.

**1.2 Document Convention**

This document adheres to standard conventions to ensure clarity and consistency. Key conventions include:

**Heading:**

Font-Size:16

Font-Style: Bold

Font: Times New Roman

**Subheading:**

Font-Size:14

Font-Style: Bold

Font: Times New Roman

**Content:**

Font-Size:12

Font: Times New Roman.

**1.3 Intended Audience and Reading Suggestions:**

This document is intended for a diverse audience including:

Project Stakeholders: Individuals involved in funding, approving, or overseeing the project.

Developers: Technical teams responsible for designing, coding, and implementing the system.

End Users: Students and administrative staff who will interact with the reservation system.

Documentation Team: Authors and reviewers who are responsible for maintaining and updating the project documentation.

For effective reading:

Project Stakeholders should focus on sections detailing the purpose and product scope to understand the project's value and objectives.

Developers should pay close attention to the technical requirements and system specifications.

End Users might benefit from sections describing system features and user interface guidelines.

Documentation Team should review the document conventions and references to ensure consistency and accuracy.

**1.4 Product Scope**

The product scope outlines the boundaries and deliverables of the course reservation system. This includes:

Core Features: Online course search, enrollment, scheduling, and payment processing.

User Roles: Different functionalities for students, instructors, and administrative staff.

System Requirements: Technical specifications, hardware, and software prerequisites.

Limitations: Any constraints or exclusions, such as integration with third-party systems or support for specific types of courses.

The scope defines what will be included in the project and helps manage expectations by specifying what is outside the project’s boundaries.

**1.5 References:**

We took references from various websites related to online learning platforms like Coursera, Udemy, edX, Khan Academy, and LinkedIn Learning.

* [Coursera](https://www.coursera.org/)
* [Udemy](https://www.udemy.com/)
* [edX](https://www.edx.org/)
* [Khan Academy](https://www.khanacademy.org/)
* [LinkedIn Learning](https://www.linkedin.com/learning/)

Additionally, we referred to relevant documents and software requirements guidelines:

* <http://users.csc.calpoly.edu/~csturner/courses/308w09/Ch9_DocReqts.pdf>
* <https://www.academia.edu/8831452/Software_Requirements_Specification_for_FSoft_D>

**2. Overall Description**

**2.1 Product Perspective**

**CourseTide** is an innovative online course reservation system designed to improve upon existing online learning platforms like Coursera, Udemy, and edX. While it incorporates many of the standard features of these platforms, such as course browsing, enrollment, and user account management, CourseTide stands out with its **Collaborative Learning Spaces** and **Interactive Course Chatbots**. These features encourage peer interaction and offer personalized support, enhancing the overall learning experience.

The platform is user-friendly and mobile-responsive, allowing students to access courses and engage with peers from any device. It integrates modern design with intuitive navigation and provides personalized learning suggestions, real-time support, and collaboration tools. CourseTide seeks to bridge the gap between passive course registration and an engaging, interactive learning environment.

**2.2 Product Functions**

**2.2.1 Administrator**

* Administrators have the ability to add, modify, and delete courses.
* Manage user accounts by approving or rejecting instructor or student registrations based on platform policies.
* Administrators can organize and categorize courses, ensuring they are easy to browse.
* Set up system notifications for course discounts, promotions, or group learning sessions.
* Monitor course completion rates and handle feedback or issues reported by users.

**2.2.2 Instructors**

* Instructors can create, update, and delete courses, manage course content, and upload learning materials.
* They can interact with students through forums and collaborative learning groups, enhancing engagement.
* Can track student progress and provide feedback on assessments or assignments.

**2.2.3 Students/Users**

* Students can search and enroll in courses based on subject, difficulty level, instructor, or specific skills.
* They have the ability to form study groups and engage in **Collaborative Learning Spaces** with peers enrolled in the same course.
* Can access personalized course recommendations and real-time assistance through **Interactive Course Chatbots**.
* Students are provided with account management features, such as tracking course progress, earning certificates, and participating in forums or discussions.

**2.3 Operating Environment**

* **CourseTide** is a web-based platform compatible with all modern browsers such as Google Chrome, Firefox, Safari, and Edge.
* The platform is fully responsive and optimized for both desktop and mobile devices.
* It requires a minimum 1 GHz processor, 2 GB RAM, and 512 MB available disk space for smooth operation on desktop devices.
* For mobile users, it supports iOS, Android, and Windows operating systems.

**2.4 User Characteristics**

The primary users of **CourseTide** are students, instructors, and administrators.

* **Students** are expected to have a basic understanding of computers and mobile devices to browse, enroll in, and complete courses.
* **Instructors** should have proficiency in managing course materials, interacting with students through the collaborative tools, and monitoring student progress.
* **Administrators** must be well-versed in platform operations, troubleshooting, and course or user management.

**2.5 Design and Implementation Constraints**

* Users must have a stable internet connection to access the platform and participate in live group discussions or collaborative spaces.
* All user data, course progress, and collaboration history will be stored securely in a cloud-based database.
* CourseTide will be available 24/7, ensuring students can access their enrolled courses and interactive features at any time.
* No specific operating system is required; the platform is platform-agnostic, running on any device with internet browsing capabilities.
* Users must use valid credentials to access their accounts, and two-factor authentication is recommended for additional security.

**2.6 Assumptions and Dependencies**

* **CourseTide** requires integration with third-party services such as video streaming (e.g., YouTube, Vimeo) for course content delivery and cloud storage solutions for storing course materials.
* The success of CourseTide depends on the availability of internet access and the familiarity of users with online platforms.
* The platform assumes instructors and students are comfortable using discussion forums, collaborative tools, and chatbot interactions for enhanced learning experiences.
* Continuous internet access and updated browsers are required for seamless platform use.

ur Rasheed - 22BD1A0538

1. Nehith Sayini - 22BD1A053F
2. Laksh Vijayvargiya - 22BD1A050X
3. K. Aman Sai - 22BD1A0553