
iStudy

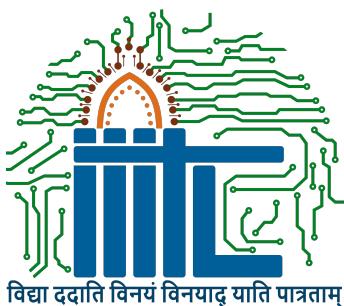
*A project report submitted in partial fulfillment of the requirements for the
award of the degree of*

B.Tech. in Computer Science

by

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Declaration of Authorship

We, **Ashleysha Sohala, Ahmad Maaz and E.Ashok Reddy**, declare that the work presented in "iStudy" is our own. We confirm that:

- This work was completed entirely while in candidature for B.Tech. degree at Indian Institute of Information Technology, Lucknow.
- Where We have consulted the published work of others, it is always cited.
- Wherever We have cited the work of others, the source is always indicated. Except for the aforementioned quotations, this work is solely my/our work.
- We have acknowledged all major sources of information.

Signed:

(Ashleysha Sohala) (Ahmad Maaz) (E.Ashok Reddy)

Date:

CERTIFICATE

This is to certify that the work entitled "iStudy" submitted by **Ashleysha Sohala, Ahmad Maaz and E.Ashok Reddy** who got his/her name registered on **Jul 2020** for the award of B.Tech. degree at Indian Institute of Information Technology, Lucknow is absolutely based upon his/her own work under the supervision of **Dr. Vishal Krishna Singh**, Department of Computer Science, University/Institute, Lucknow - 226 002, U.P., India and that neither this work nor any part of it has been submitted for any degree/diploma or any other academic award anywhere before.

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Lucknow
April 2023

Ashleysha Sohala
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ABSTRACT

The iStudy website project is aimed at providing an online platform for learning and skill development. The website will offer a wide range of courses and educational resources to learners of our college. The platform will utilize cutting-edge technology and innovative teaching methods to provide an engaging and effective learning experience. With a user-friendly interface and personalized learning paths, learners will be able to easily access content and track their progress. The iStudy website project is an exciting initiative that aims to revolutionize the way people learn and develop their skills in the digital age. iStudy is an E-Learning Website where we can upload lectures of various workshops being taken by Axios. And not only from Axios but from several sources which helped us in our subjects. There is also a project section where the students can check whether a particular project has been done previously or not.

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Chapter 1

Introduction

1.1 Motivation

Certainly, here are some words regarding the motivation behind an E-learning website project:

The motivation behind the development of this E-learning website was to provide students with an interactive and engaging platform for learning. In today's fast-paced world, where digital technology is ubiquitous, we recognized the need for a platform that would enable students to access educational materials from anywhere at any time. Our goal was to create an online space that would inspire and empower students to take control of their own learning, and to provide them with a personalized and immersive learning experience. With this E-learning website, we hope to contribute to the ongoing evolution of education and to help students reach their full potential.

Also, With the admission in a new college, students often get confused on where to study from since there are so many resources available online. The faculty takes classes but sometimes it becomes difficult for students to remember what they were taught in class or the notes they make are not understandable for some reasons or the other. Since we have faced the same problem at our time. So, we don't want our junior batches to go through the same. As online websites are problem driven to the whole world and not based on specific college problems. So, we want to make it more accessible and easy for our college students to learn and grow. This project is cost efficient and also time efficient.

1.2 Objectives

- Making a common website for all the students whose subjects sections will be made according to their needs. They will be able to study from the recommended resources or videos provided for that particular subject.
- The "Check Your Project" Section will enable the students to see whether a project has been done previously or not.
- One of the primary objectives of our project in PHP is to provide learners with a flexible and accessible learning environment. This means creating a platform that can be accessed anytime and anywhere, allowing learners to learn at their own pace and convenience.
- Our project also uses learner data to personalize learning experiences. This means providing learners with content and activities that are tailored to their interests, learning styles, and skill levels.

Chapter 2

Literature Review

E-learning, or electronic learning, is the use of technology to facilitate and enhance learning. It has become increasingly popular in recent years as technology has advanced, making it easier for people to access educational resources and connect with educators and other learners. In this literature review, we will examine some of the key research findings related to e-learning.

One of the key benefits of e-learning is its flexibility. E-learning allows learners to access educational resources and materials at their own pace and on their own schedule, which can be particularly beneficial for learners who have other commitments, such as work or family responsibilities. In addition, e-learning allows learners to access resources from anywhere with an internet connection, which can be particularly beneficial for learners who are located in remote or underserved areas.

Another benefit of e-learning is its cost-effectiveness. E-learning programs can be developed and delivered at a lower cost than traditional classroom-based programs, which can make education more accessible to people who may not be able to afford traditional programs. E-learning can also be used to supplement traditional classroom-based programs, providing additional resources and support to learners.

