



Department of Computer Science and Engineering (AI&ML)

Semester-1

Self – Driven Activity

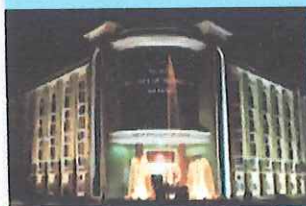
Activity Name	Web UI/Web Wizards Mastering Modern UI/UX
Date of Activity	20-02-2025 to 22-02-2025
Mode of Conduct	Physical
Time	3-Days
Program Theme	IPR & Technology Transfer
Mandatory/Elective	Mandatory
Participants (Online/offline)	Students: attending all students of 6 th semester
Resource Person/s	Mr. Bhaskar Rao and Mr. Gagan
Description	<p>This workshop aims to equip CSE (AI & ML) students with a strong foundation in web UI development using HTML, CSS, and Bootstrap. By the end of the workshop, participants will:</p> <ul style="list-style-type: none"> • Understand core web UI principles and responsive design. • Learn the fundamentals of HTML, CSS, and Bootstrap for modern web development. • Develop skills to create visually appealing and user-friendly interfaces. • Gain hands-on experience through practical exercises and real-world projects. <p>Introduction to WEB UI Web</p> <p>UI (User Interface) design is the process of crafting the visual and interactive elements of a website or web application that users engage with directly. It plays a crucial role in ensuring that users can navigate, interact, and achieve their goals seamlessly while maintaining an intuitive and visually appealing experience. Web UI encompasses everything from the layout and structure of a page to the buttons, forms, icons, and other elements that users interact with on a website or app.</p>



Department of Computer Science and Engineering (AI&ML)



DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING (AI&ML)



3-Day Web UI Development Workshop
in Collaboration with IIC and IQAC



WEB UI WORKSHOP

Web Wizards: Mastering
Modern UI/UX

Chief Patrons

Dr. Rachana Rajeev

(President, RIT, Hassan)

Dr. Ranjith Rajeev

(Vice-President, RIT, Hassan)

Dr. B N Rathna

(Secretary, RIT, Hassan)

Patron

Maresh P K

(Vice-Chancellor, RIT, Hassan)

Organizing Chair

Dr. Sharath M N

(Associate Professor & Head)

Convener

Mrs. Pooja T K

(Asst. Professor)

Mr. Lohith D K

(Asst. Professor)

Student Coordinators

Hemanth S Vas

(5th Sem CSE(AI&ML))

Preethi B P

(5th Sem CSE(AI&ML))

About the Institution (RIT)

Established in 2008, Rajeev Institute of Technology (RIT) is a premier engineering institution known for academic excellence and industry-oriented programs. With highly qualified faculty and a focus on innovation, RIT prepares students for future technological challenges.

Founded under the Rajeev Educational Trust by Dr. V. Rajeev, the institute is now led by Dr. Rachana Rajeev (President). RIT recently introduced B.E. in CSE (AI & ML) (2022) and B.E. in VLSI Design & Technology (2023) and AI and DS(2024) to meet evolving industry demands.

About the Workshop

"Web UI Development: A Deep Dive into HTML, CSS & Bootstrap" is a three-day hands-on workshop designed to equip students with essential front-end development skills. Covering core concepts of HTML, CSS, and Bootstrap, this workshop provides practical insights into building responsive and visually appealing web interfaces. Led by industry experts, it offers real-world applications to enhance development expertise.

Workshop Outline

Day 1: Introduction to Web UI Development

- Understanding the fundamentals of HTML & CSS
- Structuring web pages with HTML
- Styling basics with CSS

Day 2: Responsive Design & Bootstrap

- Introduction to Bootstrap framework
- Creating responsive layouts and components

Day 3: Advanced Techniques & Project Showcase

- Enhancing UI with animations and interactivity
- Best practices for web design and performance
- Hands-on project and feedback session

Industry Experts

- Bhaskar Rao - Front-End Web Developer.
- Gagan - Skilled in UI/UX, Figma, and Full-Stack Development.

Target Audience

This workshop is exclusively for 3rd-year CSE (AI & ML) students of Rajeev Institute of Technology, focusing on enhancing their web UI development skills using HTML, CSS, and Bootstrap.

