

Full Stack Web Development

The MERN Stack is a popular web development technology stack that is widely used for building scalable and dynamic web applications. The MERN Stack comprises of four key technologies: MongoDB, Express.js, React.js, and Node.js, which together provide a powerful, end-to-end framework for developing web applications. By the end of the course, you will have a solid understanding of the MERN Stack and be able to build full-stack web applications using this technology stack. You will also have gained practical experience in using MongoDB, Express.js, React.js, and Node.js to build scalable and dynamic web applications.

Duration : 12 months

Language : english

Price : 17700

What you will learn?

- HTML and HTML 5
- CSS and CSS3
- Working on Template
- Mobile Responsive Design
- Flex and Grid
- JavaScript
- Understanding DOM
- Advance JavaScript
- Git and Github
- Starting with React
- Tailwind With React
- Networking and Linux
- Concepts of DataBases
- Understanding MySQL
- Understanding NoSQL
- NodeJS/Express
- Full Fledge Project

Features

- Backend Development in Java using Spring Certification
- Job Guarantee Program
- Self-Paced Learning
- 150+ hours content recorded by Industry Veterans
- 10+ hands-on industry real-time projects
- 2 year Dashboard access

- Doubt clearing live classes
- Doubt clearing through mail and support team
- Assignment in all the modules
- Quiz in all modules
- End-to-End Projects
- Resume Building
- Career Guidance
- Interview Preparation
- Regular Assessment
- Job Fair & Internal Hiring
- Mock Interview Anytime
- Internship Portal Access
- NeuroLabs Access

Requirements

- System with minimum i3 processor or better
- At least 4 GB of RAM
- Working internet connection
- Dedication to learn

Course Curriculum

Introduction to Course - RoadMap to the Course

- Course Introduction

Introduction to Course - Fundamental of Development

- Internet and How it works?
- Understanding IP Address/Domain/Server/DNS
- Understand and Difference between Web and HTTP
- Understanding Protocols
- Browser and Browser Engine
- Test on Fundamental of Development

Introduction to Course - Understanding Frontend and Backend

- Web Designing Tools
- Traditional and Modern Web Pages

- Backend and requirement of it in an application
- API
- MVC
- Test on Understanding Frontend and Backend

Introduction to Course - Version Control System

- Understanding VCS and Importance
- Git and It's Working
- Essential Commands for GIT
- Importance of .gitignore
- Branche in Git
- GitHub and it's working
- Pushing the Code
- Test on Version Control System

Milestone 1 Exam

- Milestone 1 Exam

Core of Web Development - The Structure - HTML

- Introduction to HTML
- HTML Document Structure
- The Essential Toolkit - Emmet
- Tags and Attributes in HTML
- Working with Forms
- Embedding Multimedia (Audio/Video/Images) in HTML
- Importance of MetaData and Search Engine
- Understanding Web Accessibility
- Project with HTML
- Test on The Structure - HTML

Core of Web Development - The Design - CSS

- Introduction to CSS and Its Rules
- Basic and Advanced Selector
- Styling and Box Model
- Units and Display
- Layout and Positions

- Different Screen Size (Media Query)
- Gradients and Shadow
- Flex and Grid
- Project Using HTML and CSS
- Test on The Design - CSS

Core of Web Development - The Functionality - JavaScript

- Introduction to JavaScript and its Behaviour
- Understanding Basic Syntax and Datatypes
- Control structures (If/Else, Switch, Loops, Etc.)
- What are Functions and function expressions.
- Understanding DOM & its uses.
- Event handling
- Arrays and array methods
- Understanding Objects and object-oriented programming
- Walkthrough with HOF
- Asynchronous JavaScript (Callbacks, Promises, Async/Await)
- ES6+ Features
- Regular expressions
- Error handling and Miscellaneous
- Test on The Functionality - JavaScript

Core of Web Development - The Utility-First - Tailwind

- Understanding how to make CSS fun and Easy to understand
- Syntax and Utility Classes
- Responsiveness for Different Screen Sizes
- Explaining How it is installed in different Framework
- Test on The Utility-First - Tailwind

