Frontend Development Program

Welcome to our Frontend Development program. This meticulously crafted program is structured to empower individuals with the requisite skills and knowledge essential for achieving proficiency in frontend development.

In response to the escalating demand for digital products and services, there is an augmented need for developers proficient in creating userfriendly interfaces and compelling experiences for web and mobile applications. Our program strategically addresses this demand by offering a comprehensive syllabus encompassing a spectrum of frontend development skills and techniques.

Our program is inclusive and accommodates individuals at various skill levels, whether you are a novice or possess some prior experience in the field. We have designed the program to be adaptable, tangible, and easily accessible, ensuring that you can acquire knowledge in a manner that aligns with your schedule and other commitments.





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What Our School Has to Offer!

Course Objectives

The primary goal of our Frontend Development program is to equip individuals with the requisite skills and knowledge essential for achieving proficiency as frontend developers. The program is designed with the explicit aim of:

• Equip students with a strong foundation in frontend technologies, including HTML, CSS, JavaScript, and popular frontend frameworks.

• Teach students how to create user-friendly interfaces and engaging experiences for web and mobile applications.

• Provide students with practical experience working on real-world projects and building a portfolio of work that demonstrates their skills and expertise. Understand the basics of frontend web development .

- Learn how to use React.js to create reusable UI components .
- Learn how to manage state and handle user events.
- Learn how to use Next.js for server-side rendering and routing.
- Learn best practices for building scalable and maintainable frontend applications.

• Prepare students for a career as a frontend developer or to take their existing career in frontend development to the next level.

• Foster a passion for learning and continuous improvement in frontend development among our students.



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DURATION

3-4 Months

Prerequisite

Laptop:

4GB RAM at least with Core 2 Duo/Core i3 and above is good for the program

Knowledge: Basic knowledge of how the web works, HTML, CSS and Javas- cript



LEARNING MODEL



TUTOR-LED PHYSICAL CLASSES



COLLABORATIVE & INTERACTIVE LEARNING



INDIVIDUAL & GROUP BASED PROJECTS



VIRTUAL CLASS

About Syllabus

Our Introduction to Frontend Web Development program is meticulously crafted to furnish students with a robust foundation in web development, with a specific emphasis on frontend technologies. Encompassing a diverse array of subjects, the curriculum spans from fundamental HTML and CSS principles to advanced concepts like React.js and web API integration.

Throughout the course, participants will delve into essential aspects of web functionality, gaining insights into the intricacies of the internet and honing the skills needed to establish a conducive development environment. The curriculum commences with an exploration of basic HTML components, progressing to more sophisticated topics such as document structure, tags, forms, and media integration.

The CSS segment delves into the art of styling HTML elements, elucidating on CSS properties, values, layout intricacies, and positioning techniques. Crucial skills in responsive design and media queries, indispensable for contemporary web development, are also imparted.

A comprehensive introduction to JavaScript forms a pivotal part of the program, covering foundational elements like variables, data types, conditional statements, loops, and functions. Participants gain proficiency in manipulating the Document Object Model (DOM) through JavaScript, acquiring the ability to handle user events adeptly.

The React.js module illuminates the React.js ecosystem, encompassing the setup of development environments and the intricacies of JSX. Students learn to create and utilize React components, gaining insights into state and props management, along with the adept handling of user events through event handlers. The curriculum extends to encompass the use of Axios and fetch API for seamless HTTP requests.

The program culminates with an exploration of advanced topics such as web API integration, error handling, and deployment strategies. Participants delve into storage, history, and geolocation API usage, alongside acquiring proficiency in error handling techniques and debugging methodologies. Deployment procedures using platforms like Netlify, Vercel, and Github pages are also comprehensively covered.

In summation, our Introduction to Frontend Web Development program offers a holistic and pragmatic approach to mastering frontend web development. Successful completion of this program ensures participants possess the requisite skills and knowledge to embark on a career in web development or elevate an existing one to new heights.



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What Our School Has to Offer!

SYLLABUS Month 1

Module 1: Introduction to Frontend Web Development

- The internet and how the web works
- Environment setup (Installation of web browser, vs code etc)
- What is HTML?
- Basic structure of HTML and commenting in HTML
- Creating a "Hello World" web page using HTML
- HTML Document and Tags (Meta, header, paragraph, anchor, table etc) HTML Forms (Form attribute, elements and input types)
- HTML Media (Images, video, audio, iframe)

Module 2: Introduction to CSS

- What is CSS?
- Syntax of CSS and commenting in CSS Selecting and styling HTML elements Working with CSS properties and values Understanding CSS layout and positioning CSS Grid and Flexbox
- CSS transition and animation
- Responsive design and Media queries



SYLLABUS Month 2

Module 3: Introduction to Javascript

- What is javascript?
- Basic syntax, variables and data types Object and array
- Conditional statement, loop and functions Using JavaScript to handle user events Manipulating the DOM with JavaScript

Module 4: Introduction to React.js

- Overview of React.js and its ecosystem Setting up the development environment Creating a "Hello World" React component Introduction to JSX
- Creating and using React components
- Using React hooks
- Working with React Router
- Understanding state and its importance
- Using state and props to manage component data Handling user events using event handlers
- Using Axios and fetch API to make HTTP request



SYLLABUS Month 3

Module 5: Web API, Error Handling, Deployment

- Storage localStorage and sessionStorage History and Geolocation API
- Error handling and debugging
- Deployment Netlify, Vercel and Github pages



ABOUT US

We are a school for individuals looking to gain technical skills and kickstart a career in Tech. Tech Zone Academy Offers Training, Consultancy, Advisory And All Related Services In All Areas Of

Information Technology Including Computer Hardware And Software, Data

Communication, Telecommunications.

We deliver world-class software training, and tech infrastructure, to software engineers in rural and urban Africa, while deploying their skills to global technology needs.

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