About Department

The CSE(AI&ML) Department at Rajeev Institute of Technology is committed to providing high-quality education, training, and research opportunities in cutting-edge AI and ML technologies. With a vision to develop skilled professionals who can tackle real-world challenges, the department emphasizes a strong curriculum, hands-on learning, and industry collaborations.

Through research initiatives, skill development programs, and global partnerships, the department aims to shape the future of AI and ML by fostering innovation, ethical practices, and societal impact. Graduates are equipped with the expertise needed for successful careers, higher education, and impactful contributions to industry and research.

Objectives of the Workshop

This workshop aims to equip CSE (AI & ML) students with a strong foundation in web UI development using HTML, CSS, and Bootstrap. By the end of the workshop, participants will:

- ✓ Understand core web UI principles and responsive design.
- ✓ Learn the fundamentals of HTML, CSS, and Bootstrap for modern web development.
- ✓ Develop skills to create visually appealing and user-friendly interfaces.
- ✓ Gain hands-on experience through practical exercises and real-world projects.

Important Dates:

Workshop Dates: February 20, 21, and 22, 2025

Venue:

4th floor, Seminar Hall, Main block, RIT, Hassan.

Mode: In-Person Workshop

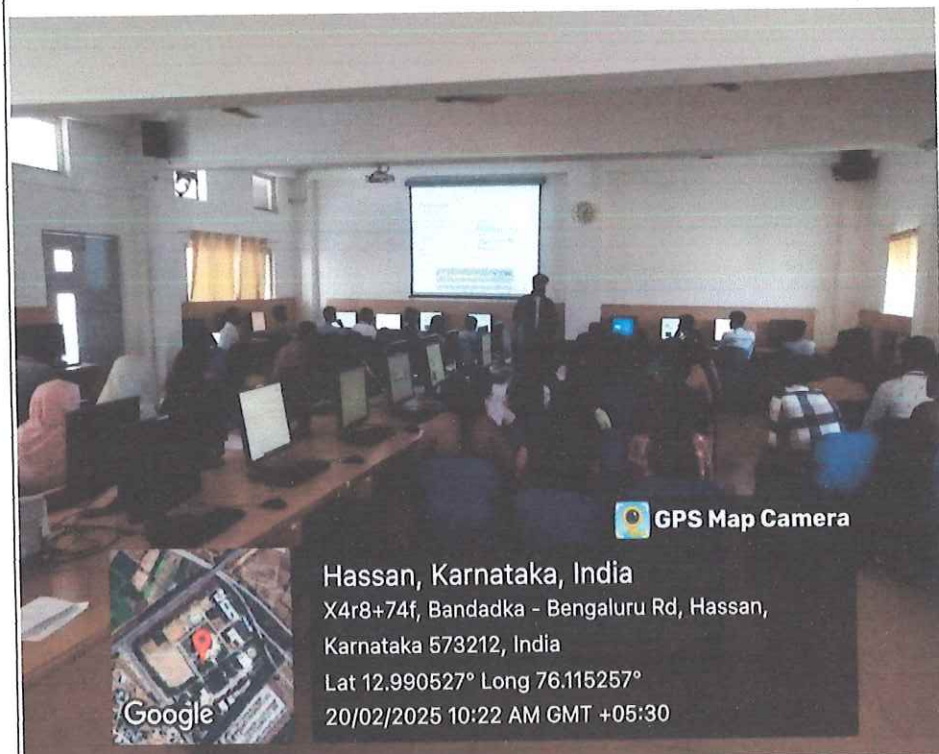
by **AVINYA**

Department of Computer Science and Engineering (AI&ML)

DAY-1

Session-1 (10:00 am to 1:00 pm): Introduction to Web UI Development and Understanding the Fundamentals of HTML and CSS

