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TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



INTERNSHIP REPORT

Submitted by

BAVADHARANI G (812421104304)

DOMAIN: FULLSTACK DEVELOPMENT

**NAME OF THE COMPANY: EAGLE HITECH SOFTCLOU PVT
LTD**

DURATION:

(10-07-2024 to 10-08-2024)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE

ENGINEERING

M.I.E.T. ENGINEERING COLLEGE,

TIRUCHIRAPPALLI - 620007

DEC 2024

M.I.E.T. ENGINEERING COLLEGE, TRICHY 60007

BONAFIDE CERTIFICATE

Certified that this Summer Internship report titled E-LEARNING EDUCATION WEBSITE” is the bonafide work of **BAVADHARANI G (812421104304)**, who carried out the summer internship under my supervision.

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The Summer Internship Viva Voice held on_____

INTERNAL EXAMINER

EXTERNAL EXAMINER

ACKNOWLEDGEMENT

First, I would like to thank the Almighty for giving me talents and opportunity to complete my Internship.

I would like to express my sincere gratitude to my college chairman and founder **Er.A.MOHAMED YUNUS B.E.,M.Sc.**, for providing large facilities in the institution for the completion of the Internship.

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CERTIFICATE:



TO WHOM IT MAY CONCERN

This is to certify that **Bavadharani G (Reg.No: 812421104304)** studying BE(CSE) from M.I.E.T Engineering College has successfully completed the internship work under the domain of “**Full Stack**” in our organization during the period of 10/07/2024 to 10/08/2024.

We congratulate you on your presence with us. We are confident that your contribution will take us further in our journey towards becoming world leaders. We assure you of your support for your professional development and growth.

With Warm & Regards,

A handwritten signature in blue ink, appearing to read 'K. Singh'.

Senior Manager

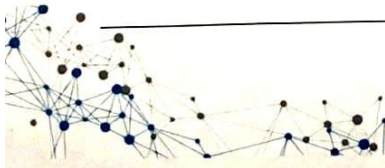
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ABSTRACT:

The **E-Learning Education College Website** is a comprehensive digital platform tailored for colleges to enhance their academic and administrative operations. It serves as a centralized hub for managing admissions, course enrollment, resource distribution, and student-faculty engagement through E-Learning functionalities. The platform integrates cutting-edge technologies such as **computer science engineering , mechanical engineering, civil engineering, electrical and electronics engineering**, to deliver a seamless and personalized user experience for students, faculty, and administrators.

Key features include **online course purchasing, virtual classrooms, interactive learning tools**, and a **digital library**. The platform also supports secure payment gateways for tuition fees, course materials, and other academic services. Its **real-time communication tools** foster collaboration between students and educators, while analytics-driven dashboards provide insights into student performance and institutional metrics.

Designed with scalability and inclusivity in mind, the website offers multilingual support, accessibility features for differently-abled users, and integration with external learning platforms. By bridging the gap between education and technology, the platform enhances the college experience, ensuring convenience, accessibility, and academic excellence for all stakeholders.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE NO
	ACKNOWLEDEMENT	III
	CERTIFICATE	IV
	ABSTRACT	V
	LIST OF FIGURES	VII
	LIST OF ABBREVIATIONS	IX
01	INTRODUCTION	01
	1.1 ORGANISATION PROFILE	01
	1.2 INTRODUCTION OF PROJECT	02
	1.3 PROBLEM SPECIFICATION	03
	1.4 PROBLEM DEFINITION	03
	1.5 LIMITATIONS OF EXISTING SYSTEM	03
	1.6 OBJECTIVE OF PROJECT	04
02	SYSTEM ANALYSIS	06
	2.1 FEASIBILITY STUDY	06
	2.2 INTRODUCTION	06
	2.3 SUMMARY	06
	2.4 CONSTRAIN	07
	2.5 TYPES OF FEASIBILITY STUDY	07
	2.5 HARDWARE AND SOFTWARE REQUIREMENTS	09
03	DEVELOPMENT ENVIRONMENT	11
	3.1 INTRODUCTION TO HTML	11
	3.2INTRODUCTION TO CSS	15
	3.3 INTRODUCTION TO JAVA SCRIPT	19
	3.4 INTRODUCTION TO JAVA	22
	3.5 INTRODUCTION TO VS CODE	26
	3.6 ORACLE DATABASE	28

04	SYSTEM DESIGN	32
	4.1 MODULE DESCRIPTION	32
	4.2 FLOW CHART	33
05	IMPLEMENTATION AND TESTING	34
	5.1 TESTING	34
	5.2 SAMPLE CODE	34
	5.4 OUTPUT	43
06	INTERNSHIP REPORTS	49
	6.1 STUDENT INTERNSHIP PROGRAM APPLICATION	49
	6.2 DAILY LOG	50
	6.3 WEEKLY GEOTAG REPORT	51
	6.4 SUPERVISOR EVALUATION OF INTERN	53
	6.5 STUDENT FEED BACK OF INTERNSHIP	55
07	CONCLUSION	57
08	BIBLOGRAPHY	58

LIST OF FIGURES

FIGURE NO	FIGURE NAME	PAGE NO
5.3.1	NAVIGATION TOOL BAR	43
5.3.2	REGISTRATION FORM	43
5.3.3	LOGIN FORM	44
5.3.4	COURSE OFFERED	44
5.3.5	STAFF DETAILS	45
5.3.6	COURSE DETAILS	45
5.3.7	COURSE OFFERED	46
5.3.8	STAFF DETAILS	46
5.3.9	COURSE DETAILS	47
5.3.10	ATTENDANCE PORTAL	47
5.3.11	PLACEMENT FORM	48
5.3.12	CONTACT DETAILS	48

LIST OF ABBREVIATIONS

ETS	Educational Testing Service
HTML	Hyper Text Markup Language
CSS	Cascading Style Sheet
SSL	Secure Socket Layer
ROI	Return On Investment
GDPR	General Data Protection Language
CCPA	Central Customer Protection Authority
PCI DSS	Payment Card Industry Data Security Standard
JVM	Java Virtual Machine
JSP	Java Server Page
RAM	Random Access Memory

CHAPTER 1

INTRODUCTION

1.1 ORGANISATIONAL PROFILE:

Eagle-HiTech Softclou Private Limited is one of the leading bootstrapped pure-play IT services and software development company that are on a mission to provide an industry-leading platform for software applications. ETS is constantly expanding its family and is looking for dynamic fresher's and graduates with a background in Computer Science.

With more than 12 Years of industry expertise today, we are a company with 50+ professionals and 10+ customers. We have operations in India. With a focus on innovation, quality, and efficiency, we specialize in providing top-notch lending IT services and automation systems designed to help our clients stand out in a competitive market. As a trusted leader in marketing these innovative solutions, we focus on making our technology not just powerful, but also easy to use, so our clients can focus on what matters most—growing their business with confidence.

Having partnered and worked with some of the leading names across IT, Manufacturing, Distribution, Professional services, Controlling vehicles, Electric vehicles, etc. ETS has clients all over the world that hands you the opportunity to work on a variety of projects.

ETS is a team who are passionate about creating cutting-edge software solutions for businesses of all sizes. Choose us for exceptional service, fair pricing, trusted reliability, and a commitment to your success through our strong values and innovative vision. ETS offer a comprehensive suite of IT services designed to meet the diverse needs of businesses. Our consulting and outsourcing services provide expert guidance and efficient solutions to streamline your operations and drive business growth.

Development and Maintenance services ensure seamless enhancement and reliable upkeep of your IT systems and automation solutions, driving continuous performance and adaptability to your evolving business needs. Leverage our deep technology expertise to deliver innovative IT solutions and automation systems tailored to optimize your business operations. Our Research and Development service drives innovation by exploring and implementing cutting-edge IT solutions and automation technologies to keep your business ahead of the curve.

Business verticals are:

- **Consulting and Outsourcing**
- **Development and Maintenance**
- **Technology Expertise**
- **Research and Development**

ETS TEAM has expertise ranging from design to development, training to placements and solutions to implementation. We combine this knowledge with proactive thinking and strategic planning to approach new challenges with your overall business objectives in mind. ETS Lab's management team brings together a wealth of experience in both technological and organizational development that is critical in helping our customers achieve their goals.

1.2 INTRODUCTION OF PROJECT

1.2.1 INTRODUCTION:

In today's digital age, the integration of E-Learning and education has transformed how institutions deliver academic services and resources. The **E-Learning College Website** is a cutting-edge platform designed to meet the evolving needs of students, faculty, and administrators in a fast-paced, technology-driven world. By combining the convenience of E-Learning functionalities with the core objectives of higher education, this platform streamlines processes such as admissions, fee payments, resource procurement, and course enrollment, creating a seamless and efficient academic ecosystem.

This website provides a one-stop solution for purchasing academic materials, registering for courses, and accessing a variety of educational tools. It supports **virtual classrooms**, **online assessments**, and **personalized learning experiences**, ensuring flexibility and accessibility for all users. Additionally, the platform incorporates secure payment systems and advanced technologies like **artificial intelligence (AI)** to enhance user engagement and provide tailored recommendations for academic resources and programs.