Research has also shown that e-learning can be just as effective as traditional classroom-based programs in terms of learning outcomes. In some cases, e-learning has been shown to be more effective, particularly when it comes to the retention of information and the development of critical thinking skills. E-learning can also be tailored to meet the needs of individual learners, providing personalized support and resources that can help learners achieve their educational goals.

However, there are also some challenges associated with e-learning. One of the key challenges is the potential for learners to become isolated

and disconnected from other learners and educators. This can be particularly challenging for learners who are used to traditional classroom-based learning environments, where they have more opportunities to interact with other learners and educators.

Another challenge is the potential for e-learning to be less engaging than traditional classroom-based programs. E-learning programs need to be designed with engagement in mind, using interactive and multimedia resources to keep learners engaged and motivated.

In conclusion, e-learning has the potential to be a highly effective and cost-effective way to facilitate and enhance learning. However, it is important to design e-learning programs that are engaging, flexible, and tailored to meet the needs of individual learners. By doing so, we can help to ensure that e-learning is an effective tool for promoting lifelong learning and personal development.

A literature review is a critical analysis and evaluation of existing literature on a particular topic or research question. In the context of an E-learning website project, a literature review involves conducting a comprehensive search and analysis of existing literature on E-learning and related topics, with the goal of identifying and evaluating existing knowledge, research gaps, and best practices. The literature review will typically involve the following steps:

1. Defining the research question: The first step in conducting a literature review is to define the research question or topic of interest. For an E-learning website project, the research question may relate to the design, implementation, or evaluation of E-learning platforms.
2. Factors influencing e-learning adoption: The adoption of e-learning is influenced by several factors, including organizational support, learner motivation, technology infrastructure, and instructional design. Studies have shown that effective e-learning design requires careful attention to these factors, as well as the specific needs and preferences of the target audience.
3. E-learning technologies and tools: E-learning technologies and tools are rapidly evolving, with new platforms, applications, and tools emerging on a regular basis. Some of the most popular e-learning tools include learning management systems (LMS), web conferencing tools, gamification platforms, and mobile learning applications.
4. Challenges and barriers to e-learning: While e-learning has many advantages, there are also several challenges and barriers that can

hinder its adoption and effectiveness. These challenges include issues related to technology infrastructure, learner motivation and engagement, instructional design, and the quality and reliability of e-learning resources.

Chapter 3

Methodology

- **HTML:**

1. Identifying the content: The first step in using HTML in an e-learning website is to identify the content that will be included on the website. This may include text, images, videos, and other multimedia resources.
2. Creating the website structure: Once the content has been identified, the next step is to create the website structure using HTML. This involves creating the basic elements of the website, such as the header, footer, navigation menu, and content sections.
3. Styling the website: After the basic website structure has been created, the next step is to style the website using CSS. This involves applying styles to the HTML elements to create a visually appealing and user-friendly design.
4. Adding multimedia resources: Once the basic website structure and design have been established, the next step is to add multimedia resources such as images, videos, and audio files. These resources can be added to the HTML code using the appropriate tags and attributes.
5. Creating interactive elements: To enhance the user experience and engagement, interactive elements can be added to the website using JavaScript. This may include quizzes, interactive timelines, and other interactive features that help learners to engage with the content.
6. Testing and refining: After the website has been created, it should be thoroughly tested to ensure that it is functioning

properly and that the content is accessible and engaging. Any issues or errors should be identified and addressed, and the website should be refined based on user feedback and testing results.

- **php:**
 1. Designing the database: The first step in using PHP in an e-learning website is to design the database that will store the information about the users, courses, modules, quizzes, and other related data. This involves identifying the tables and fields that will be needed, and establishing the relationships between them
 2. Creating the website structure: Once the database has been designed, the next step is to create the website structure using HTML and CSS. This involves creating the basic elements of the website, such as the header, footer, navigation menu, and content sections.
 3. Developing the PHP code: After the website structure has been created, the next step is to develop the PHP code that will interact with the database and generate dynamic content for the website. This may include creating user registration and login systems, course and module management systems, quiz and assessment systems, and other interactive features.
 4. Testing and refining: After the PHP code has been developed, it should be thoroughly tested to ensure that it is functioning properly and that the content is accessible and engaging. Any issues or errors should be identified and addressed, and the website should be refined based on user feedback and testing results.
 5. Deploying the website: Once the website has been thoroughly tested and refined, it can be deployed to a web server for public access. This may involve setting up the necessary infrastructure, such as hosting, domain name registration, and security measures.
- **SQL:** SQL (Structured Query Language) is commonly used in e-learning websites to store, manage and manipulate data related to learners, courses, modules, quizzes, and other aspects of the learning experience. SQL is used to manage user data, course content, generate reports, and personalize the learning experience. SQL is a powerful tool that allows e-learning websites to store and organize data

in a structured way, providing a dynamic and personalized learning experience for learners while enabling instructors and administrators to monitor and optimize course content and structure.

