UI Full stack WEB DEVELOPMENT with React





Full Stack Web with React

- BASIC FRONT END
- HTML
- CSS

60 Days

- JavaScript
- Adv. JavaScript
- Bootstrap
- SAAS

10 Projects

- DATABASE
- MySQL

25 Days

MongoDB

Duration 185
Sessions

- TOOLS •
- GitHub
- Docker
- Kubernates

10 Days

BACKEND

- NodeJS
- ExpressJS

30 Days

- Rest API
- Testing-Unit
- Deployment

• REACT •

- React Introduction
- Components & Props
- State & Hooks
- Context API
- Advanced React
- React Router

60 Days

- Redux, Redux
- Material UI
- Server-Side Deployment

Project: Design & Implement E-commerce Website

HTML Basics

- ▶ Introduction to HTML, Document Structure, Headings (h1 to h6)
- > Paragraphs, Tags vs Elements, Text Formatting, Lists (ul, ol, li)
- > Comments, Links (anchor tags), Images (img tags), Block vs Inline
- > Semantic Elements, Tables, symbols, miscellenous
- Forms(Ui Elements and their attributes)
- Forms Validation
- Media inserting tags(video,audio,picture, iframe,embed etc..,)

More HTML & CSS

- CSS Basics Selectors, Colors, Fonts
- Box Model (margin, padding, border), Display Property
- pseudo selectors,pseudo classes
- Positioning,floats,clearfix
- ➤ FlexBox ➤ Grid
- Translate and Transitions and units(vw,vh,em,rem,%,px)
- animations and Responsive Basics
- media Queries
- miscellaneous (Filters, Blendering mode, designs, custom variables)
- Project 1(using HTML & CSS)
- Project 2(Using HTML &CSS)
- > SASS Introduction(vaiables, Nesting, mixin, partials)
- > SASS (control directives, extend, sample usage)
- Project 3(using HTML& Css)





CZZ

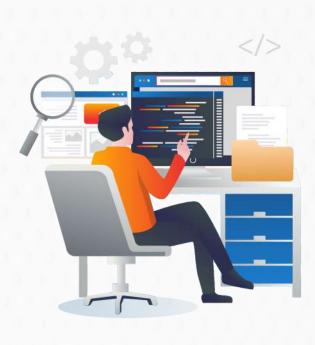






- Introduction to JavaScript, Variables
- Data types and its Methods-1
- Data types and its Methods-2
- Operators in JS
- Control Statements (if and switch)
- loops(while,do-while,for)
- variations of for(for,for..in,for..of,forEach)
- ▶ for Each, Map, Filter, Reduce
- Function(declaration, invokation, parameters and arguments)
- Scope, Closure, Callbacks
- ▶ DOM Intro, Selection, modifying content
- Handling events(event handlers, listeners)
- Events(event propagation and delegation)
- creating and deleting elements
- > Forms in JS
- Asynchronous JS, Callback Hell
- Promises
- HTTP Requests and Fetch API
- Async/Await
- Practice projects for DOM and API
- ES6 Features(Arrow Functions, Template Literals)
- Destructuring
- ▶ Classes -1
- Classes-2(include this,bind,apply,call)
- ➤ Modules-1
- Modules-2 and Prototypes and its chaining







- ➤ BOM(introduction and basics)
- Local Storage and Session Storage
- cookies
- HTML5(Canvas,svg,GeoLocation)
- AJAX(Asynchronous requests,XHR,JSON,CORS)
- > JQUERY-1
- > JQUERY-2
- PROJECT(Complete)
- PROJECT(Complete)
- PROJECT(Complete)



Bootstrap

▶ Introduction to Bootstrap, Libraries, Grid System

▶ Bootstrap Typography, Colors, Images

➤ Bootstrap Components (Navbar, Cards, Forms)

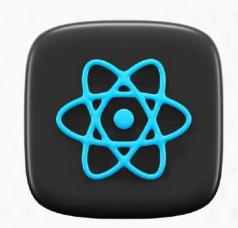




React JS

Getting Started with React

- React version history
- What's New in React 18
- Understanding "what" and "why" React
- Environment Setup for React Application
- Understanding NPM commands
- Using VS Code and VS Code extensions for ES6, React
- React App Project Directory Structure



Components and JSX

- React Component Basics
- Creating React Components
- Understanding JSX
- Limitations of JSX
- Working with Components and Reusing Components

State, Props, & Event Handling

- Helloworld app in React
- Functional/Class/Pure Components
- Understanding and using Props and State
- Handling Events with methods
- Manipulating the State
- Two-way data-binding





Advanced React Components

- ➤ Functional (Stateless) VS Class (Stateful) Components
- Between component child communication
- Dynamically rendering contents
- Showing Lists, List and keys
- Refs

Styling in React

- CSS Styling in React
- Scoping Styles using Inline Styles
- ➤ Limitations of inline styles
- ▶ Inline Styles with Radium
- Using Pseudo classes/media queries with inline styles
- CSS Modules, importing CSS classes
- Adding Bootstrap, Semantic UI to React apps
- Using react-bootstrap, reactstrap packages