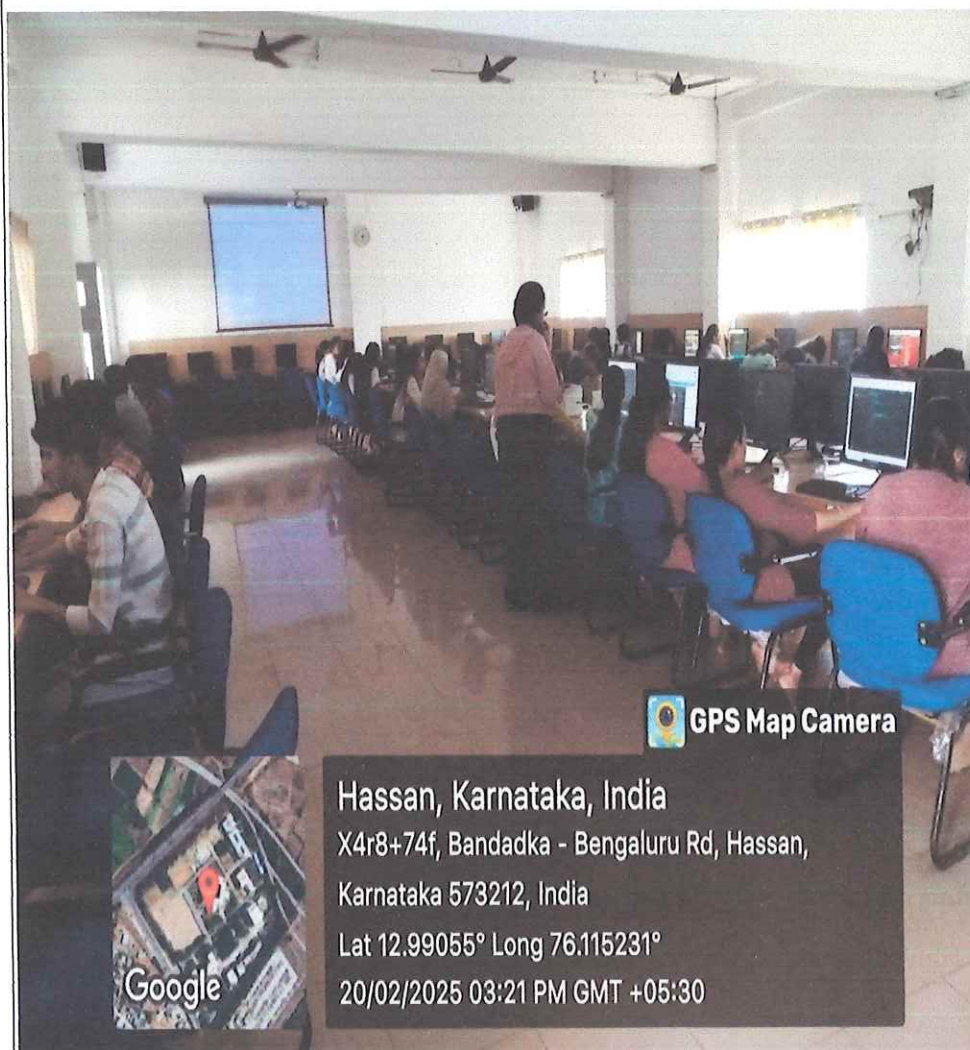
Web UI development refers to the process of designing and building the interactive elements of a website or web application that users interact with directly. It involves combining design, usability, and technology to create interfaces that are visually appealing, easy to navigate, and function seamlessly across devices. Web UI development focuses on optimizing user experience (UX) by ensuring that users can interact with digital platforms effortlessly, whether it's filling out forms, clicking buttons, or navigating through different pages.



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Session-2 (02:00 pm to 5:00 pm): Structuring web pages with HTML and Styling basics with CSS

Structuring web pages with HTML involves organizing and defining the content of a website using a series of HTML elements or tags. Each element serves a specific function, such as creating headings, paragraphs, links, lists, forms, and images, which are the core components of a web page. HTML uses a hierarchical structure, where tags like `<div>` and `<div>` serve as containers for other elements.



GPS Map Camera



Hassan, Karnataka, India
X4r8+74f, Bandadka - Bengaluru Rd, Hassan,
Karnataka 573212, India
Lat 12.99055° Long 76.115231°
20/02/2025 03:21 PM GMT +05:30



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DAY-2

Session-3 (09:00 am to 01:00 pm): Responsive Design and Bootstrap and Introduction to Bootstrap Framework

Responsive design is an approach to web development that ensures websites adapt seamlessly to different screen sizes and devices, providing an optimal user experience. It utilizes flexible grids, fluid layouts, and media queries to adjust content dynamically based on the user's device. Bootstrap, a popular front-end framework, simplifies the implementation of responsive design with its pre-built CSS and JavaScript components. It includes a mobile-first grid system, responsive utilities, and flexible design elements that help developers create visually appealing and functional websites efficiently. By combining responsive design principles with Bootstrap, developers can build adaptable, user-friendly, and modern web applications.