- **jQuery:** jQuery is a JavaScript library that is commonly used in e-learning websites to enhance the user interface and user experience. jQuery can be used to add dynamic content loading, animations and effects, form validation, and responsive design, which can help to provide a more engaging and interactive learning experience for learners. Overall, jQuery is a powerful tool that can improve the overall usability and accessibility of e-learning websites.
- **Ajax:** Ajax (Asynchronous JavaScript and XML) is a web development technique used in e-learning websites to allow asynchronous data transfer between the server and the client without requiring a full page refresh. Some of the common uses of Ajax in e-learning websites include dynamic content loading, real-time feedback, and user interaction. By using Ajax, e-learning websites can provide a more seamless and responsive learning experience for learners, improving engagement and reducing frustration. Overall, Ajax is a powerful tool for improving the interactivity and usability of e-learning websites.
- **Css:** CSS (Cascading Style Sheets) is a fundamental web development technology used in e-learning websites to style and format the visual layout of web pages. CSS is used to control the presentation of content, including the placement, size, color, font, and style of text, images, and other visual elements. In e-learning websites, CSS is used to create a visually appealing and engaging interface that enhances the user experience and promotes learning. Overall, CSS plays a critical role in the design and development of e-learning websites, helping to create an attractive and functional interface for learners to interact with.
- **Bootstrap:** Bootstrap is a popular open-source front-end development framework used in e-learning websites to create responsive and mobile-first designs. Bootstrap provides a set of pre-designed HTML, CSS, and JavaScript components that can be easily customized and used to create a consistent and visually appealing interface across different devices and screen sizes. Some of the common uses of Bootstrap in e-learning websites include creating responsive

navigation menus, layouts, and forms, as well as incorporating pre-built UI components such as alerts, modals, and carousels. By using Bootstrap, e-learning websites can create a professional-looking and engaging interface that adapts seamlessly to different devices and screen sizes, enhancing the user experience and promoting learning..

- **Fontawesome:** Fontawesome is a popular icon font and CSS toolkit used in e-learning websites to add visual icons and graphics to various elements of the website. Fontawesome provides a library of scalable vector icons that can be easily customized and used in conjunction with HTML, CSS, and JavaScript. Some of the common uses of Fontawesome in e-learning websites include adding icons to navigation menus, buttons, and user interface components, as well as using icons to represent various concepts and ideas within the content. By using Fontawesome, e-learning websites can enhance the visual appeal and usability of the interface, making it easier for learners to navigate and interact with the content.

3.1 Project description

iStudy has a simple home page where we can see various tabs and functions like Login, SignUp and Check your Project.

1. **Home Page:** The Home Page consists of tabs like 'Home', 'About', 'Subjects', 'Contact', 'Check Your Project', 'Login' and 'SignUp'.
2. **Login:** This tab allows the registered students to login into their accounts and go and manage their student dashboard.
3. **SignUp:** The students themselves by using this tab and filling out their credentials.
4. **Contact:** This tab takes you to the contact section where you can see the details of the project members and can contact them for any doubts regarding the project.
5. **Check Your Project:** This allows the students to check whether their current project has been made previously or not.

The Subject tab actually redirects you to another page where you can see all the subjects available for enrollment. There you can click on the enrollment button after login and it will redirect you to the enrollment page. And after that the course is automatically added to the 'My Course' section in the student dashboard. The admin login is for the admin where he/she can go to the admin dashboard and make any necessary changes in the courses or lessons.

- Our project focuses on personalized learning which uses data and analytics to tailor the learning experience to the individual needs and preferences of each learner. This approach allows learners to progress at their own pace and focus on areas where they need more support.
- In Here learners access course materials at their own pace, without the need for real-time interaction with an instructor or other learners. This approach allows learners to fit their studies around their schedule and work at their own pace.

Chapter 4

Simulation and Results

The simulation involves Login and Sign up and then opening the student or admin dashboard to run the various functionalities provided. Our simulation demonstrates the use of Ajax and Jquery to run functions like edit and search and even login and sign up.

Some of the steps for effective simulation are as follows:

- Define the project scope: Before you start coding, you need to define the project scope, requirements, and objectives. This includes identifying the user roles, features, and functionalities you want to implement in your eLearning project. Like we have Login and Signup pages to enables students or admin to open the dashboard and use the various functions provided there.
- Choose a PHP framework: There are many PHP frameworks available, such as Laravel, CodeIgniter, and CakePHP. You can choose the one that best suits your project requirements and familiarity. We have chosen a simple php framework for our project.
- Design the database schema: You need to design the database schema for your eLearning project. This includes creating tables, relationships, and constraints that will store the course content, user information, and progress. We have created a database in SQL with tables as per our requirements.
- Develop the course content: You can use PHP to create the course content dynamically, depending on the user's progress and interaction. This includes creating text, images, videos, and interactive elements such as quizzes and assessments. We have added several sample courses to our project.