Designed to cater to diverse user needs, the platform includes features for students, faculty, and administrative staff, enabling them to communicate and collaborate effectively. By leveraging digital innovation, the E-Learning Education College Website not only simplifies academic processes but also empowers institutions to provide a modern, inclusive, and student-focused learning environment.

This project has 2 parts:

- User database section.
- User confirmation for registering

This project include:

- Login options for the students and staffs.
- Saving details of the students in the database.
- Giving choice to the students to select the course.
- Different courses, departments in front of students to select.
- Confirmation of students registration at the end .

1.3 PROBLEM SPECIFICATION:

This problem is assigned to me during my full stack development training to design an application on “**E-Learning college website**” using **HTML and CSS**.

1.4 PROBLEM DEFINITION:

A data base is maintained of information regarding students details like Name, Address, Email id, Phone no., who have logged in the system for registering the courses, departments , and languages.

This project works by storing the details of students in the database and then enabling the students to select their liked courses of his/her choice on which he/she wants to select their courses based on their own interest.

1.5 LIMITATIONS OF EXISTING SYSTEM:

Poor Website Design: If the interface is not user-friendly, students and faculty may find it difficult to navigate, leading to frustration and abandonment.

Limited Mobile Responsiveness: A lack of optimization for mobile devices can alienate users, especially as many prefer browsing on smartphones.

Performance Issues: Slow loading times or frequent crashes can negatively affect user experience.

Inefficient Support Systems: Poorly designed customer service or support systems (e.g., lack of live chat, slow response times) can lead to unresolved issues for users.

Dependency on Internet Connectivity: Users in areas with poor internet access might struggle to use the platform effectively.

Miscommunication: If the website lacks clarity in explaining features like refund policies, discounts, or delivery timelines for physical goods (e.g., textbooks, merchandise), it could cause confusion.

Inadequate Personalization: A lack of personalized recommendations or features may fail to meet user needs effectively, reducing engagement.

Language Barriers: If the website is not available in multiple languages, it may limit accessibility for non-native speakers.

1.6 OBJECTIVE OF THE PROJECT:

Provide a secure and convenient platform for online fee payments, course registration, and material purchases.

Enhance accessibility with 24/7 availability and a mobile-friendly interface.

Support academic processes by offering access to learning materials, study guides, and past papers.

Promote institutional branding through the sale of merchandise and publicizing college events.

Streamline administrative tasks by automating payment collections and reducing manual workload.

Offer a centralized platform for academic and non-academic transactions, minimizing the need for physical visits.

Improve user experience with personalized recommendations and efficient customer support.

Ensure secure transactions by implementing robust cybersecurity measures and reliable payment gateway and foster engagement by providing easy access to college events, seminars, and workshops.

CHAPTER 2

SYSTEM ANALYSIS

2.1 FEASIBLE STUDY:

A feasibility study for an E-Learning college website evaluates its viability by analyzing technical, operational, and financial factors. The project requires reliable hosting, skilled developers, and integration with college systems to ensure scalability and security. It must offer user-friendly access for students, parents, and faculty while integrating features like payment gateways and academic resources.

Initial costs include development, software licensing, and maintenance, with potential revenue from merchandise sales, event registrations, and streamlined fee payments. Operational success depends on efficient management, regular updates, and responsive customer support. The project is feasible if the benefits outweigh costs and meet user needs effectively.

2.2 INTRODUCTION:

Describe and identify courses in college.

Can study extra languages apart from their selected courses.

Determine the performance of the students for the placement.

2.3 SUMMARY:

An E-Learning college website serves as an essential platform to provide detailed information about the institution, its academic programs, and the opportunities it offers. It is designed to cater to the needs of prospective and current students, faculty, and other stakeholders by offering comprehensive resources and an engaging user experience. The website typically highlights the college's focus on E-Learning education, including undergraduate and postgraduate programs, certificate courses, and specialized training in areas like digital marketing, online business management, and technology integration. It provides clear guidance on the admissions process, including requirements, deadlines, financial aid options, and scholarships, making it easier for students to navigate their application journey.

The site also acts as a resource hub, offering access to academic calendars, course catalogs, and student portals for managing enrolment, grades, and schedules. A dedicated section for career services connects students with internships, job placements, and industry

networking opportunities, ensuring they are prepared for the professional world. The website often includes detailed faculty profiles, showcasing their expertise and contributions to research and teaching in E-Learning and related fields.

In addition to academic offerings, the site highlights the college's facilities, events, and extracurricular activities, fostering a sense of community. It may include a blog or news section featuring articles on E-Learning trends, success stories, and updates on the college's initiatives. Integration of E-Learning functionalities like online fee payment, merchandise stores, and an e-learning platform for accessing course materials further enhances usability. Overall, the website is a comprehensive, user-friendly platform that reflects the institution's commitment to excellence in E-Learning education and its engagement with the digital economy.

2.4 CONSTRAINT:

Statements of constraints: Constraints are factors that limit the solution of a problem. Some constraints are identified during the initial investigation.

Identification of specific system objectives: Once the constraints are spelled out, the analyst proceeds to identify the system's specific performance objectives. They are derived from the general objectives specified in the project directive at the end of the initial investigation. The steps are to state the system's benefits and then translate them into measurable objectives.

Description of outputs: A final step in system performance definition is describing the output required by the user. An actual sketch of the format and contents of the reports as well as a specification of the media used, their frequency, size and numbers of copies required are prepared at this point.

2.5 TYPES OF FEASIBILITY STUDY:

1. Technical Feasibility

This assesses whether the technical requirements for the website can be met.

- **Infrastructure:** Can the hosting platform handle expected traffic, especially during peak periods like admissions or fee payment deadlines?
- **Technology Stack:** Availability and suitability of tools for website development, such as CMS platforms (e.g., WordPress, Drupal) or custom-built solutions.

- Integration: Ability to integrate with existing college systems (e.g., student portals, learning management systems).
- Security: Measures like SSL certificates, encryption, and compliance with data security standards (e.g., PCI DSS for payment systems).

2. Economic Feasibility (Cost-Benefit Analysis)

This evaluates whether the website is financially viable.

- Initial Costs: Website development, hosting, design, and software licensing.
- Operational Costs: Ongoing maintenance, updates, marketing, and staff training.
- Revenue Potential: Monetization through application fees, online courses, merchandise sales, or donations.
- ROI (Return on Investment): Comparison of costs versus expected benefits, such as increased enrolment or improved student services.

3. Operational Feasibility

This examines the practical implementation and day-to-day management of the website.

- Content Management: Can the college staff easily update information like admissions dates, events, and course details?
- Support Readiness: Availability of personnel to handle technical issues, user inquiries, and routine maintenance.
- Ease of Use: Ensuring intuitive navigation for students, faculty, and external users.
- Scalability: Can the website adapt to increased demand, such as new programs or higher user traffic?

4. Legal Feasibility

This ensures compliance with laws and regulations.

- Data Privacy: Adherence to data protection regulations (e.g., GDPR, CCPA) for handling student and faculty data.
- Copyright and Licensing: Proper use of images, videos, and academic content on the site.

- **Payment Compliance:** Ensuring secure transactions and adherence to payment standards (e.g., PCI DSS).

5. Social and Cultural Feasibility

This examines the website's ability to meet the needs and expectations of its user base.

- **Accessibility:** Compliance with web accessibility standards (e.g., WCAG) for students with disabilities.
- **User Experience:** Intuitive design and multilingual support for international users.
- **Community Engagement:** Features that promote interaction, such as forums, blogs, or virtual events.

6. Market Feasibility

This analyses the potential demand and competition.

- **Target Audience:** Understanding the needs of students, parents, and faculty.
- **Competitor Analysis:** Comparing features and services with other educational institution websites.
- **Marketing Opportunities:** Leveraging SEO, social media, and online advertising to drive traffic.

2.6 HARDWARE AND SOFTWARE REQUIREMENTS:

2.6.1 HARDWARE REQUIREMENTS:

PROCESSOR: 11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz 2.42 GHz

RAM: 8.00 Giga Byte or Greater

SYSTEM TYPE: 64-bit operating system, x64-based processor

MONITOR: Colour (For Best Result)

Keyboard & Mouse

Printer

2.6.2 SOFTWARE REQUIREMENTS:

OPERATING SYSTEM: Windows 11 Home Single Language

FRONT END: Visual Studio Code

BACKEND: Visual Studio Code and Oracle database

CHAPTER 3

DEVELOPMENT ENVIRONMENT

3.1 INTRODUCTION TO HTML:

HTML or **Hyper Text Markup Language**, is the **standard markup language** for creating and structuring content on the World Wide Web. It forms the backbone of web pages by organizing content and defining its presentation and layout.

Without HTML, the internet as we know it would not exist. It is the foundation of web development, providing the framework upon which technologies like CSS and JavaScript build.

HTML is the cornerstone of web development, providing the essential framework for structuring content. Its simplicity, versatility, and universal compatibility make it indispensable in creating websites, web applications, and other online content.