Core of Web Development - Making it LIVE - Hosting

- Connecting Project with Github
- Connecting GitHub with Other platform
- Launching Your First Project to Github
- Assignment on Make it LIVE

Milestone 2 Exam

- Milestone 2 Exam

Becoming Front-End Developer - Fundamental of React

- Background of React
- Starter Project with CDN
- Create-react-app
- createRoot() & render() methods of react18
- Components and Props
- State V/s Props
- Styling with React
- Test on Fundamental of React

Becoming Front-End Developer - Hooks and Router

- Explaining Hooks
- useState(), useEffect(), useMemo(), useCallback(), useReducer()
- Propdrilling (useContext())
- React Router Dom (V6)
- CreateBrowserRouter, RouterProvider
- useParams and useRouteError
- Test on Hooks and Router

Becoming Front-End Developer - Form Handling and State Management

- Form Handling and Validation (Formik, React Hook Form)
- Redux
- Store Concept
- What are Reducer and Actions
- How to Dispatch an Action

Becoming Front-End Developer - React With Tailwind

- Tailwind and Its Concept
- React with Tailwind Integration
- Responsive project with Tailwind
- Making Project with Tailwind
- Assignment on Tailwind

Becoming Front-End Developer - Complete Frontend Project

- Capstone Project (FrontEnd)

Milestone 3 Exam

- Milestone 3 Exam

Becoming Back-End Developer - Networking

- Network
- TCP/IP
- OSI Model
- Introduction to OS
- Hashing and Encryption

Becoming Back-End Developer - Fundamental of Database

- Database and Types of DataBase
- SQL and Types of SQL Database
- CAP Theorem
- ACID
- Schema and Schema Design
- ER Diagram

Becoming Back-End Developer - SQL

- RDBMS and all its Concept (Field, Row, Column, Null Values, Constraint, NF)
- MySQL and Installation
- SQL Queries - Part 1 (Show Database, use, Select and Create)
- SQL Queries - Part 2 (Insert, update, delete)
- SQL Queries - Part 3 (Joins)

Becoming Back-End Developer - No - SQL

- NoSQL and Types of NoSQL
- Advantage and Disadvantage SQL and NoSQL
- Collection
- MongoDB Query - Part 1 (Show, use, Create Select)
- MongoDB Query - Part 2 (Insert, Update, Delete)
- MongoDB Query - Part 3 (Constraint, Sorting and Aggregation)

Becoming Back-End Developer - Understanding NodeJS

- Understanding Different Architecture (Monolithic and Microservices)
- Nodejs and It's Architecture
- Understanding How it Works

- Different Module of Nodejs
- Test on Understanding NodeJS

Becoming Back-End Developer - Fundamental of ExpressJS

- Understanding Express and it's Fundamentals
- Basics of Routes
- Web Request and Status Code
- Writing First Hello World in Express
- PORT
- Test on Fundamentals of Express JS

Becoming Back-End Developer - Building APIs (CRUD)

- Rest API (Why, What and How)
- HTTPS Methods
- Creating Profile (POST)
- Fetching Profile(s) (GET)
- Update Profile (PUT)

Becoming Back-End Developer - Protecting APIs (Auth)

- Create a simple login API for SignUp and SignIn
- Authentication and Authorization
- Working with environment variables using .env
- What and Why of CORS ?

Becoming Back-End Developer - Complete Backend Project

- Capstone Project (Backend)

Milestone 4 Exam

- Milestone 4 Exam

Full Fledged Application - Integrating API in FrontEnd

- Understanding Tools available to connect
- Connecting Backend and Frontend

Full Fledged Application - Understanding Production Environment

- Importance of ENV in production Grade application
- What all information are hidden inside .env

- Creating .env on Server

Full Fledged Application - Deployment

- Deploying Backend to a Server
- Deploying Frontend on Server
- Fixing Bugs
- Make it go live

Cracking the JOB - Interview Preparation

- JavaScript Interview Preparation
- FrontEnd Interview Preparation
- BackEnd Interview Preparation

Cracking the JOB - Resume Discussion

- Guide to Create Resume
- Showing Sample Resume
- Walkthrough with your Resume

Cracking the JOB - Mock Interview

- Guide to Interview
- Conducting Interview
- Mock Interview Round