

# Full Stack Web Development using React

## Module 1 of Full stack Web Development: HTML

HTML is the basic and must have skill for every web developer. It is used and extended by various other technologies. To be completely able to understand how things work in web development, you should develop an understanding of HTML. In this section, you will learn

- Introduction to HTML
- Browsers and HTML
- Editor's Offline and Online
- Tags, Attribute and Elements
- Doctype element
- Comments
- Headings, Paragraphs, Formatting text
- Lists and Links
- Images , Table

## Module 2 of Full stack Web Development: CSS

CSS is the other important language in the web tech must-learn trifecta. It will help you style, layout and control the behaviour and look and feel of the web apps that you build. In this module, you will learn:

- Introduction CSS
- Applying CSS to HTML
- Selectors, properties and values
- CSS Colors, Backgrounds
- CSS Box Model
- CSS Margins,Padding,Borders
- CSS Text and Font Properties
- CSS General Topics

## Module 3 of Full stack Web Development : Javascript

The third of the must learn trifecta, Js is present in about 90% of the internet. To make sense of what you're doing and to design and build new web apps, this language is indispensable. In this section you will learn the following topics:

### Topics covered in this module:

- Introduction to JavaScript
- Applying JavaScript (internal, external)
- Understanding JS Syntax
- Introduction to Document and Window Object
- Variables, Operators
- Data Types, Num Type Conversion
- Math, String Manipulation
- Objects, Arrays
- Date and Time
- Conditional Statements
- Switch Case
- Looping in JS
- Functions

## Module 4 of Full stack Web Development: ReactJS

ReactJS is the best and most popular framework for frontend development. An integral part of the MERN Stack, its community is great, and the demand for reactjs specialists is only increasing day by day. React is great for Rapid app development, SPAs and for creating awesome responsive and interactive web apps. In this topic you will learn:

- Introduction
- Templating using JSX
- Components, State and Props
- Lifecycle of Components
- Rendering List, Portals
- Error Handling
- Routers
- Redux, Redux Saga
- Immutable.js
- Service side rendering
- Unit testing
- Webpack

## Module 5 of Full stack Web Development : Node.js

The Node.js is a great skill to have. It is JS based and it completes the javascript full stack experience. It is a backend skill that's very much in demand and pays well. In this module, you will learn the following:

- Node.js overview
- Node.js – basics and setup
- Node.js console
- Node.js command utilities
- Node.js modules
- Node.js concepts
- Node.js events
- Node.js with Express.js
- Node.js database access

## Module 6 of Full stack Web Development: MongoDB

This is a data driven schemaless NoSql database. It is a great tool to know. The syntax is very similar to javascript making this that much easier to learn. You can use this for projects of any size and also very easy to scale up or down depending on your requirement. In this module, you will learn:

- SQL and NoSql concepts
- Create and manage MongoDB
- Migration of data into MongoDB
- MongoDB with NodeJS
- Services offered by MongoDB

## Module 7 of Full stack Web Development: Python

Learn the basics of python and learn to use it to develop applications. Also learn to work with mongodb in python. This additional language is a value-added skill as python is increasingly in demand for full stack projects. In this module, you will learn:

- Python installation & configuration
- Developing a Python application
- Connect MongoDB with Python

## Module 8 of Full stack Web Development: VCS

Learn version control with Git. This is a bankable skill for every web developer so that they can collaborate and work as a team while working individually. It is also imperative to use VCS so that you can simplify work on identifying errors and also store every piece of coding that you've worked on.

### Capstone Project

The capstone project is the endgame to your full stack developer course. This is a medium for you to apply and exhibit what you have learnt in this course. You get to take your theoretical learning and apply it in a real-world setting. This is a very important aspect of the full stack developer course syllabus.

The prerequisite for the capstone project is that you have completed the learning modules course on full stack developer, taken up on practising code at the lab sessions and also completed all your mini-projects, which will give you an idea how to get working on your capstone project. You can build web apps that are fully functional like Paytm or oyo.