Front-End UI/UX Mini Project

University Department Info Page

Submitted By:

Team Members:

1. N.Muthukrishnan (2462519) – n.muthukrishnan@btech.christuniversity.in

2. S.Jacques Paul (2462527) – s.jacquespaul@btech.christuniversity.in

3. Adwaith Anil Kumar (2462503) – adwaith.anilkumar@btech.christuniversity.in

Course: L&T FrontEnd UI/UX

Instructor Name: Mr.Dhiraj*alate*

Institution: *Christ University*

Date of Submission: 11*/8/2025*

Abstract:

This project is a web-based portal for the Computer Science Department at Christ University, designed to showcase faculty expertise, course offerings, and research areas. The key goal is to provide a clear, interactive, and user-friendly platform for students and visitors to explore academic programs and departmental highlights. Developed using HTML and CSS, the portal features structured sections such as faculty spotlight, course catalog with comparison functionality, and research areas with visual icons. The clean layout and responsive design ensure accessibility and ease of navigation. The final outcome is an informative and visually appealing

website that enhances departmental visibility, streamlines academic information access, and serves as a digital hub for prospective and current students.

Objectives:

Clearly list the project goals:
• Design a clean and organized interface tailored for departmental needs
• Develop a responsive layout using only HTML and CSS for compatibility across devices
• Implement structured HTML5 semantic elements for better accessibility and SEO
• Apply CSS styling to enhance branding, readability, and visual appeal
• Ensure smooth navigation and clear presentation of faculty, courses, and research information

Scope of the Project:

• Focused solely on front-end design and layout for the departmental website
• No JavaScript functionality or server-side integration included
• Designed to work seamlessly on desktop, tablet, and mobile devices
• Built using only pure HTML and CSS without external libraries or frameworks
• Covers core sections such as Home, About, Faculty, Courses, and Contact

Tools & Technologies Used

Tool/Technology	Purpose
HTML5	Markup and content structure
CSS3	Styling and layout management
VS Code	Code editor
Google Chrome	Testing and debugging

HTML Structure Overview:

- Used semantic tags: <header>, <nav>, <main>, <section>, <footer>
- Structured into dedicated sections: Home, About, Faculty, Courses, Contact
- Navigation menu created using <ul> and anchor links for smooth page navigation

CSS Styling Strategy:

- Used an external CSS file (style.css) for all styling
- Organized code with comments and logical sections for readability
- Techniques used:
  - Flexbox and Grid for structured, responsive layout
  - Media Queries to ensure compatibility across desktop, tablet, and mobile devices
  - CSS Variables for consistent colors and easy theme customization
  - Hover effects and smooth transitions for interactive elements
  - Mobile-first design approach to prioritize smaller screen usability

Key Features:

Feature	Description
Responsive Design	Adapts seamlessly to all screen sizes
Smooth Navigation	Fixed top nav with anchor links
Project Cards	Flex-based layout with hover effects
Contact Form (non-functional)	Placeholder layout for inputs and button
Accessible Fonts & Colors	High contrast and readable typography

Challenges Faced & Solutions:

Challenge	Solution
Overlapping elements on small screens	Used media queries to stack elements
Difficulty aligning items using float	Shifted to Flexbox and Grid
Typography scaling issue	Used relative units (em/rem) instead of px