GPS Map Camera

Hassan, Karnataka, India
X4r8+74f, Bandadka - Bengaluru Rd, Hassan,
Karnataka 573212, India
Lat 12.990542° Long 76.115286°
21/02/2025 09:40 AM GMT +05:30

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Session-4 (02:00 pm to 5:00 pm): Creating responsive layouts and components and Customizing Bootstrap for modern UI

Creating responsive layouts and components is essential for ensuring a seamless user experience across various devices and screen sizes. This involves using flexible grids, fluid layouts, and media queries to dynamically adjust content based on the viewport. Frameworks like Bootstrap simplify this process with their mobile-first grid system, responsive utilities, and pre-designed components that automatically adapt to different screen resolutions. Developers can create flexible navigation bars, scalable images, and fluid columns that adjust based on the device. By implementing responsive design principles, websites become more accessible, user-friendly, and visually consistent across desktops, tablets, and smart phones.



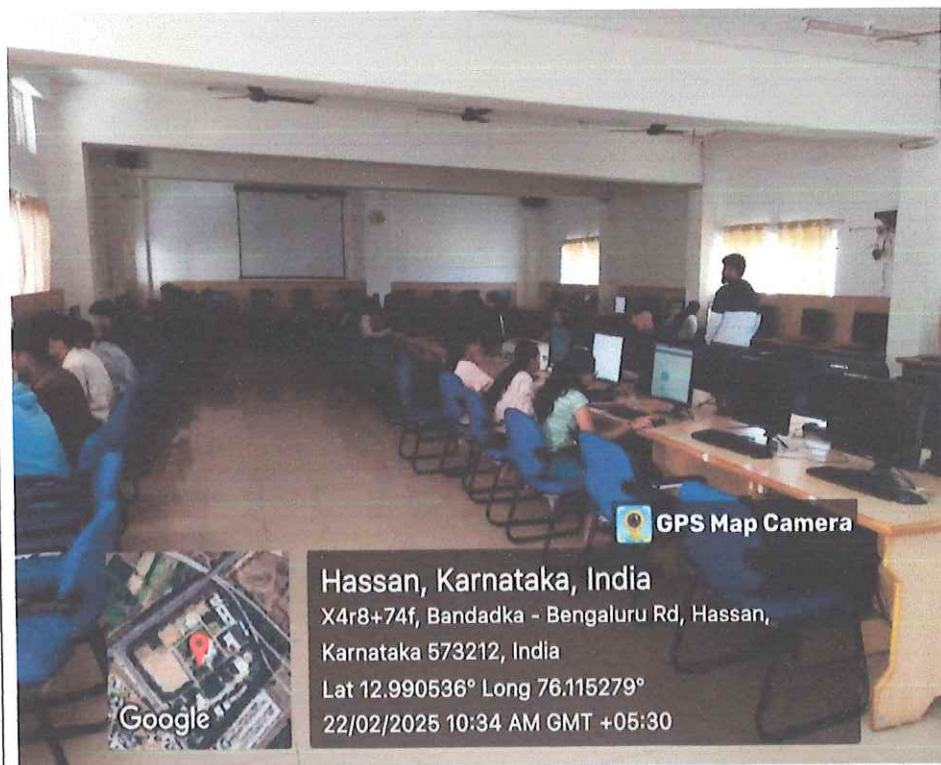


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DAY-3

Session-5 (09:00 am to 01:00 pm): Advanced Techniques & Project showcase and Enhancing UI with Animations and interactivity