- Test the system: Before you launch your eLearning project, you need to test the system thoroughly. This includes testing the functionality, performance, and security of the system.
- Launch the system: Once you have tested the system and made necessary changes, you can launch it. You can host the system on a web server and provide access to learners and instructors.
- Evaluate the system: After the system is launched, you need to evaluate its effectiveness in achieving the learning objectives. You can use feedback from learners, assessments, and other metrics to measure the success of your eLearning project.

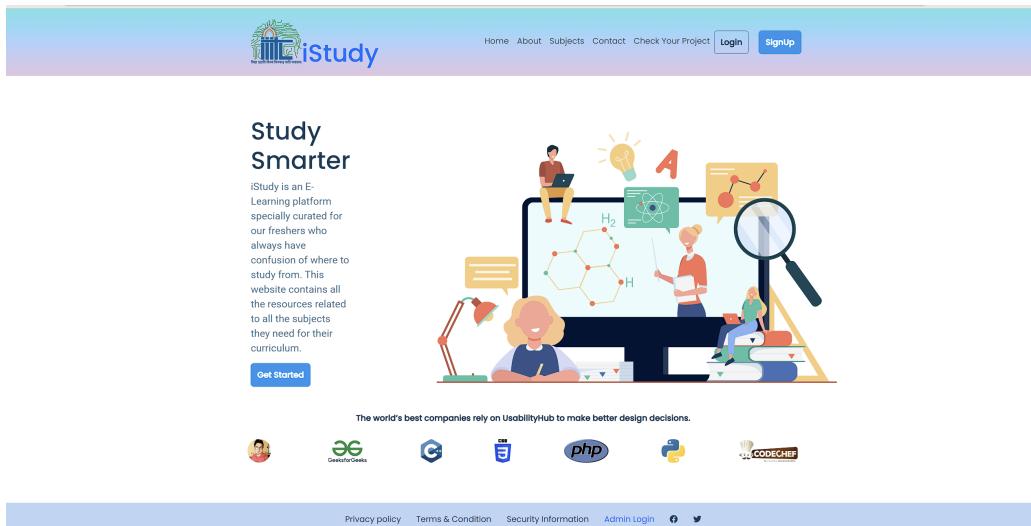


Figure 4.1: Home Page

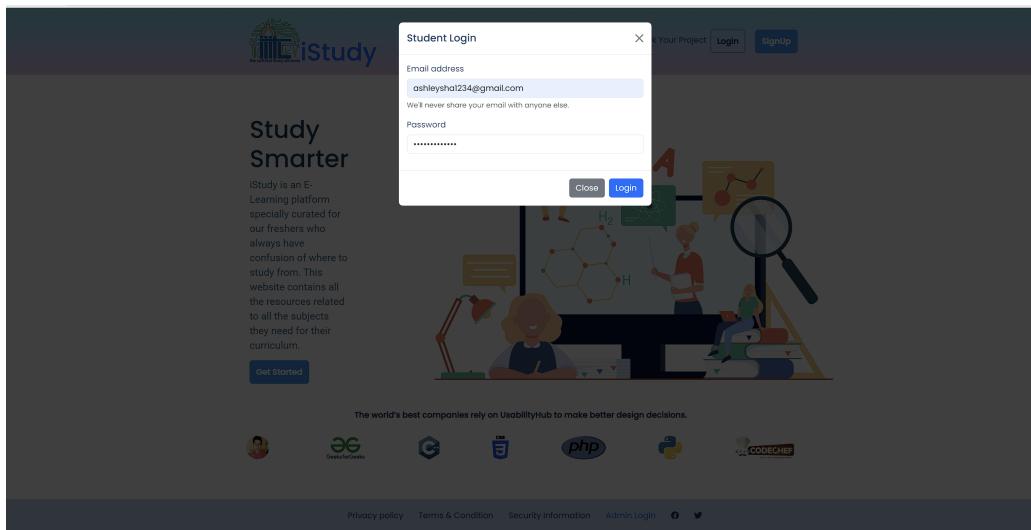


Figure 4.2: Login

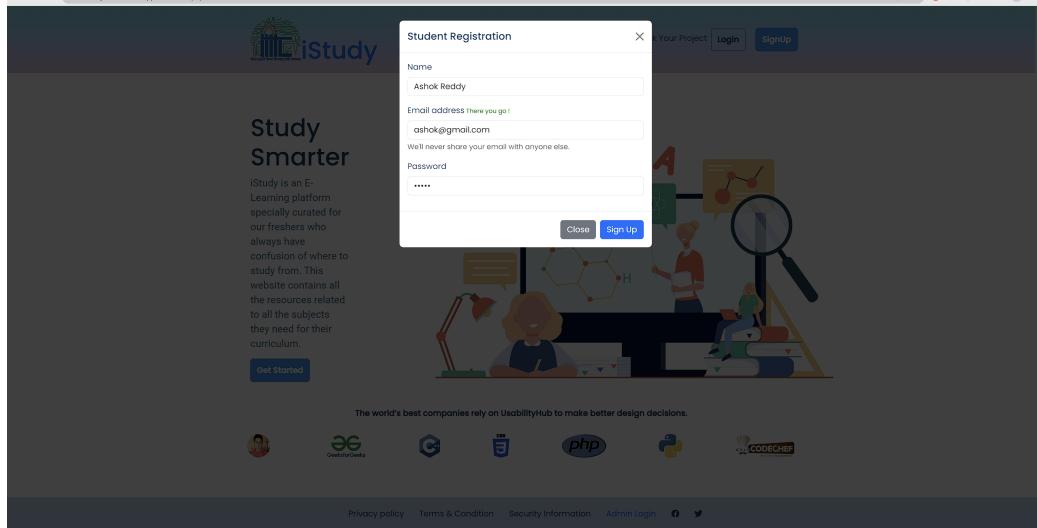


Figure 4.3: Signup



Figure 4.4: Student Dashboard Homepage)