While HTML alone offers limited interactivity, its integration with CSS and JavaScript enables developers to build dynamic, visually engaging, and responsive user experiences. With its ongoing evolution, HTML continues to adapt to modern web needs, ensuring its relevance in the ever-changing digital landscape.

3.1.1 Understanding HTML:

Definition of Markup Language: HTML is a **markup language**, not a programming language. It uses **tags** and **attributes** to structure content, allowing browsers to interpret and display it.

Markup refers to the process of annotating text to define its meaning and structure.

Hyper Text implies the use of links (hyperlinks) to navigate between web pages or different parts of a document.

Purpose of HTML:

The primary goal of HTML is to provide a structured document that browsers can render visually for users. It organizes content into elements such as headings, paragraphs, lists, tables, images, and multimedia.

3.1.2 Basic Structure of HTML:

HTML documents follow a consistent structure:

Doctype Declaration (<!DOCTYPE html>): Specifies the document type and version (HTML5 is the current standard).

HTML Root Element (<html>): Encloses the entire document content.

Head Section (<head>): Contains metadata, like the page title, character encoding, and links to external resources.

Body Section (<body>): Contains all the visible content, including text, images, and links.

3.1.3 Key Components of HTML:

HTML Elements: HTML content is built using elements, which consist of tags and attributes.

Tags: Keywords enclosed in angle brackets (< >) that define the type of content or its role. Tags typically come in pairs: an opening tag (e.g., <p>) and a closing tag (e.g., </p>).

Content: The data or text between the opening and closing tags.

Attributes: Provide additional information about an element, like its style, class, or unique ID.

Document Object Model (DOM): HTML elements form a hierarchical structure known as the DOM, which browsers use to render the web page. The DOM allows developers to manipulate HTML using scripting languages like JavaScript.

Structure of an HTML Document: An HTML document is organized into three primary parts:

Doctype Declaration (<!DOCTYPE html>): Declares the HTML version. In HTML5, this is simplified as <!DOCTYPE html>.

Head Section (<head>): Contains metadata about the document, such as the title, character encoding, and links to external resources (like stylesheets or scripts).

Body Section (<body>): Includes all the content visible to users, such as text, images, videos, and forms.

3.1.4 Features of HTML:

Universality: HTML is the standard language for web pages and is supported by all modern browsers, ensuring content consistency.

Media Integration: HTML allows embedding of various media types, including images, audio, video, and animations, to create rich user experiences.

Semantic Structure: With the introduction of HTML5, semantic tags like `<header>`, `<footer>`, `<article>`, `<section>`, and `<nav>` improve document readability and accessibility. Semantic elements also enhance SEO (Search Engine Optimization) by providing meaningful context to search engines.

Interactivity: HTML supports interactive features through integration with JavaScript, enabling dynamic content updates, user input processing, and form validation.

Extensibility: HTML works seamlessly with CSS for styling and JavaScript for functionality, making it highly versatile.

3.1.5 Evolution of HTML

HTML has undergone significant changes since its inception in the early 1990s:

HTML 1.0: The first version, introduced in 1993, focused on basic document structuring with limited tags.

2.0 to HTML 4.01: Expanded features, including support for tables, forms, and scripting languages.

HTML5 (Current Standard): Introduced in 2014, HTML5 brought significant enhancements, including:

Semantic Elements: `<header>`, `<footer>`, `<article>`, and `<aside>`.

Multimedia Support: Native support for `<audio>` and `<video>` elements.

Offline Capabilities: APIs like local storage and caching.

Responsive Design: Enhanced compatibility with modern devices.

3.1.6 Advantages of HTML:

Simple and Easy to Learn: HTML's syntax is straightforward, making it accessible to beginners and efficient for professionals.

Widely Supported: HTML is universally recognized by all web browsers, ensuring cross-platform compatibility.

Flexible and Scalable: HTML can be used for small personal websites or large-scale enterprise applications.

Integration with Other Technologies: HTML acts as a base for CSS (styling) and JavaScript (functionality), providing a complete web development solution.

3.1.6 Limitations of HTML:

Static Nature: HTML by itself is static and cannot create dynamic or interactive content without the support of scripting languages like JavaScript.

Dependency on Other Tools: HTML needs CSS for design and layout and JavaScript for advanced interactivity.

Browser Rendering Differences: Although widely supported, different browsers may render HTML slightly differently, leading to potential inconsistencies.

3.1.8 Applications of HTML:

Website Development: HTML is essential for creating static and dynamic websites.

Web Applications: Modern web applications use HTML as their structural foundation, integrated with other technologies like React or Angular.

Email Templates: HTML is commonly used for designing visually appealing email campaigns.

Documentation: HTML helps structure and format documentation or e-books for online access.

3.1.9 Why is HTML Important?

Web Development Foundation: No website can exist without HTML as its structural base.

Accessibility: Ensures that content is readable and accessible across devices and platforms.

Compatibility: Works universally across all web browsers.

3.2 INTRODUCTION TO CSS:

CSS, or **Cascading Style Sheets**, is a language designed to control the **appearance** and **layout** of HTML documents. It enhances web pages by providing aesthetic and functional styles such as colours, fonts, spacing, alignment, and positioning.

CSS allows developers to create visually appealing websites that adapt seamlessly across devices and screen sizes while maintaining a clear separation between structure (HTML) and design (CSS).

CSS revolutionized the way websites are designed and maintained, making it an essential tool for web developers. Its ability to separate design from structure, coupled with advanced features like responsive layouts and animations, allows developers to create websites that are both functional and aesthetically pleasing.

By constantly evolving to meet modern demands, CSS remains at the core of the web development ecosystem.

3.2.1 What is CSS?

CSS is a style sheet language that defines how HTML elements are displayed. It does not alter the content of the webpage but instead focuses on its visual presentation. The term Cascading refers to its method of resolving style conflicts through a hierarchy of rules and priorities, ensuring flexibility and control.

3.2.2 Key Components of CSS:

Selectors: Define which elements to style.

Properties: Specify what aspect of the element to style (e.g., colour, font-size, margin).

Values: Assign specific styles to the properties

3.2.3 How CSS Works?

Linking CSS to HTML: CSS can be applied to HTML in three main ways:

Inline CSS: Styles are written directly inside an HTML tag using the style attribute.

Internal CSS: Styles are defined within a `<style>` tag in the HTML `<head>`.

External CSS: Styles are written in a separate `.css` file and linked to the HTML using the `<link>` tag. This is the most efficient and widely used method for larger projects.

The Box Model: Every HTML element is treated as a rectangular box, consisting of:

Content: The actual text or elements inside.

Padding: Space between the content and the border.

Border: The outer boundary around the padding.

Margin: Space between the element and adjacent elements.

Cascading Order: CSS resolves style conflicts using:

Source order: Inline styles override internal and external styles.

Specificity: A more specific selector takes precedence.

Importance: Styles marked with `important` will override all others.

3.2.4 Core Features of CSS:

Selectors: CSS uses selectors to target HTML elements for styling. Common types include:

Element Selector: Targets elements by their tag name (e.g., `h1`, `p`).

Class Selector: Targets elements with a specific class (e.g., `.button`).

ID Selector: Targets a unique element using its ID (e.g., `#header`).

Pseudo-classes: Targets elements based on their state (e.g., `:hover`, `:nth-child`).

Universal Selector: Targets all elements (e.g., `*`).

Properties and Values: CSS properties control aspects like text styling, spacing, and layout.

Text Styling: `font-family`, `font-size`, `color`, `text-align`.

Box Properties: `width`, `height`, `margin`, `padding`, `border`.

Background: `background-color`, `background-image`.

Positioning and Layout: `position`, `display`, `flex`, `grid`.

Layouts: CSS provides powerful layout techniques to structure content:

Flexbox: A one-dimensional layout model for aligning items within a container.

Grid: A two-dimensional layout model for creating complex layouts with rows and columns.

Float: Used to position elements to the left or right.

Positioning: Specifies an element's placement using static, relative, absolute, fixed, or sticky.

Media Queries: CSS adapts to different screen sizes using media queries. This is essential for creating **responsive designs** that work on desktops, tablets, and smartphones.

Pseudo-elements: Used to style parts of elements, such as the first letter or line of a paragraph.

Transitions and Animations: CSS adds interactivity through animations and transitions.

Transitions: Smoothly change property values over time.

Animations: Define keyframes for more complex effects.

3.2.5 Advantages of CSS:

Efficiency: Reusable external stylesheets reduce redundancy and save time. Easier to update or change the design of a website.

Separation of Concerns: HTML handles structure, while CSS manages style, leading to cleaner and more maintainable code.

Improved User Experience: Enables responsive designs, ensuring websites look good on any device. Enhances visual appeal through rich styling and animations.

Cross-Browser Compatibility: Modern CSS ensures consistent rendering across browsers with proper testing.

Performance Optimization: Lightweight external CSS files can be cached by browsers, improving website load times.

3.2.6 Limitations of CSS:

Complexity in Large Projects: Managing large stylesheets can be challenging without proper organization. Naming conflicts and specificity issues may arise.