Debugging and Error Handling

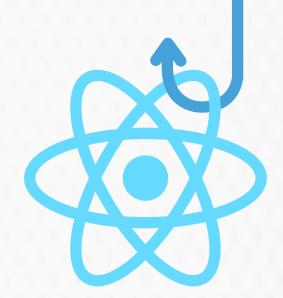
- Understanding React Error Messages
- Handling Logical Errors
- Debugging React apps using Google Developer Tools and React DevTool
- Understanding Error Boundaries
- Updating life cycle hooks
- PureComponent
- React's DOM Updating Strategy
- Returning adjacent elements, Fragments





Introduction to Hooks

- Introducing Hooks
- Hooks at a Glance
- Using the State Hook
- Using the Effect Hook
- Other Hooks like useCallBack, useRef, use LayoutEffect, useMemo etc.
- Rules of Hooks
- Building Your Own Hooks
- Hooks API Reference
- Hooks FAQ



Higher Order Components & Context API

- > Higher Order Components
- Passing unknown Props
- Validating Props
- Using References
- React Context API
- ▶ Best practices for React Projects

HTTP Requests and Forms in React

- Demo apps
- HTTP Requests in React
- Introduction of Axios package
- > HTTP GET Request, fetching & transforming data
- > HTTP POST, DELETE, UPDATE
- ▶ Handling Errors
- Creating/Using Axios instances
- Routing and SPAs





React Router and Forms

- Setting Up the Router Package
- React-router vs react-router-dom
- Preparing the Project For Routing
- Switching Between Pages, Routing-Related Props
- ➤ The "withRouter" HOC & Route Props
- Passing & extracting route/query parameters
- Navigating Programmatically

Form Handling and Validation

- Creating a Custom Dynamic Input Component
- Setting up a JS Config for the Form
- Dynamically Create Inputs based on JS Config
- Adding a Dropdown Component
- Handling User Input
- Handling Form Submission
- Adding Custom Form Validation
- Fixing a Common Validation
- Adding Validation Feedback
- Showing Error Message
- Handling Overall Form Validity

State Management with Redux

- Redux principles
- Install and setup redux
- Creating actions, reducer and store
- What is React Redux









- Why React Redux
- Install and setup
- Presentational vs Container components
- Understand high order component
- Understanding mapStateToProps and mapDispatchToProps usage

Material UI and Common Errors

- Material UI Overview
- Installation and Setup
- Basic Usage and Components
- Theming and Styling
- Handling Forms and Inputs
- Using Icons and SVGs
- Common Errors in React
- Debugging Techniques
- Best Practices for Error Handling



Advanced React Features

- Automatic Batching
- Transitions
- Suspense Features
- New Strict Mode Behaviors

Unit Testing and Webpack

- Understand the significance of unit testing
- Understand unit testing jargon and tools
- Unit testing react components with Jest
- Unit testing react components with enzyme



- What is webpack
- Why webpack
- Install and setup webpack
- Working with webpack configuration file
- Working with loaders
- Quick word on code splitting, lazy loading, tree shaking
- Setting up Hot Module Replacement

Server-Side Rendering & Deployment

- What is server-side rendering (SSR)?
- Why SSR
- Working with renderToString and renderToStaticMarkup methods
- Firebase Deployment
- Deploy full Stack Application in Netlify, Vercel, AWS, or Azure

▶ Hands-On

- Project: Design and Implement E-commerce Website
- > Design & implement an E-commerce website with a suitable UI using React
- Implement state management using Redux
- Handle situations like Prop Drilling By Context API





Introduction to Server-Side Scripting & NPM

- > Introduction to Server-Side Scripting
- Overview of NPM (Node Package Manager)

Node.js Features, Drawbacks, and Environment Setup

- ➤ Features and Drawbacks of Node.js
- Setting up the Environment for Node.js

Node.js Program Architecture and Nodemailer

- Node.js Program Architecture
- > Introduction to Nodemailer for email functionality

Node.js Core Concepts

- MVC Design Pattern
- Node.js Web Server
- Node.js Global and OS Objects
- Error Handling in Node.js
- Understanding the Event Loop



Node.js File System and Asynchronous Operations

- File System in Node.js
- Asynchronous and Synchronous Operations
- Connecting with Databases
- > Handling CRUD Operations

Express.js

- Express.js Basics
- Introduction to Express.js
- Routing in Express
- Response Methods in Express
- Serving Static Files
- Express JSON Parser
- Middleware and API Creation
- Middleware and Middleware Chaining
- Express CORS
- Postman for API Testing
- Creating Web API
- Exploring the Express Module

Advance Express.js

- Express.js Sessions and Data Handling
- Session Management in Express
- Setting up Session Middleware
- Sending and Receiving Data (POST & GET)
- Reading Data from Requests
- ➤ Templates, File System, and REST API
- Creating Templates using PUG/JADE
- Generating Dynamic HTML Pages
- Exploring File System (Reading and Writing)
- Introduction to REST API and REST Architecture