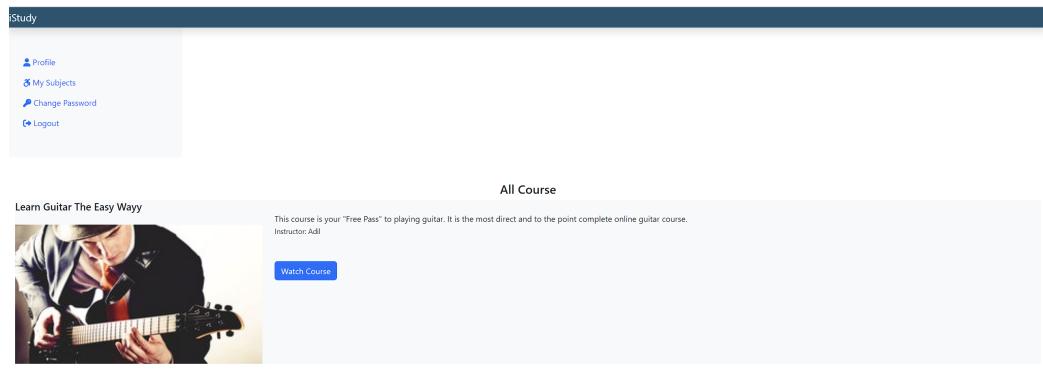


Figure 4.5: Student Dashboard My Course

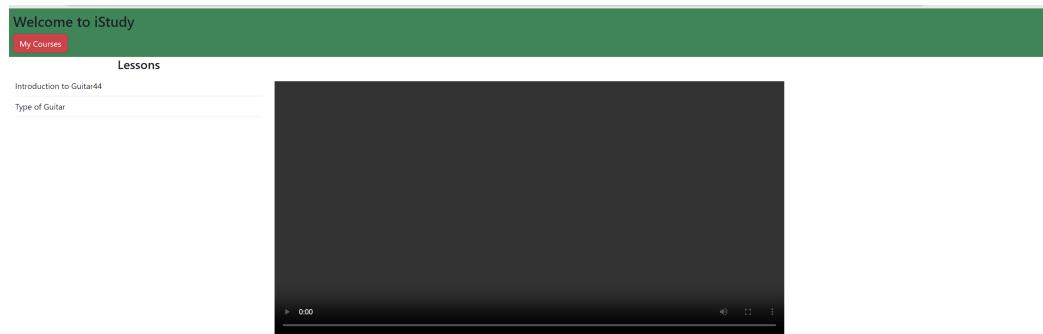


Figure 4.6: Student Dashboard Watch Course

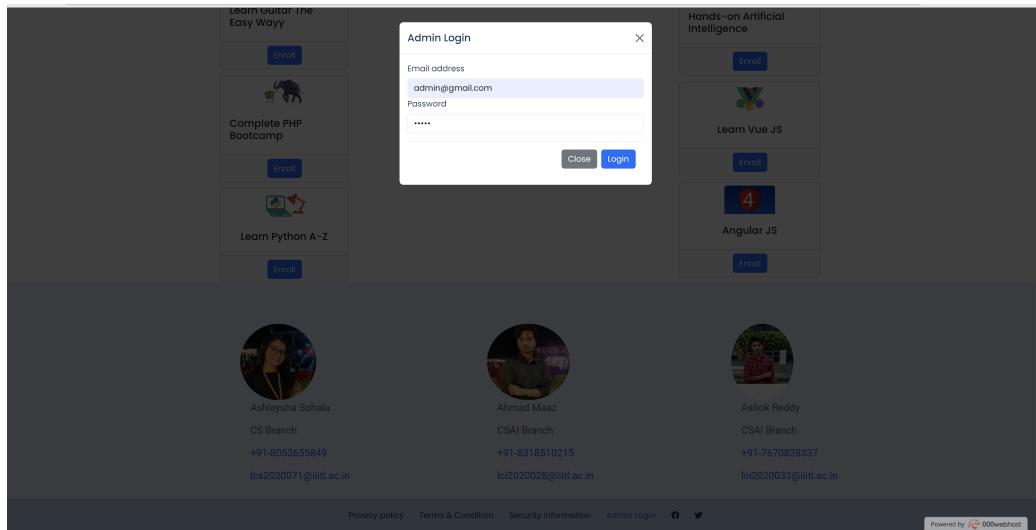


Figure 4.7: Admin Login

A screenshot of the Admin Dashboard. The top navigation bar includes 'Dashboard', 'Courses', 'Lessons', 'Students', 'Change Password', and 'Logout'. Below the navigation, there are two summary boxes: 'Courses' (8 items) and 'Students' (8 items). A table titled 'Course Ordered' lists one item: Enrollment ID 'ORD553114157', Course ID '8', Student Email 'ashleysha1234@gmail.com', and Order Date '2024-04-23'. The table has columns for Enrollment ID, Course ID, Student Email, Order Date, and Action (with a delete icon).

Figure 4.8: Admin Dashboard Homepage

E-Learning Admin Area

The screenshot shows the 'Courses' tab in the admin dashboard. The left sidebar includes links for Dashboard, Courses, Lessons, Students, Change Password, and Logout. The main content area is titled 'List of Courses' and displays a table with the following data:

Course ID	Name	Author	Action
8	Learn Guitar The Easy Wayy	Adil	
9	Complete PHP Bootcamp	Rajesh Kumar	
10	Learn Python A-Z	Rahul Kumar	
11	Hands-on Artificial Intelligence	Jay Veeru	
12	Learn Vue JS	Jay Shukla	
13	Angular JS	Sonam Gupta	
16	Python Complete	RK	
17	Learn React Native	GeekyShows	

A red '+' button is located at the bottom right of the table.

Figure 4.9: Admin Dashboard Courses

The screenshot shows the 'Students' tab in the admin dashboard. The left sidebar includes links for Dashboard, Courses, Lessons, Students, Change Password, and Logout. The main content area is titled 'List of Students' and displays a table with the following data:

Student ID	Name	Email	Action
171	Captain Marvel	cap@example.com	
172	Ant Man	ant@example.com	
