# Delta: Full Stack Web Development

MERN Stack (Mongo, Express, React, Node)



'Let not the fruit of action be your motive to action. Your concern is with action alone, not with the fruit of action. '

- The Bhagavad Gita

Our experience tells us that students on average are 3 times more serious in a paid batch. The completion of course and watch time of students increases exponentially.

#### **MERN**

Full Stack Web Development

#### Live

12+ Hours of Live Sessions

500+

videos. Classes on alternate days for next 4.5 months



# **Batch Overview**

- Complete Frontend Development
- Complete Backend Development
- Complete Database (SQL & MongoDB)
- Complete MERN Stack (MongoDB, Express, React, Node)
- Real Life and Industry Grade Projects
- LIVE sessions on how to get a job, resume, freelance, open source & more



500+

video lectures 12+
Hours of Live Sessions

**Duration**: 4.5 Months Course access is for Two Years

## Topics





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CATEGORY	CHAPTERS	OVERVIEW
	What is Web?	Understanding how and who built the web
Introduction	Client-Server Architecture	General architecture used by websites; requires & response
IIICIOGGOCIOII	Setting Developer Environment	Setting our environment on our laptop/computer where we'll do coding
HTML	Structure	How to create the structure of a web page
	Tags in HTML	Learning about various tags in HTML like <h1>, , <a>, <img/> etc</a></h1>
	Block v/s Inline	Understand the difference between inline and block HTML elements
	Tables	Learn to create tables in HTML
	Forms	Learn about forms and form fields
Intro to CSS	Introduction	What is CSS & how to use it in HTML, different styles of writing
Selectors in CSS	Understanding Selectors Selector Specificity	Element, Class & Id selectors etc., combinators, pseudo classes, pseudo elements, specificity in CSS  Understanding the specificity & priority of CSS selectors



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CATEGORY	CHAPTERS	OVERVIEW
Styling with CSS	Box Model	Understanding the CSS box model
	CSS Units	Learning about various CSS units used to style HTML elements, absolute & relative
More CSS	CSS Transition	Understanding element transitions in CSS along with shorthand
	CSS Transforms	Understanding element transformations in CSS along with shorthand
Flexbox	Intro to Flex	Understanding flexbox layout, cross axis, main axis etc.
	Flex properties	flexbox direction, justify content, align items, align self, flexwrap, flex sizing,etc.
Responsive Designs	Media Queries	Learn about Media Queries & Viewport
	Animations & 3d Space	Basics of CSS animation and how to animate HTML elements using animate.css
Bootstrap	Frontend frameworks	What are frontend frameworks and how to use one
	Components	Using various bootstrap elements like Navbar, buttons, cards etc
	Layouts(Grid system)	Learning about grid system of bootstrap
Tailwind CSS	What is Tailwind?	Understanding Tailwind as a Framework



CATEGORY	CHAPTERS	OVERVIEW
Tailwind CSS	Components	Covering button, navbar, fonts, margin, padding etc.
	Creating Responsive Designs	Understanding responsiveness in tailwind, @apply, @layer etc.
Major Project	CSS Major Project	Focus on using concepts we have learn to build our project
Starting with Javascript	Intro to JS	What is JS and use of JS
	Variables, operators, conditional, loops	Learning the basics of the language
Functions and Arrays in JS	Scope	Understanding scope in JS
	Hoisting	What is hoisting and its application
	Functions expressions v/s Function declaration	Difference between function expression and declaration
	Arrays and its usage	What are arrays and using array functions like splice, slice etc.
Objects and Timing Events	Intro to Objects	What are objects, how to create them and using dierent notations to access object's data
	Object functions	Learn to iterate over objects, delete object properties, creating nested objects
Understanding DOM	DOM	Understanding DOM, what it is, how to access elements from the DOM



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CATEGORY	CHAPTERS	OVERVIEW
Understanding DOM	Events	How to manipulate DOM events in JS
	IIFE	What are immediately invoked function expressions
Closures	Closures	What are closures and its application
	Arrow functions	Learning about arrow functions and bindings in arrow functions
Constructors and Prototypes	"this" keyword	How does the "this" keyword works in JS
	Prototypes	Discussing what are prototypes in JS, why do we use them and its application
	Class	Learning about using classes in JS and how to deal with class inheritance in JS
	Promises, Callback	What are promises and callbacks in Javascript, Why to use
Ashyncronous JavaScript	Timed Events	What is setTimeout, Event loops in javascript
	Async Await	What are Async Await in Javascript, Why that is important
jQuery	Intro to jQuery	What is jQuery and what is the need for it
	Event handling in jQuery	Handling various JS events with jQuery and exploring the library
Ajax	Intro to AJAX	What are async requests, what is API and JSON



CATEGORY	CHAPTERS	OVERVIEW
Ajax	Ajax requests with jQuery	Making ajax requests with jQuery and handling errors
Promises	Intro to promises	What is a promise, how do we use promises and chaining promises
	Intro to Git	What is git and why it's helpful
Git	Branches	Exploring branches in Git. How to create branches.
	Git workflow	Understanding push, commits, pull requests and using git for teams and individual
Terminal	Mastering Terminal	Directories, Commands, paths, operations on files etc.
Major Project	JS Major Project	Create something classic by using the concept learn in JS

#### Backend



CATEGORY	CHAPTERS	OVERVIEW
Node.js	Intro to Node	Introduction to the course, hello world with nodejs
	Setting up	Setting up tools and the project
	Intro to servers	What are servers and how one can use them
Writing Our First Server	Setting up node server	Beginning the project by setting up the very first node server
	nodemon	Introducing nodemon to monitor changes made to the server
Creating Express Apps	MVC	MVC architecture for our server
	Express	What are frameworks, using express with node
	Ejs	What are template engines, setting up and working with Ejs
	Middleware	What is a middleware and how to use one
Intro to Databases	Database	What are databases & why do we need them
	SQL	what is SQL, SQL queries etc.
MongoDb	MongoDB	What is MongoDB, how to use it and setting up MongoDB for the project
	DB operations	CRUD operations for MongoDB

### Backend



CATEGORY	CHAPTERS	OVERVIEW
MongoDb	Mongoose	Linking MongoDB using Mongoose
Mega Project	Working on our Mega Project	APIs, error handling, validation, express router, authentication, deployment & many more concepts to be covered

#### React

CATEGORY	CHAPTERS	OVERVIEW
React	Components, Styling, Redux & more	What is React, installation, react components, styling in react, component lifecycle methods, react hooks, redux, redux toolkit etc.
Major Project	React Project	Using the concepts we have learnt to build our project



Lectures will be uploaded on Alternate Days

Till then, keep learning & keep exploring 🕶

Start Data: 7th June, 2023