Cross-Browser Inconsistencies: Older browsers may not fully support newer CSS features, requiring fallbacks.

Dependence on HTML: CSS relies on properly structured HTML for effective styling.

Static Nature: CSS cannot handle dynamic behaviours without JavaScript.

3.2.7 Modern CSS Enhancements:

Variables: Variables allow developers to reuse values across stylesheets for consistency CSS.

CSS Frameworks: Popular frameworks like Bootstrap and Tailwind CSS simplify development with pre-built styles and components.

Preprocessors: Tools like SASS and LESS extend CSS capabilities by introducing features like nesting, mixins, and functions.

Grid and Flexbox: Modern layout systems provide unmatched flexibility and precision for responsive designs.

3.2.8 Applications of CSS:

Website Styling: CSS ensures visually appealing and consistent web page designs.

Responsive Web Development: Enables websites to adapt to varying screen sizes, enhancing usability.

Email Design: CSS is widely used for crafting professional email templates.

Web Applications: CSS is crucial for modern web applications with user-friendly interfaces.

3.2.9 Relationship Between HTML and CSS:

HTML for Structure: Defines the organization and placement of content (e.g., headings, paragraphs, forms).

CSS for Style: Enhances the appearance of HTML content by adding design elements like colour, fonts, layout, and spacing.

How They Work Together: HTML provides the content and skeleton.

CSS layers visual design and formatting on top of that structure.

3.3 INTRODUCTION TO JAVASCRIPT:

JavaScript is a **dynamic, high-level programming language** primarily used to add interactivity, functionality, and behaviour to websites. It is one of the core technologies of the World Wide Web, alongside HTML (for structure) and CSS (for styling).

Originally developed to enhance the user experience on web pages, JavaScript has evolved into a versatile language that can be used for both client-side and server-side programming.

JavaScript is the backbone of modern web interactivity, enabling developers to create rich, dynamic, and responsive web experiences. Its versatility and widespread adoption have solidified its position as one of the most essential programming languages in the tech industry.

With its continuous evolution, JavaScript remains at the forefront of web and application development, empowering developers to build innovative solutions across platforms.

3.3.1 Key Features of JavaScript:

Lightweight and Versatile: JavaScript is easy to implement and works seamlessly within browsers to enhance the user interface. It can be embedded directly in HTML or used as an external script.

Interactivity: JavaScript allows developers to create interactive elements like dropdown menus, sliders, pop-ups, and form validations, enhancing user engagement.

Event-Driven Programming: It responds to user interactions such as clicks, keypresses, and mouse movements, enabling dynamic and real-time behaviour.

Cross-Platform Compatibility: JavaScript runs on all modern browsers without the need for additional plugins or software.

Asynchronous Processing: Using features like AJAX (Asynchronous JavaScript and XML) and modern APIs like Fetch, JavaScript enables smooth data fetching and updates without reloading the entire webpage.

Versatility Beyond Browsers: While initially designed for web browsers, JavaScript now powers back-end development (Node.js), mobile apps (React Native), desktop apps (Electron), and even IoT devices.

3.3.2 How JavaScript Works?

JavaScript is executed in the browser using a **JavaScript engine**. For example:

Google Chrome uses the V8 engine.

Mozilla Firefox uses SpiderMonkey.

When JavaScript code is embedded in a web page, the browser's engine parses the code, converts it to machine-readable instructions, and executes it.

3.3.3 Role of JavaScript in Web Development:

Client-Side Scripting: JavaScript allows interaction directly in the browser, reducing server load and improving performance. Examples: Form validation, animations, real-time updates.

Server-Side Programming: With the introduction of Node.js, JavaScript is used for back-end development, handling databases, and creating APIs.

Rich User Interfaces: JavaScript frameworks and libraries like React, Angular, and Vue enable developers to build interactive, single-page applications (SPAs).

3.3.4 Advantages of JavaScript:

Speed: JavaScript runs in the browser, reducing server communication and speeding up execution.

Ease of Learning: Its syntax is relatively simple, making it beginner-friendly.

Wide Adoption: JavaScript is supported by all modern browsers and has a vast ecosystem of frameworks, libraries, and tools.

Dynamic Capabilities: JavaScript adds functionality like updating content dynamically, creating animations, and handling multimedia.

Versatility: From front-end interfaces to back-end servers, JavaScript supports a wide range of applications.

3.3.5 Limitations of JavaScript:

Browser Dependency: JavaScript's behaviour may vary slightly across browsers, requiring additional testing and compatibility fixes.

Security Concerns: Being a client-side language, JavaScript can be exploited for malicious purposes if not implemented securely.

Performance: For heavy computational tasks, JavaScript may not be as fast as other compiled languages like C++.

3.3.6 Applications of JavaScript:

Web Development: JavaScript powers websites, making them interactive and dynamic.

Web Applications: Single-Page Applications (SPAs) like Gmail or Trello heavily rely on JavaScript frameworks.

Server-Side Development: Node.js enables developers to use JavaScript for server-side tasks like handling requests and managing databases.

Game Development: JavaScript, combined with HTML5 Canvas or WebGL, is used to create browser-based games.

Mobile and Desktop Apps: Frameworks like React Native and Electron allow JavaScript to build cross-platform mobile and desktop applications.

3.3.7 Modern JavaScript Features:

ES6 and Beyond: Modern JavaScript introduced features like let, constant, arrow functions, template literals, and de-structuring, making code more efficient and readable.

Asynchronous Programming: Tools like Promises, async/await, and the Fetch API enable developers to handle asynchronous operations effectively.

APIs: JavaScript integrates with APIs to provide advanced functionalities, including geolocation, file handling, and notifications.

Modules: Modular JavaScript allows developers to structure code into reusable components, improving maintainability.

3.5 INTRODUCTION TO JAVA:

Java is an object oriented programming language originally developed by Sun Microsystems and released in 1995. Java was originally developed by James Gosling at Sun Microsystems (which has since merge into Oracle Corporation).

Java programs are platform independent which means they can be run on any operating system with any type of processor as long as the Java interpreter is available on that system. Java code that runs on one platform does not need to be recompiled to run on another platform, it's called "write once, run anywhere" (WORA).

Java virtual machine (JVM) executes Java code, but is written in platform specific languages such as C/C++/ASM etc. JVM is not written in Java and hence cannot be platform independent and Java interpreter is actually a part of JVM.

3.4.1 USES OF JAVA:

Earlier, java was only used to design and program small computing devices but later adopted as one of the platform independent programming language and now according to Sun, 3 billion devices run java. Java is one of the most important programming language in today's IT industries.

JSP – Java is used to create web applications like PHP and ASP, JSP(Java Server Pages) used with normal HTML tags, which helps to create dynamic web pages.

Applets – This is another type of Java program that used within a web page to add many new features to a web browser.

J2EE – The software Java 2 Enterprise Edition are used by various companies to transfer data based on XML structured documents between one another.

JavaBeans – This is something like Visual Basic, a reusable software component that can be easily assemble to create some new and advanced application.

Mobile – Besides the above technology, Java is also used in mobile devices, many kind of games and services built in Java. Today, all leading mobile service provider like Nokia, Siemens, Vodafone are using Java technology.

3.5.1 Key features of Java :

Object Oriented: In java everything is an Object. Java can be easily expanded since it is based on the Object model.

Platform independent: C and C++ are platform dependency languages hence the application programs written in one Operating system cannot run in any other Operating system, but in platform independence language like Java application programs written in one Operating system can able to run on any Operating system.

Simple: Java is designed to be easy to learn. If you understand the basic concept of OOP java would be easy to master.

Secure: With Java's secure feature it enables to develop virus-free, tamper-free systems. Authentication techniques are based on public key encryption.

Architectural neutral: Java compiler generates an architecture neutral object file format which makes the compiled code to be executable on many processors, with the presence Java runtime system. Portable – being architectural neutral and having no implementation dependent aspects of the specification makes Java portable. Compiler and Java is written in ANSI C with a clean portability boundary which is a POSIX subset.

Robust: Java makes an effort to eliminate error prone situations by emphasizing mainly on compile time error checking and runtime checking.

Multithreaded: With Java's multithreaded feature it is possible to write programs that can do many tasks simultaneously. This design feature allows developers to construct smoothly running interactive applications.

Interpreted: Java byte code is translated on the fly to native machine instructions and is not stored anywhere. The development process is more rapid and analytical since the linking is an incremental and light weight process.

High Performance: With the use of Just-In-Time compilers Java enables high performance.

Distributed: Java is designed for the distributed environment of the internet.

Dynamic: Java is considered to be more dynamic than C or C++ since it is designed to adapt to an evolving environment. Java programs can carry an extensive amount of runtime information that can be used to verify and resolve accesses to objects on runtime.

3.4.3 How Java Works?

Compilation: Java code is written in a .java file and compiled into **bytecode** by the Java Compiler (javac).

Execution: The bytecode runs on the **Java Virtual Machine (JVM)**, which interprets it for the underlying platform.