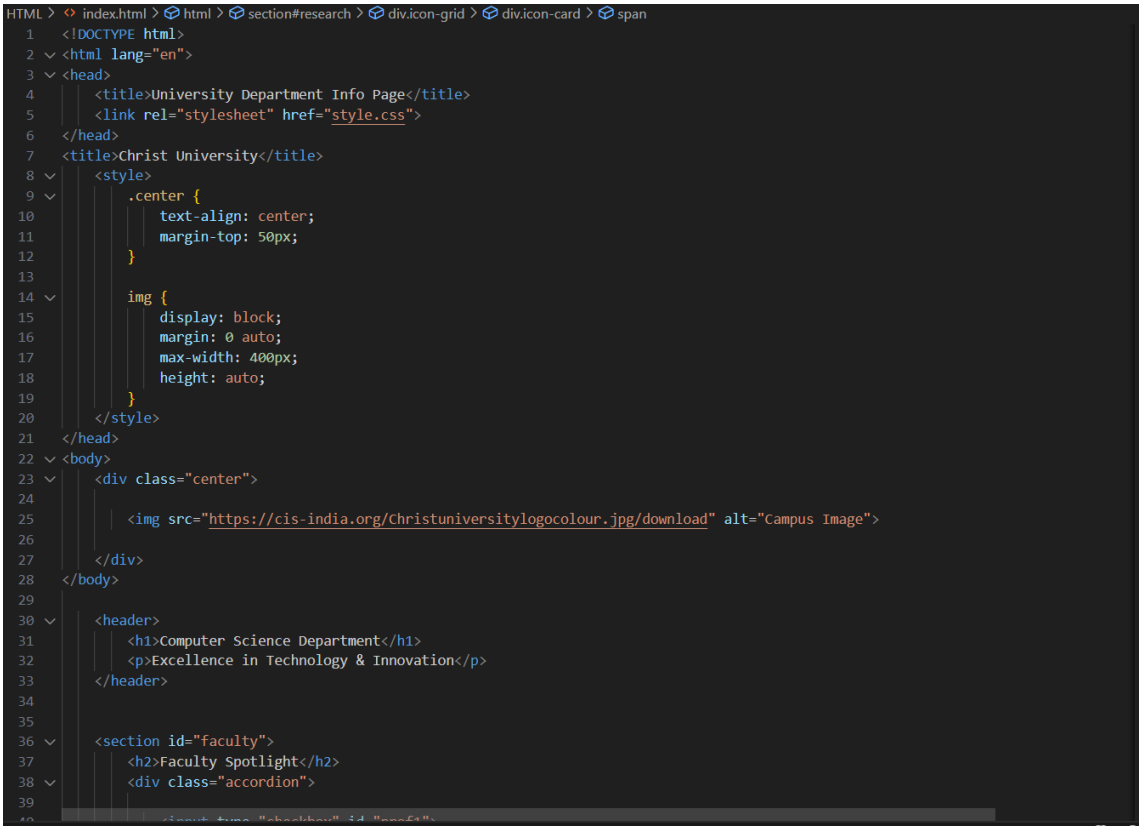
Outcome:

• Achieved a clean, consistent, and visually appealing departmental website layout
• Successfully implemented all core sections and navigation using only HTML and CSS
• Ensured responsive design across multiple devices without external libraries
• Gained practical experience in structuring semantic HTML and applying CSS for UI hierarchy and branding.