Hands-On

- Project: Design and Implement Back-End and DB
- Applying knowledge to design and implement a back-end for an E-commerce site

Authentication and Security

- Introduction to Authentication
- Session-based Authentication
- Token-based Authentication
- Basic Security Concepts

Security Practices & Error Handling

- ▶ Handling SQL Injection and Cross-Site Scripting
- Understanding CORS and Solving CORS Issues
- Best Practices for Error Handling
- ➤ Debugging Node.js Applications

Testing & Deployment

- Tools for Testing REST APIs
- Writing Test Cases
- Deploying Node.js App on Heroku

WebSockets, GraphQL & Middleware

- ➤ WebSockets and Implementation
- Introduction to GraphQL
- Setting up GraphQL with Express
- Creating Custom Middleware



Caching

- Introduction to Caching
- Implementing Caching in Node.js

Streams

Working with Streams in Node.js



Microservices

Introduction to Microservices
 Pros and Cons of Microservices

Docker

Introduction to DockerCreating Docker Images and Docker Compose



Hands-On

- Full-Stack Application and Deployment
- ▶ Building a Full-Stack Application
- Deploying the Full Stack Application on NETLIFY, Vercel, AWS, or Azure





MongoDB

MongoDB & Database Connectivity

- Introducing to MongoDB
- Configuring Server & client
- MongoDB Compass
- Creating Database and CRUD Operations



MySQL

▶ Introduction

- DBMS vs RDBMS
- ➤ Intro to SQL
- > SQL vs NoSQL
- MySQL Installation
- Data Types in SQL

Keys

- Primary Key
- Foreign Key

▶ Constraints

- Unique
- ▶ Not NULL
- > Check
- Default
- Auto Increment

Constraints

- Create
- Update
- Retrieve
- Delete



SQL Languages

- ➤ Data Definition Language (DDL)
- Data Query Language
- ➤ Data Manipulation Language (DML)
- Data Control Language
- Transaction Control Language

SQL Clause

- Where
- ▶ GroupBy
- Distinct
- Having
- OrderBy
- Limit

SQL Commands

- ➤ Create ➤ Insert
- > Alter, Modify, Rename, Update
- ➤ Delete, Truncate, Drop
- ▶ Grant, Revoke
- ➤ Commit, Rollback ➤ Select

Operators

- Comparison Operators
- Logical Operators
- Membership Operators
- Identity Operators

Wild Cards Aggregate Functions

SQL Joins

- ➤ Inner Join & Outer Join ➤ Self & Cross Join
- ➤ Left Join & Right Join → Natural Join





Students Placed Till Aug-2024



Jan **202**

Feb **189**

Mar 225

Apr **195**

May 209

Jun 226

Jul 258

Aug **262**

INTERNSHIP PROGRAM



PYTHON | EDA | DATA SCIENCE | DATA ANALYTICS

Academic Pursuing Students (1st Year/2nd Year/3rd Year)

♦ Ameerpet | **♦ K.P.H.B**







The Faculties are incredibly humble and soft-spoken, and I genuinely appreciate the teaching style. taking the time to explain concepts clearly and addressing everyone's doubts Read more...

Joining AWS cloud course from NareshIT is worth and can gain compete AWS cloud skills(both theoretical and practical). It can be done by both IT and non-IT students. Read more...

Naresh I technologies is a good platform for learning the IT courses over all review is good and most important thing is faculty in the institute. teach us basic concept with Read more...



Lova Lakshmi Anasuri

a week ago





I took core Java classes at NareshIT with a passionate instructor who maintained the same enthusiasm on the last day as on the first. I feel lucky to have been a student, especially Read more...



I had an incredible experience learning Full Stack Data Science. If eel fortunate to have had the chance to learn from a wonderful teacher and mentor. I'm always grateful for the Read more...

Naresh I technologies is a good platform for learning the IT courses over all review is good and most important thing is faculty in the institute. teach us basic concept with Read more...





Akshay Narrot

Snadeep Reddy

a month ago

3 month ago



I had a great learning experience in Data Science and AI. The course was incredibly helpful, and the teaching methods were easy to understand. The instructor motivated students to Read more...

Hi friends! I had a great experience with my training at NareshIT. The teaching was excellent, focusing not only on the subject but also on motivating students in a logical way. I Read more...

I want to share my experience learning. The teaching style was very unique, making even the toughest topics easy to understand. Real-time examples and detailed notes really Read more...







I just wanted to take a moment to express my gratitude for the great experience. The content is well-structured, and the teaching is excellent, with daily assignments, Read more...

I've joined Naresh IT for my training. The teaching style and ability to clarify doubts are really impressive. The daily assignments, helpful materials, and excellent support

Overall, the training experience was great. I received excellent knowledge with a good mixture of theoretical and practical training. I felt I had the best environment for my studies. Read more...









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