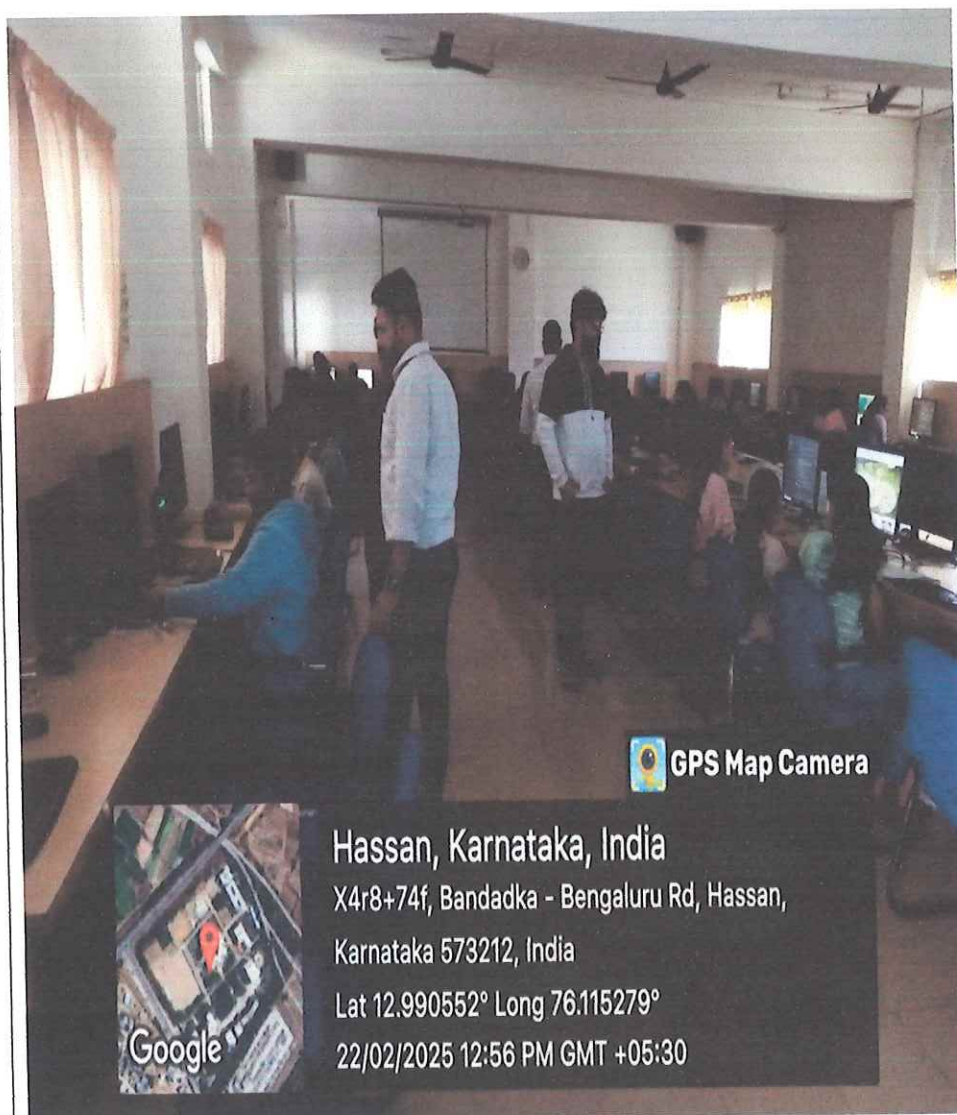
Advanced techniques in Bootstrap involve leveraging its powerful features, such as customizing Sass variables, using flexbox utilities, and integrating JavaScript components for enhanced interactivity. Developers can create dynamic layouts with advanced grid configurations, animations, and responsive behaviors to enhance user experience. Additionally, optimizing performance by minimizing CSS and JavaScript files ensures faster loading times. A project showcase demonstrating these techniques can include interactive dashboards, e-commerce websites, or portfolio pages, highlighting the seamless integration of Bootstrap's features. By applying advanced Bootstrap techniques, developers can build professional, high-performance web applications with modern, user-centric designs.



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Session-6 (02:00 pm to 5:00 pm): Best practices for web design and performance and Hands-on project and feedback session

Best practices for web design and performance focus on creating visually appealing, user-friendly, and high-performing websites. A clean and intuitive layout with consistent typography, color schemes, and spacing enhances readability and aesthetics. Prioritizing mobile-first design ensures responsiveness across all devices.





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Program Outcome

- A well-designed web UI enhances user experience by providing an intuitive, visually appealing, and responsive interface that adapts seamlessly to different devices.
- It improves usability by ensuring easy navigation, clear typography, and accessible content, leading to higher user engagement and satisfaction.
- A well-optimized UI also contributes to better performance, reducing loading times and improving efficiency.
- Additionally, incorporating modern design principles, animations, and interactive elements makes the website more dynamic and engaging.
- Ultimately, a high-quality web UI not only attracts users but also builds credibility, strengthens brand identity, and improves overall digital presence.

Signature of the HOD

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Head of the Department
Computer Science & Engg.(AI & ML)
Rajeev Institute of Technology, Hassan

Dr. Sahana C P

IIC Vice President

Dr. Prashanth S J

IIC President

Dr. Mahesh P K

Principal