JRE and JDK: **JRE (Java Runtime Environment):** Provides the libraries and JVM necessary to run Java applications. **JDK (Java Development Kit):** Includes the tools required to develop and compile Java applications, such as javac.

3.4.4 Advantages of Java:

Portability: Java's platform independence ensures compatibility across devices and operating systems.

Scalability: Suitable for small applications to large distributed systems.

Extensive Community and Resources: Java boasts a vast ecosystem of libraries, frameworks, and a supportive developer community.

Backward Compatibility: Java ensures older applications can run on newer Java versions with minimal adjustments.

Robustness and Security: Its architecture and built-in security features make Java a trusted choice for critical applications.

3.4.5 Limitations of Java:

Performance: Java applications can be slower compared to those written in lower-level languages like C++ due to the overhead of the JVM.

Memory Usage: Java's automatic memory management can lead to higher memory consumption.

Verbose Syntax: Java code tends to be more verbose compared to newer languages like Python or Kotlin.

3.4.6 Applications of Java:

Web Development: Frameworks like **Spring** and **Hibernate** are widely used for building server-side web applications.

Mobile Development: Java is the primary language for developing Android applications using tools like Android Studio.

Desktop Applications: Tools like JavaFX and Swing enable the creation of graphical user interfaces (GUIs).

Embedded Systems: Java is used in embedded devices like smart cards and set-top boxes.

Big Data and AI: Java integrates with tools like Apache Hadoop and Apache Spark for data processing and AI applications.

3.5 INTRODUCTION TO VISUAL STUDIO CODE:

Visual Studio Code (VS Code) is a **lightweight, open-source code editor** developed by Microsoft. Since its launch in 2015, it has become one of the most popular tools among developers due to its versatility, performance, and rich ecosystem of extensions.

VS Code is designed for a wide range of programming and development tasks, including writing code, debugging, version control, and deploying applications. Its cross-platform compatibility allows it to run on **Windows, macOS, and Linux**, making it accessible to a broad user base.

Visual Studio Code is a modern and flexible code editor that bridges the gap between lightweight text editors and fully-featured IDEs. Its intuitive interface, extensive customization options, and vibrant community make it an indispensable tool for developers across disciplines.

Whether you're a beginner writing your first lines of code or an experienced professional managing complex applications, VS Code offers a robust environment to enhance productivity and streamline workflows.

3.5.1 Key Features of Visual Studio Code:

Lightweight and Fast: Unlike traditional Integrated Development Environments (IDEs), VS Code is designed to be fast and responsive while still offering many powerful features.

Cross-Platform: VS Code works seamlessly on multiple operating systems, ensuring a consistent development experience across platforms.

Intelligent Code Editing: Syntax Highlighting: Makes code easier to read and debug.

Code Autocompletion (IntelliSense): Suggests code completions based on the programming language.

Error Detection: Highlights syntax and runtime errors in real time.

Integrated Git and Version Control: VS Code provides built-in Git support, enabling users to manage source code repositories, track changes, and collaborate with others.

Debugging Tools: VS Code includes a powerful debugging feature that allows developers to step through their code, set breakpoints, and inspect variables.

Extensibility: With the **Visual Studio Code Marketplace**, users can install thousands of extensions for additional functionality, such as language support, themes, and tools for frameworks like React, Angular, and Flask.

Built-in Terminal: A terminal integrated within the editor allows developers to run commands without switching between applications.

Customization: Users can customize themes, keyboard shortcuts, and settings to suit their preferences.

Rich Ecosystem of Language Support: VS Code supports a vast array of programming languages, including JavaScript, Python, C++, Java, and PHP, through built-in functionality or extensions.

Remote Development: Developers can work on remote servers, containers, or WSL (Windows Subsystem for Linux) using the **Remote Development extensions**.

3.5.2 Why Developers Choose Visual Studio Code?

Versatility: Suitable for web development, mobile app development, data science, and even DevOps tasks.

Community Support: Backed by Microsoft and an active global community, VS Code benefits from frequent updates and community-driven enhancements.

Open Source: As an open-source project, VS Code fosters transparency and innovation, allowing developers to contribute to its development.

Integrated Ecosystem: It integrates smoothly with cloud services like **Azure** and development tools like Docker, making it ideal for modern software development workflows

3.5.3 Cases of Visual Studio Code:

Web Development: Tools like **HTML, CSS, JavaScript**, and frameworks such as React and Angular are fully supported.

Back-End Development: Languages like Python, Node.js, and Java, paired with debugging and database extensions, make VS Code suitable for server-side development.

Data Science: Extensions like **Jupyter Notebooks** enable developers to work on data analysis and machine learning projects.

DevOps and Cloud: VS Code supports Docker, Kubernetes, and cloud integrations, facilitating seamless deployment and operations.

3.5.4 Limitations of VS Code:

Performance Issues on Large Projects: While lightweight, performance can degrade when working on very large codebases with many extensions.

Dependency on Extensions: Core functionality is minimal, and many features rely on third-party extensions, which may sometimes conflict or become outdated.

Limited Out-of-the-Box Features: Compared to full-featured IDEs like IntelliJ IDEA, some advanced tools (e.g., refactoring for complex languages) may require additional setup.

3.6 ORACLE DATABASE:

Oracle Database, developed by Oracle Corporation, is a **relational database management system (RDBMS)** designed to efficiently store, manage, and retrieve large volumes of data. It is one of the most widely used and robust database solutions globally, offering high performance, scalability, and security for enterprise-level applications.

Introduced in 1979, Oracle Database has continually evolved, becoming a cornerstone for managing structured and unstructured data in modern organizations.

Oracle Database is a powerful, feature-rich RDBMS that serves as the backbone for countless organizations worldwide. Its scalability, security, and robust performance make it ideal for applications ranging from transactional systems to large-scale analytics.

While it requires expertise and investment, Oracle's innovative features and strong support ecosystem ensure its position as a leader in the database market.

3.6.1 Key Features of Oracle Database:

Relational Model: Oracle organizes data into tables that can be queried and manipulated using SQL (Structured Query Language). Relationships between data are maintained to ensure consistency.

High Availability: Features like **Oracle Real Application Clusters (RAC)** and **Data Guard** provide continuous availability, even during hardware failures or system maintenance.

Scalability: Oracle supports vertical and horizontal scaling to handle increasing data volumes and user loads, making it suitable for small applications and large enterprises.

Security: Oracle offers advanced security features, including data encryption, access controls, and auditing, ensuring data protection and regulatory compliance.

Performance Optimization: Tools like **Automatic Storage Management (ASM)** and query optimization ensure high-speed data retrieval and transaction processing.

Support for Multiple Data Types: Oracle handles structured, semi-structured, and unstructured data, including JSON, XML, and multimedia content.

Cloud Integration: Oracle Database supports hybrid and cloud deployments, enabling organizations to leverage cloud scalability and on-premise control.

Built-In Analytics: Advanced analytical functions and machine learning integration allow data analysis directly within the database.

3.6.2 Components of Oracle Database:

Database: The core component where all the data resides, organized into tablespaces, schemas, and objects.

Instance: The combination of memory structures (SGA - System Global Area) and background processes that interact with the database files.

Datafiles: Physical files that store the database data.

Control Files: Metadata about the database, such as the structure and location of datafiles.

Redo Logs: Used for transaction recovery and ensuring data integrity in case of a system failure.

3.6.3 Features That Differentiate Oracle:

Pluggable Databases (PDBs): Introduced in Oracle 12c, this allows multiple databases to coexist within a single container database, improving resource utilization and simplifying management.

Data Partitioning: Oracle supports partitioning large tables to enhance performance and manageability.

Flashback Technology: Enables users to view and recover historical data without restoring backups.

Advanced Compression: Reduces storage requirements and enhances query performance.

Oracle Autonomous Database: A self-managing database that automates routine tasks like patching, backups, and tuning, powered by machine learning.

3.6.4 Common Use Cases of Oracle Database:

Enterprise Applications: Widely used in ERP, CRM, and SCM systems for large organizations.

E-Learning Platforms: Oracle supports high transaction volumes with consistent performance.

Data Warehousing: Ideal for analytical workloads and large-scale data integration.

Banking and Finance: Ensures secure and reliable handling of critical financial data.

Healthcare and Research: Manages sensitive data securely while supporting analytical insights.

3.6.5 Advantages of Oracle Database:

Reliability and Robustness: Offers unmatched stability for mission-critical applications.

Flexibility: Supports multiple deployment models (on-premises, cloud, hybrid).

Extensive Ecosystem: A rich set of tools, frameworks, and third-party integrations.

Continuous Innovation: Regular updates introduce cutting-edge features like autonomous capabilities.

Global Support: Backed by Oracle's worldwide network of experts and consultants.

3.6.6 Limitations of Oracle Database:

Cost: Licensing and maintenance fees can be high, making it less suitable for smaller organizations with limited budgets.

Complexity: Advanced features require skilled database administrators (DBAs) to manage effectively.

Resource Intensive: Oracle's powerful capabilities demand substantial system resources, particularly for large-scale deployments.