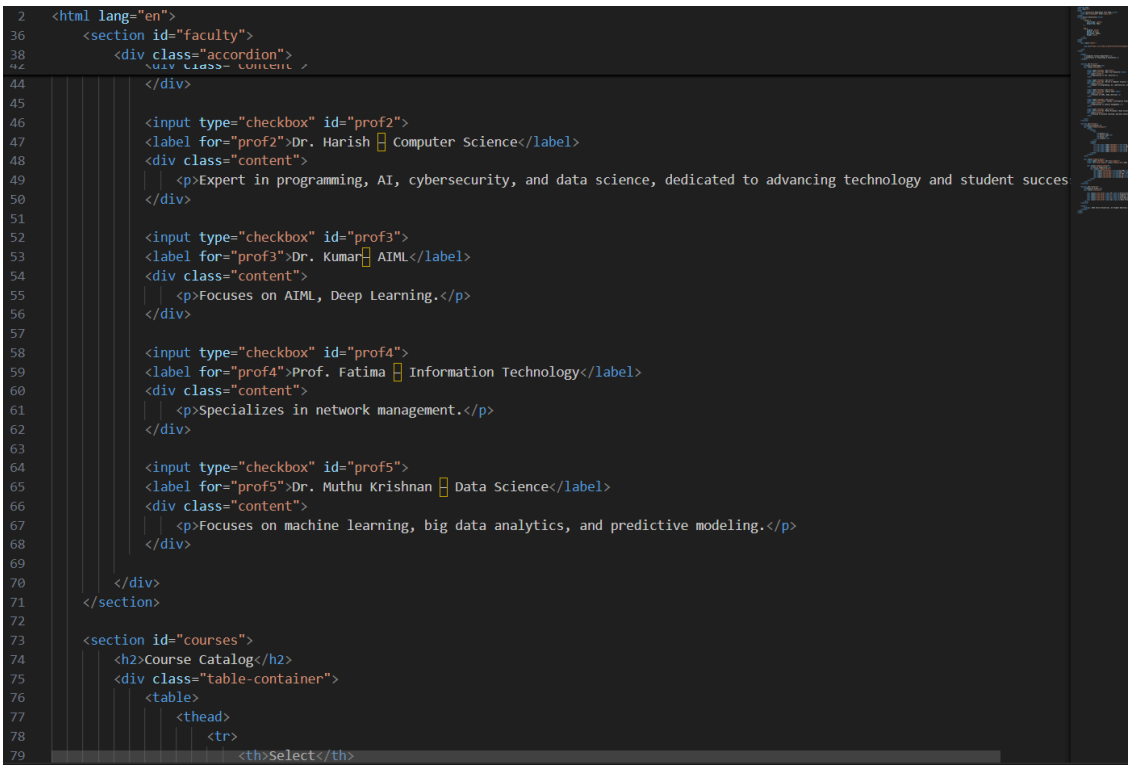
Future Enhancements:

• Add JavaScript for interactive features such as form validation and dynamic content updates
• Integrate smooth animations and transitions for improved user experience
• Implement backend integration to enable functional contact form submissions
• Include a theme toggler for switching between light and dark modes
• Add a search function for quickly locating faculty, courses, or research areas