173	Dr Strange	drc@example.com	
174	Scarlet Witch	witch@example.com	
176	Shaktiman	shaktiman@ischool.com	
178	Mario	mario@ischool.com	
182	sonam	sonam@gmail.com	
183	Ashleysha Sohala	ashleysha1234@gmail.com	

A red '+' button is located at the bottom right of the table.

Figure 4.10: Admin Dashboard Students Tab

The screenshot shows the 'E-Learning Admin Area' interface. On the left, a sidebar menu includes 'Dashboard', 'Courses', 'Lessons' (which is selected), 'Students', 'Change Password', and 'Logout'. The main content area has a search bar with placeholder 'Enter Course ID:' and a red 'Search' button. Below this, a table lists course lessons for 'Course ID : 8 Course Name: Learn Guitar The Easy Way'. The table columns are 'Lesson ID', 'Lesson Name', 'Lesson Link', and 'Action'. Two rows are shown: Row 39 ('Introduction to Guitar') and Row 40 ('Type of Guitar'). Each row has edit and delete icons in the 'Action' column.

Figure 4.11: Admin Dashboard Lessons

The screenshot shows the iStudy website. At the top, there's a navigation bar with links for 'Home', 'About', 'Subjects', 'Contact', 'Check Your Project', 'Login', and 'SignUp'. Below the navigation is a search bar with placeholder 'Enter Project Name' and a red 'Search' button. A table titled 'Project Members' displays three projects with their names and members. The table has columns for 'Id', 'Project Name', and 'Project Members'.

ID	Project Name	Project Members
1	Web Charity Platform	Naveed Akshat Negi Siddharth Singh
2	Algorithmic Stock Exchange Engine	Avantika Modi Hriday Gupta
3	Blockchain Based Certificate Validation	Palak Goel Soumya Baheti Anjali Chaudhary Ashna Agrawal

At the bottom, there's a footer bar with links for 'Privacy policy', 'Terms & Condition', 'Security Information', 'Admin Login', and social media icons for Facebook and Twitter.