CHAPTER 4

SYSTEM DESIGN:

4.1 MODULAR DESCRIPTION:

Home page: The homepage for an E-Learning college website could feature a clean, engaging design with a logo and navigation bar at the top, providing links to important sections like About us, login, Courses, placement form, attendance form and Contact. A prominent search bar and student login and staff login option should be easily accessible. The main banner could include a captivating image or video representing E-Learning, with a catchy slogan and a clear call to action such as "Apply Now" or "Explore Our Courses."

Login page: A login page for an E-Learning college website should be simple, secure, and user-friendly. The page can have a clean layout with a login box. The login box should have fields for the user's credentials:

- Username/Email: A field for the student's registered username or email address.
- Password: A password field with a 'show password' toggle option for convenience.
- Forgot Password Link: A link for users to reset their password if needed.

Below the login fields, there could be a large "Login" button. Below this, a "Create Account" link can encourage new users to register if they haven't already.

Placement form: The placement form for an E-Learning college website should have fields for full name, email address, contact number, course/program completed, graduation year, skills, and a resume upload option. It should allow students to select preferred job roles, such as Digital Marketer or Web Developer, and indicate their location preference, whether remote or city-based. A submit button should finalize the process, and a confirmation message or email should be sent upon successful submission. The form should be user-friendly, ensuring quick and easy submissions for students seeking placement opportunities.

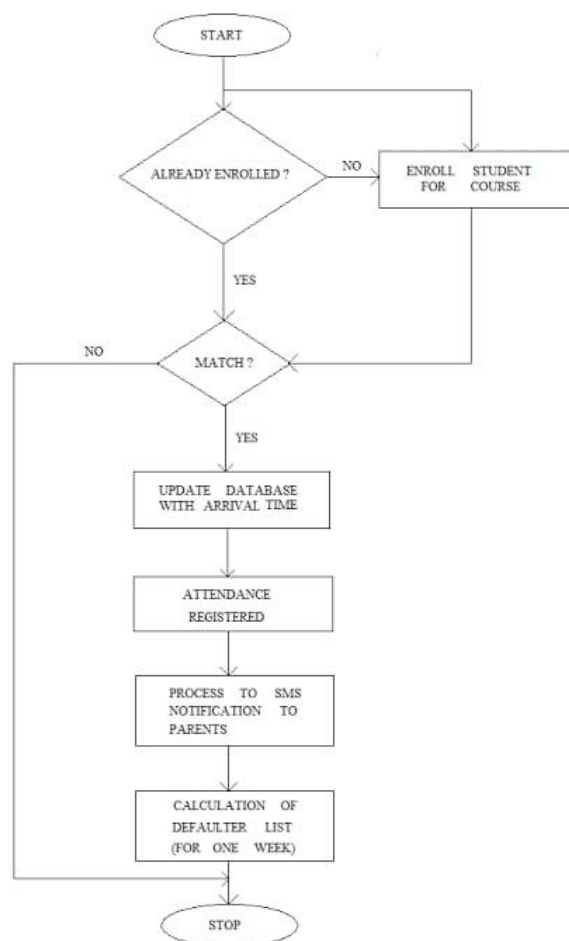
Categories of courses: Different types of courses are offered. They are:

- Computer science and engineering
- Electrical and electronics engineering
- Mechanical engineering
- Civil engineering

Attendance form: The attendance page for an E-Learning college website should allow students to view and track their attendance records. It should display the student's name, course details, and the number of sessions attended vs. missed. There could be options for filtering by date or semester. A section for faculty or admin to mark attendance and update records could be included for administrative use. The page should be simple to navigate, with clear indicators of attendance status and any necessary actions, such as requesting leaves or viewing attendance history.

Contact: It typically includes a contact form for inquiries, the phone number, email address, links to social media profiles, and physical address. customers can easily communicate for help, feedback, or suggestions, enhancing trust and satisfaction

4.2 FLOW CHART



CHAPTER-05

IMPLEMENTATION AND TESTING

5.1 TESTING:

Testing for an E-Learning college website ensures that all functionalities work correctly and provide a seamless user experience. The process includes:

Functional Testing: Verifying features such as student login, course registration, attendance tracking, placement forms, and payment gateways. Ensure links and forms work as intended.

Usability Testing: Assessing navigation, layout, and ease of use to ensure an intuitive interface for students, faculty, and administrators.

Performance Testing: Checking website speed, responsiveness, and ability to handle multiple users simultaneously, especially during peak times like admissions or placements.

Security Testing: Ensuring protection of sensitive data like student records, login credentials, and payment details from vulnerabilities and breaches.

Compatibility Testing: Verifying that the website works seamlessly across different browsers, devices, and screen sizes.

Database Testing: Ensuring that student data, attendance records, and course details are stored, retrieved, and updated correctly.

Accessibility Testing: Confirming the website meets accessibility standards, enabling usage by individuals with disabilities.

5.2 SAMPLE CODE:

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width,initial-scale=1.0">

    <body>

      <div class="container">
```

```

    <div class="logo">

</div>

<div class="site">

    <h1><b><i>Tech Educations</i></b></i></h1>

</div>

    <nav>

        <a href="education.html">Home</a>

        <a href="about1.html">About</a>

        <a href="signin.html">signin</a>

        <a href="courses.html">Product</a>

        <a href="atten.html">Payment</a>

        <a href="placement.html">Placement</a>

        <a href="contact1.html">Contact</a>

    </nav>

</div>

</header>

<section id="home" class="hero">

    <div class="container">

        <h2>WELCOME TO TECH EDUCATIONS</h2>

        <p>Our college provides a 100% results with placement</p>

    </div>

</section>

<h2> Registration form</h2>

```

```
<button                                onclick="document.getElementById('id01').style.display='block'"
style="width:auto;">Login</button>
```

```
<div id="id01" class="modal">
```

```
<form class="modal-content animate" action="/action_page.php" method="post">
```

```
<div class="imgcontainer">
```

```
<span onclick="document.getElementById('id01').style.display='none'" class="close"
title="Close Modal">&times;</span>
```

```

```

```
</div>
```

```
<div class="container">
```

```
<label for="uname"><b>Username</b></label>
```

```
<input type="text" placeholder="Enter Username" name="uname" required>
```

```
<label for="Enter your email"><b>Enter your Email</b></label>
```

```
<input type="text" placeholder="Enter Email" name="Email" required>
```

```
<label for="psw"><b>Password</b></label>
```

```
<input type="password" placeholder="Enter Password" name="psw" required>
```

```
<button type="submit">Register</button>
```

```
<label>
```

```
<input type="checkbox" checked="checked" name="remember"> Remember me
```

```
</label>
```

</div>

<p>Already have an account? </p>

student login: submit

staff login: submit

<div class="container" style="background-color:#f1f1f1">

 <button type="button" onclick="document.getElementById('id01').style.display='none'"
class="cancelbtn">Cancel</button>

 Forgot password?

</div>

</form>

</div>

<script>

// Get the modal

var modal = document.getElementById('id01');

// When the user clicks anywhere outside of the modal, close it

window.onclick = function(event) {

 if (event.target == modal) {

 modal.style.display = "none";

 }

}

```

</script>

<title>courses</title>

<body>

  <h1>COURSES OFFERED</h1>

  <li>

    <ul>

      <a href="CSE.html"> <h2>COMPUTER SCIENCE AND
ENGINEERING</h2></a><br>

      </ul>

      <ul>

        <a href="EEE.html"><h2> ELECTRICAL AND ELECTRONICS
ENGINEERING</h2></a><br>

        </ul>

        <ul>

          <a href="CIVIL.html"><h2>MECHANICAL ENGINEERING</h2></a><br>

          </ul>

          <ul>

            <a href="CIVIL.html"><h2>CIVIL ENGINEERING</h2></a><br>

            </ul>

          </li>

</div class="container">

```

```
<h2>placement form</h2>
```

```
<form id="placementForm">
```

```
  <div class="form-group">
```

```
    <label for="studentName">Student Name:</label>
```

```
    <input type="text" id="studentName" name="studentName" required>
```

```
  </div>
```

```
  <div class="form-group">
```

```
    <label for="email">Email:</label>
```

```
    <input type="email" id="email" name="email" required>
```

```
  </div>
```

```
  <div class="form-group">
```

```
    <label for="department">Department:</label>
```

```
    <select id="department" name="department" required>
```

```
      <option value="">Select Department</option>
```

```
      <option value="CSE">CSE</option>
```

```
      <option value="EEE">EEE</option>
```

```
      <option value="CIVIL">CIVIL</option>
```

```
      <option value="MECH">MECH</option>
```

```
    </select>
```

```
  </div>
```

```
  <div class="form-group">
```

```
    <label for="preferredLocation">Preferred Location:</label>
```

```
    <input type="text" id="preferredLocation" name="preferredLocation">
```

```
  </div>
```

```
</div class="form-group">
```

```

    <label for="additionalInfo">Additional Information:</label>

    <textarea id="additionalInfo" name="additionalInfo" placeholder="Enter any additional
information"></textarea>