12. **Sample Code:**

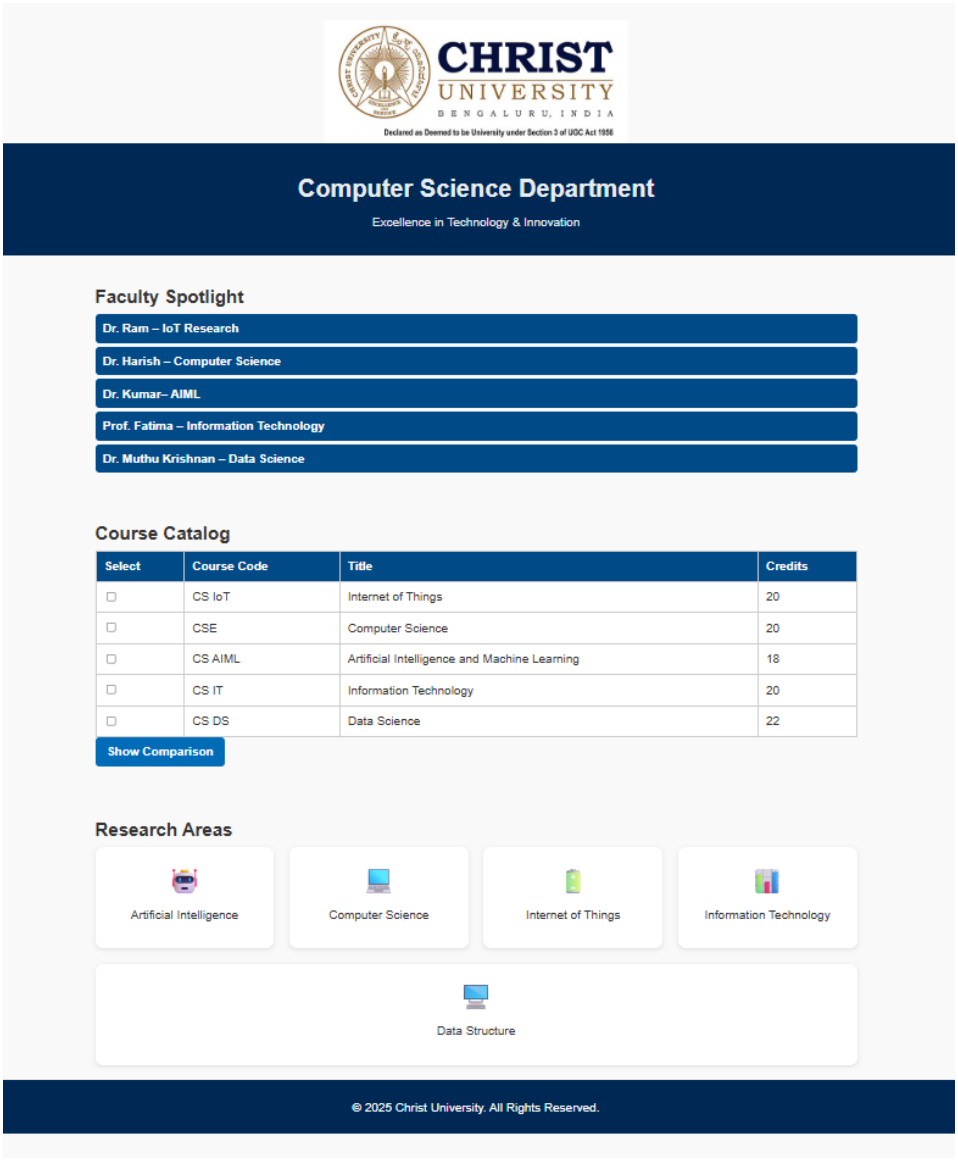


```
HTML > index.html > html > section#research > div.icon-grid > div.icon-card > span
<!DOCTYPE html>
<html lang="en">
<head>
    <title>University Department Info Page</title>
    <link rel="stylesheet" href="style.css">
</head>
<title>Christ University</title>
    <style>
        .center {
            text-align: center;
            margin-top: 50px;
        }

        img {
            display: block;
            margin: 0 auto;
            max-width: 400px;
            height: auto;
        }
    </style>
</head>
<body>
    <div class="center">

        <img src="https://cis-india.org/Christuniversitylogocolour.jpg/download" alt="Campus Image">

    </div>
</body>

    <header>
        <h1>Computer Science Department</h1>
        <p>Excellence in Technology & Innovation</p>
    </header>


    <section id="faculty">
        <h2>Faculty Spotlight</h2>
        <div class="accordion">
```



```
<html lang="en">
    <section id="faculty">
        <div class="accordion">
            </div>

            <input type="checkbox" id="prof2">
            <label for="prof2">Dr. Harish - Computer Science</label>
            <div class="content">
                <p>Expert in programming, AI, cybersecurity, and data science, dedicated to advancing technology and student succes
            </div>

            <input type="checkbox" id="prof3">
            <label for="prof3">Dr. Kumar - AIML</label>
            <div class="content">
                <p>Focuses on AIML, Deep Learning.</p>
            </div>

            <input type="checkbox" id="prof4">
            <label for="prof4">Prof. Fatima - Information Technology</label>
            <div class="content">
                <p>Specializes in network management.</p>
            </div>

            <input type="checkbox" id="prof5">
            <label for="prof5">Dr. Muthu Krishnan - Data Science</label>
            <div class="content">
                <p>Focuses on machine learning, big data analytics, and predictive modeling.</p>
            </div>

        </div>
    </section>

    <section id="courses">
        <h2>Course Catalog</h2>
        <div class="table-container">
            <table>
                <thead>
                    <tr>
                        <th>Select</th>
```

Screenshots of Final Output:



Conclusion:

This project is a departmental website for the Computer Science Department, showcasing faculty profiles, course offerings, and research areas in a clean and organized layout. Built entirely with HTML and CSS, the site focuses on clarity, accessibility, and responsive design across devices.

This mini project helped me strengthen my front-end development skills, particularly in semantic HTML structuring, responsive layouts, and visual branding. The hands-on implementation of design principles enhanced my understanding of user-friendly, content-focused web design tailored for academic purposes.

References:

- L&T LMS : https://learn.lntedutech.com/Landing/MyCourse
- W3Schools: https://www.w3schools.com/