Figure 4.12: Check Your Project Tab

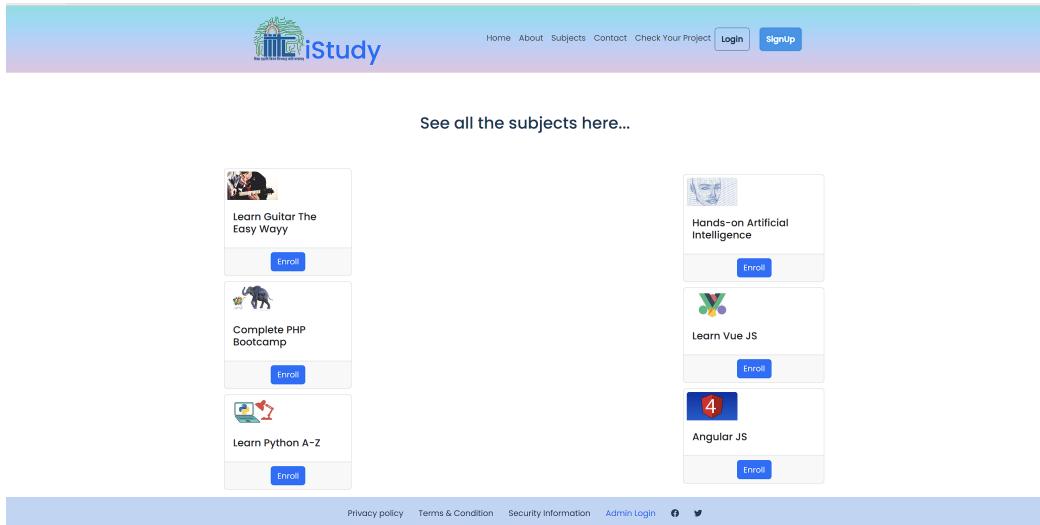


Figure 4.13: Enroll

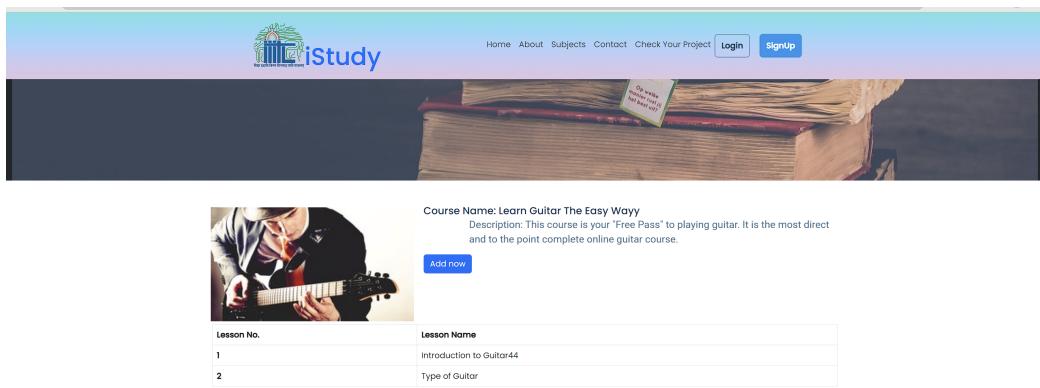


Figure 4.14: Student Enrolling Course

Chapter 5

Conclusion and Future Work

5.1 Conclusion

In conclusion, the E-learning website project is an innovative and impactful initiative that has the potential to transform the way students learn and interact with educational content. Through the use of modern web development technologies such as HTML, CSS, PHP, jQuery, Ajax, and Bootstrap, the project has created a responsive, visually appealing, and user-friendly platform that promotes engagement and fosters effective learning.

The literature review has provided a comprehensive overview of the existing research and literature on E-learning, highlighting the benefits, challenges, and best practices associated with the implementation of E-learning platforms.

The project's methodology has focused on the use of HTML, PHP, jQuery, Ajax, CSS, Bootstrap, and SQL to develop a dynamic and interactive platform that enables students to access and engage with educational content easily.

Overall, the E-learning website project represents a significant contribution to the field of education and has the potential to provide a more accessible and engaging learning experience for students worldwide. With the continued growth and evolution of web technologies, the possibilities for further innovation and development in this field are endless.

5.2 Future Work Plans

There are several opportunities for future work and development of the E-learning website project. Some of these include:

- Integration of new technologies: As web technologies continue to evolve, there are numerous opportunities to integrate new and emerging technologies into the E-learning platform. For example, the integration of virtual and augmented reality technologies could enhance the immersive learning experience for students.
- Expansion of content: The E-learning platform can be expanded to include a wider range of educational content and resources, including multimedia content, interactive simulations, and personalized learning pathways.
- Improvement of user experience: The user experience of the E-learning platform can be further improved by conducting usability studies and implementing user feedback to optimize the platform's design and functionality.
- Integration of social learning: The platform can be integrated with social learning tools, allowing students to collaborate and interact with peers and instructors in real-time, enhancing the social and collaborative aspect of learning.
- Integration with learning management systems: The E-learning platform can be integrated with learning management systems (LMS) to streamline the management and delivery of educational content and improve student tracking and assessment.

Appendix A

Contribution of each group member and Roles:

A.1 Front-End by Ashleysha Sohala

HTML/CSS Developer: One group member could be responsible for developing the HTML/CSS code for the website's user interface. This could include creating the layout, formatting text and images, and designing the navigation.