</div>

<div class="form-group">

    <button type="submit">Submit Placement Form</button>

</div>

</form>

</div>

<div class="container">

    <h2>Student Attendance portal</h2>

    <form id="attendanceForm">

        <div class="form-group">

            <label for="studentName">Student Name:</label>

            <input type="text" id="studentName" name="studentName" required>

        </div>

        <div class="form-group">

            <label for="attendanceStatus">Attendance:</label>

            <select id="attendanceStatus" name="attendanceStatus" required>

                <option value="">Select Attendance Status</option>

                <option value="present">Present</option>

                <option value="absent">Absent</option>

            </select>

        </div>

        <div class="form-group">

```

```

        <button type="submit">Submit Attendance</button>

    </div>

</form>

</div>

<header>

    <h2>CONTACT US</h1>

</header>

    <p><strong>Email:</strong> bava1606@gmail.com</p>

    <p><strong>Phone:</strong> 9867654398</p>

    <p><strong>Address:</strong> 189,kodambakam,chennai</p>

</section>

<section class="CONTACT US">

    <h2>FORM</h2>

    <form action="#" method="POST">

        <div class="form-group">

            <label for="name">Name:</label>

            <input type="text" id="name" name="name" required>

        </div>

        <div class="form-group">

            <label for="email">Email:</label>

            <input type="email" id="email" name="email" required>

        </div>

        <div class="form-group">

```



```
<label for="message">Message:</label>

<textarea id="message" name="message" required></textarea>

</div>

<div class="form-group">

  <button type="submit">Send Message</button>

</div>

</form>

</section>

<footer>

  <p><em> copy@ Tech Education Feel free to reach out to us with any
inquiries!</em></p>

</footer>

</body>

</html>
```

5.3 OUTPUT

SCREENSHOTS:

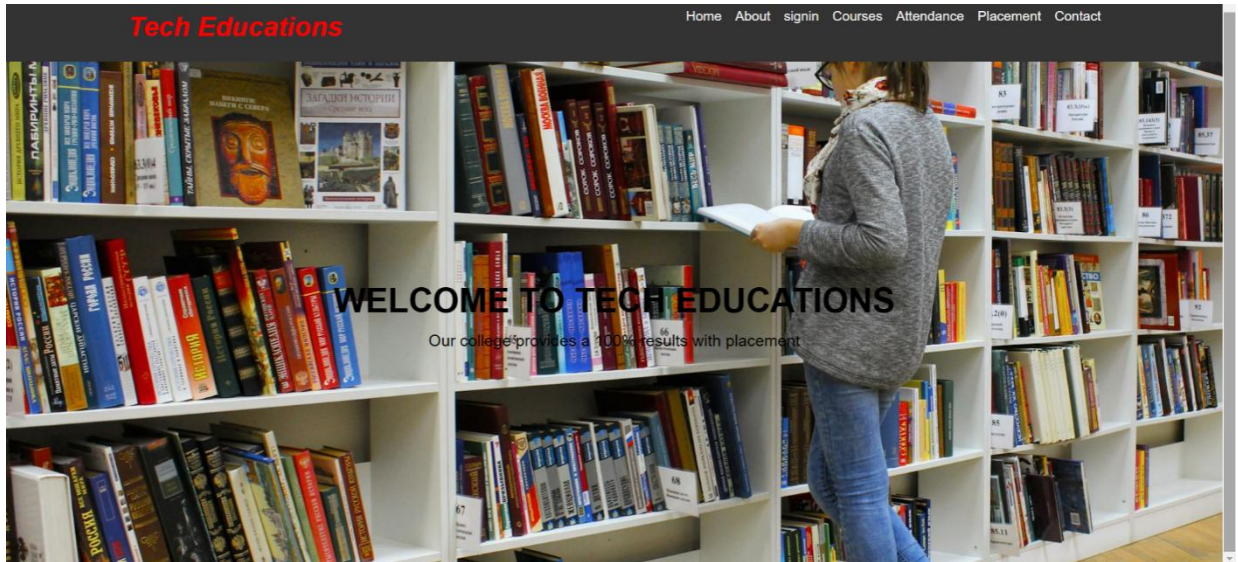


Figure 5.3.1: navigation tool bar

The screenshot shows a registration form titled "Registration form" in the top left corner. On the far left, there is a green "Login" button. The form itself is a white box with a green "Avatar" icon and a close button (X) in the top right. It contains three input fields: "Username" with the text "bava", "Enter your Email" with the text "bava123@gmail.com", and "Password" with masked characters. Below these fields is a wide green "Register" button. Underneath the "Register" button is a checkbox labeled "Remember me" which is checked. At the bottom left of the form, it says "Already have an account?" followed by "student login: [submit](#) staff login: [submit](#)". At the bottom right, there is a "Forgot [password?](#)" link. A red "Cancel" button is located at the bottom left of the form box.

Figure 5.3.2: registration form

Login Form

Login

Register number ✕

Password

Login

Cancel

Forgot [password?](#)

Figure 5.3.3: login form

Computer Science and Engineering Courses

Introduction to cse Staffs Languages offered

INTRODUCTION TO COMPUTER SCIENCE AND ENGINEERING

The CSE professionals can work as a IT consultant,software developer,IT specialists,web developer,database administrator




Figure 5.3.4:courses offered



STAFFS

The Department is equipped with well experienced faculty and supporting staffs who strives to produce excellent acedemic performance

HOD:Mr.R. Mohammed rafeeq

ART DIRECTOR

rafeeq@gmail.com.com

Figure 5.3.5: staff details

LANGUAGES OFFERED

#PHP

#C++

#JAVA



Figure 5.3.6.: course details

Electrical And Electronics Engineering Courses

Introduction to EEE

Staffs

Languages offered

Introduction to Electrical and Electronics Engineering

The EEE professionals can work on profesional electricians,electrical engineer,product design engineer ,appendix and so on



Figure 5.3.7: course offered

Staffs

HOD:Mrs.DHARANI

The Department is equipped with well experienced faculty and supporting staffs who strives to produce excellent acedemic performance



Figure 5.3.8 : staff details

Languages offered

C and C++ on embedded systems

Arduino programming language

VHDL language

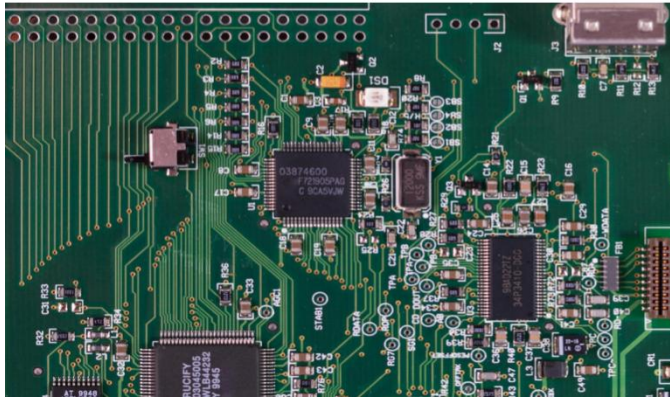


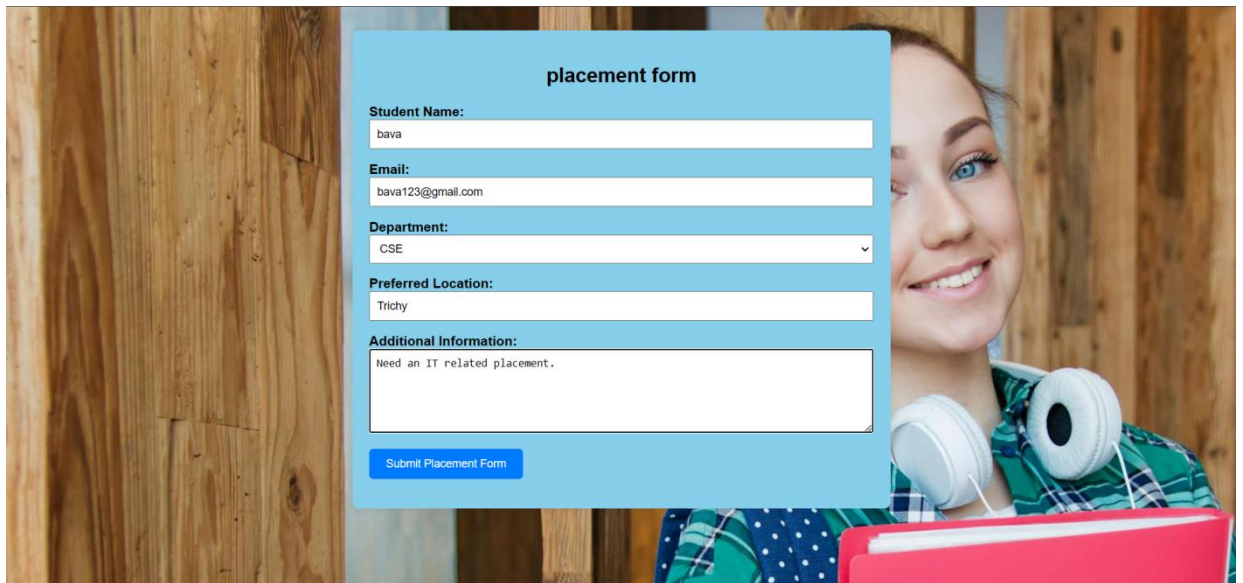
Figure 5.3.9: course details

Student Attendance portal

Student Name:

Attendance:

Figure 5.3.10 attendance portal



placement form

Student Name:
bava

Email:
bava123@gmail.com

Department:
CSE

Preferred Location:
Trichy

Additional Information:
Need an IT related placement.

Submit Placement Form

Figure 5.3.11: placement form

Contact

Launched by bava.bavadharami1606@gmail.com
Visit us at: [insta:16_bava1606](#)
[Phone: 9897687076](#)
India

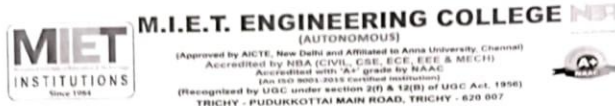
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Figure 5.3.12: contact details

CHAPTER-06

INTERNSHIP REPORTS

6.1 STUDENT INTERNSHIP PROGRAM APPLICATION



Department of Computer Science and Engineering
Academic Year 2024 -2025(ODD)

STUDENT INTERNSHIP PROGRAM APPLICATION

Complete and submit to the Internship Program Coordinator.(Type the details)

1. Student Name:	G. BAVADHARANI		
2. Campus Address:	NO 4, 1 ST FLOOR JAIN ANTARIKSA, RATHINAMMAL ST, MURUGESAN NAGAR, KODAMBAKKAM, CHENNAI, TAMILNADU - 600024	Phone:	9092497999
3. Home Address:	NO 11/189, BHARATHIYAR NAGAR, MANAPPARAI, TIRUCHIRAPALLI - 621306	Phone:	7373461704
3a. Student email address: bavadharani606@gmail.com			
4. Academic Concentration: CSE FULL STACK DEVELOPER	5. Internship Semester: 6 th Year. 3 rd		
6. Overall GPA: 8.1			
9. Internship Preferences			
	Location	Core Area	Company/ institution
Preference-1	NO 4, 1 ST FLOOR JAIN ANTARIKSA, RATHINAMMAL ST, MURUGESAN NAGAR, KODAMBAKKAM, CHENNAI, TAMILNADU - 600024		EAGLE HITECH IT
Preference-2			
Preference-3			
Faculty mentor Signature: <u>[Signature]</u> Date: <u>5/7/24</u>			
Signature confirms that the student has attended the internship orientation and has met all paperwork and process requirements to participate in the internship program, and has received approval from his/her Advisor..			
Student Signature: <u>[Signature]</u> Date: <u>5/7/24</u>			
Signature confirms that the student agrees to the terms, conditions, and requirements of the Internship Program			

6.3 WEEKLY GEOTAG REPROT



M.I.E.T. ENGINEERING COLLEGE (AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Accredited by NBA (CIVIL, CSE, ECE, EEE & MECH)
Accredited with 'A+' grade by NAAC
(An ISO 9001:2015 Certified Institution)
(Recognized by UGC under section 2(f) & 12(B) of UGC Act, 1956)
TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



Department of Computer Science and Engineering Academic Year 2024-2025(ODD)



Name of the Student: G.BAVADHARANI



Name of the Company: EAGEL HI TECH SOFT CLOU PVT LTD

Domain: FULL STACK DEVELOPMENT

Duration: 10-07-2024 To: 10-08-2024

Course Code/Course Title: CS3711/SUMMER INTERNSHIP

No of weeks	WEEKLY GEOTAG REPORT
Week 1	
Week 2	

<p>Week 3</p>	
<p>Week 4</p>	
<p>TRAINER'S SIGNATURE WITHDATE:</p> <p><i>K.N.K</i></p>	

6.4 SUPERVISOR EVALUATION OF INTERN



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 Accredited with 'A' grade by AACSB
 (An ISO 9001:2015 Certified Institution)
 (Recognized by UGC under section 2(F) & 12(B) of UGC Act, 1956)
 TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



Department of Computer Science and Engineering

Academic Year 2024 -2025(ODD)

SUPERVISOR EVALUATION OF INTERN

Student Name: GI BAYADHARAN Date: 10/08/2024
 Work Supervisor: N. Vishwanathan Title: Full Stack Developer
 Company/Organization: EAGLE HITECH SOFTWARE PVT LTD
 Internship Address: OFFICE NO 4, 13th FLOOR, TAIN AMARIKSHA, KODANRAYAN, CHENNAI - 600044
 Dates of Internship: From 10/1/24 To 10/8/24

Please evaluate your intern by indicating the frequency with which you observed the following behaviors:

Parameters	Needs improvement	Satisfactory	Good	Excellent
Behaviors				✓
Performs in a dependable manner				✓
Cooperates with co-workers and supervisors			✓	
Shows interest in work				✓
Learns quickly				✓
Shows initiative				✓
Produces high quality work			✓	
Accepts responsibility				✓
Accepts criticism				✓
Demonstrates organizational skills			✓	
Uses technical knowledge and expertise				✓
Shows good judgment				✓
Demonstrates creativity/originality				✓
Analyzes problems effectively			✓	
Is self-reliant			✓	
Communicates well				✓
Writes effectively				✓
Has a professional attitude				✓
Gives a professional appearance				✓
Is punctual				✓
Uses time effectively				✓

Overall performance of student intern (circle one):
 (Needs improvement/ Satisfactory/ Good/ Excellent)

Additional comments, if any:




Department of Computer Science and Engineering
Academic Year 2024-2025(ODD)

K.N.K.
SIGNATURE OF INDUSTRY
SUPERVISOR

Klaash
HR MANAGER




6.5 STUDENT FEEDBACK OF INTERNSHIP



MIET
INSTITUTIONS
Since 1982

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TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



Department of Computer Science and Engineering
Academic Year 2024 -2025(ODD)

STUDENT FEEDBACK OF INTERNSHIP (TO BE FILLED BY STUDENTS AFTER INTERNSHIP COMPLETION)

Student Name: G. RAVADHARANI Date: 10-08-2024
 Industrial Supervisor: LOKE SHIVARAN Title: Full Stack Developer
 Supervisor Email: lokeesh@engletochisolutions.com Internship Is: ☒ Paid ☐ Unpaid
 Company/Organization: EAGLE HMECH SOFTWARE PVT LTD
 Internship Address: HURUKESAN NAGAR OFFICE NO.4, 1st FLOOR, JAIN ANIARIKSHA, KODAMPALATHI, CHENNAI-600060 Department: COMPUTER SCIENCE
 Faculty Coordinator: _____
 Dates of Internship: From 10/1/24 To 10/8/24

Please fill out the above in full detail

Give a brief description of your internship work (title and tasks for which you were responsible): Was your internship experience related to your major area of study?
☒ Yes, to a large degree ☐ Yes, to a slight degree ☐ No, not related

at all Indicate the degree to which you agree or disagree with the following statements.

This experience has:	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Given me the opportunity to explore a career field	<input checked="" type="checkbox"/>				
Allowed me to apply classroom theory to practice	<input checked="" type="checkbox"/>				
Helped me develop my decision-making and problem-solving skills	<input checked="" type="checkbox"/>				
Expanded my knowledge about the work world prior to permanent employment		<input checked="" type="checkbox"/>			
Helped me develop my written and oral communication skills		<input checked="" type="checkbox"/>			
Provided a chance to use leadership skills (influence others, develop ideas with others, stimulate decision-making and action)	<input checked="" type="checkbox"/>				
This experience has:	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Expanded my sensitivity to the ethical implications of work involved		<input checked="" type="checkbox"/>			

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TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007

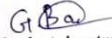


Department of Computer Science and Engineering
Academic Year 2024 -2025(ODD)

Made it possible for me to be more confident in new situations	✓				
Given me a chance to improve my interpersonal skills	✓				
Helped me learn to handle responsibility and use my time wisely		✓			
Helped me discover new aspects of myself that I didn't know existed before		✓			
Helped me develop new interests and abilities	✓				
Helped me clarify my career goals	✓				
Provided me with contacts which may lead to future employment		✓			
Allowed me to acquire information and/or use equipment not available at my Institute		✓			

Considering your overall experience, how would you rate this internship? (Circle one).

(Satisfactory/ Good/ Excellent)


Student signature

CHAPTER 7

CONCLUSION

An E-Learning college website is a transformative tool that integrates technology into the academic ecosystem, creating a seamless and interactive platform for all stakeholders. It goes beyond traditional functionalities, offering features such as online admissions, fee payment systems, access to educational resources, and real-time communication tools. These elements not only simplify administrative processes but also enhance the overall user experience, making education more accessible and efficient.

By leveraging secure payment gateways and responsive design, the platform ensures inclusivity and trust, accommodating diverse user needs. Furthermore, its adaptability to emerging technologies positions the institution for sustained growth in an increasingly digital world. Ultimately, an E-Learning college website fosters a holistic educational environment, empowering students, faculty, and administrators to collaborate effectively while embracing the convenience of modern digital solutions.

CHAPTER-08

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