Bootstrap Developer: Bootstrap is a popular front-end framework that can be used to create responsive and mobile-friendly websites. One group member could be assigned to develop the website's layout and design using Bootstrap.

A.2 Back-End by Ashok Reddy and Ahmad Maaz

PHP Developer: Ashok is responsible for developing the PHP code that runs on the server-side of the website. This include creating dynamic web pages and implementing user authentication and authorization.

Database that is used is MySQL. Ashok managed the data database of our E-learning website.

AJAX Developer: AJAX is a technique for creating fast and dynamic web pages that update content without requiring a full page refresh. Ahmad Maaz implemented AJAX functionality on the website, such as updating user data in real-time or displaying search results.

jQuery Developer: Ahmad Maaz added jQuery library to add dynamic

functionality to the website. This could include creating interactive forms, creating animations, and handling user events.

```
1 index.php
2 <!-- Start Navigation Bar -->
3 <?php
4 include('./connection.php');
5 include('./navbar.php')
6 ?>
7
8
9
10
11 <!-- start header section -->
12 <header>
13     <div class="container header-section flex">
14         <div class="header-left">
15             <h1>Study Smarter</h1>
16             <p>It's an E-learning platform specially curated for our freshers who always have confusion of where to study from. This website contains all the resources related to all the subjects</p>
17             <?php
18                 if(isset($_SESSION['is_login'])){
19                     echo "<button type='button' class='btn btn-primary' data-bs-toggle='modal' data-bs-target='studentProfile.php'>My Profile</a>";
20                 }
21                 else{
22                     echo "<button type='button' class='btn btn-primary' data-bs-toggle='modal' data-bs-target='stuRegModalCenter'>Get Started</a>";
23                 }
24             </?php>
25         </div>
26         <div class="header-right">
27             
28         </div>
29     </div>
30 </header>
31 <!-- end header section -->
32
33
34 <!-- Start companies section -->
35 <section class="companies-section">
36     <div class="container">
37         <div class="small-bold-text companies-header">The world's best companies rely on usabilityhub to make better design decisions.</div>
38         <div class="logos flex">
39             
40             
41             
42             
43             
44             
45             
46         </div>
47     </div>
48 </section>
49 <!-- End companies section -->
50
51
52
```

Figure A.1: Code Snippet

```
    <!-- Start subjects section -->
    <section id="subject-section" class="features-section">
        <div class="container">
            <div class="features-header">
                <h2 class="features-heading-text">See some of the subjects here...</h2>
                <a href="subjects.php" class="secondary-button">See all subjects <i class="fa-solid fa-right-long"></i></a>
            </div>
            <div class="features-area flex">
                <div class="card-deck mt-4 flex features-cards"> <!-- Start Most Popular Course 1st Card Deck -->
                    <?php
                        $sql = "SELECT * FROM course LIMIT 3";
                        $result = $conn->query($sql);
                        if($result->num_rows > 0){
                            while($row = $result->fetch_assoc()){
                                $course_id = $row['course_id'];
                                echo
                                    <a href="coursesdetails.php?course_id=".$course_id." class="btn" style="text-align: left; padding:0px; margin:0px;">
                                        <div class="card">
                                            <div class="imgcard">
                                                img src="." str.replace('..', '.', $row['course_img'])." class="card-img-top" alt="Guitar" />
                                            <div class="card-body">
                                                <h5 class="card-title">$row['course_name']</h5>
                                            </div>
                                            </div>
                                            <div class="card-footer">
                                                <a class="btn btn-primary text-white font-weight-bolder float-right" href="subjectsdetails.php?course_id=".$course_id.">Enroll</a>
                                            </div>
                                        </div>
                                    </a> ";
                            }
                        }
                    </div> <!-- Start Most Popular Course 2nd Card Deck -->
                    <?php
                        $sql = "SELECT * FROM course LIMIT 3,3";
                        $result = $conn->query($sql);
                        if($result->num_rows > 0){
                            while($row = $result->fetch_assoc()){
                                $course_id = $row['course_id'];
                                echo
                                    <a href="coursesdetails.php?course_id=".$course_id." class="btn" style="text-align: left; padding:0px;">
                                        <div class="card">
                                            <div class="imgcard">
                                                img src="." str.replace('..', '.', $row['course_img'])." class="card-img-top" alt="Guitar" />
                                            <div class="card-body">
                                                <h5 class="card-title">$row['course_name']</h5>
                                            </div>
                                            </div>
                                            <div class="card-footer">
                                                <a class="btn btn-primary text-white font-weight-bolder float-right" href="subjectsdetails.php?course_id=".$course_id.">Enroll</a>
                                            </div>
                                        </div>
                                    </a> ";
                            }
                        }
                    </div>
                </div>
            </div>
        </div>
    </section>
```

Figure A.2: Code Snippet

Bibliography