



Mern Stack

**Description:**

Learn how to build complete online applications with MongoDB, Express.js, React.js, and Node.js. Mern stack is one of the most versatile tech stacks available. Learn front-end and hybrid mobile development, as well as server-side support, to build a multi-platform solution.

**Start Date:**

**Doubt Clear Time:**

**Course Time:**

**Features:**

# Challenges

# Assignments in each module

# Quizzes

# Downloadable resources

# Completion certificate

## **What we learn:**

# HTML

# CSS

# Bootstrap

# JAVASCRIPT

# Bootstrap

# Node js & Express js

# Database

# Validation

# JWT

# React js

# GraphQL

## **Requirements:**

# No Prior knowledge is required

# A System with Internet Connection

# Your dedication

## **Instructor:**

### **Name:**

Syed Ashraf

### **Description:**

Full Stack Engineer at TensorGo Technologies

### **>HTML:**

- >>How do websites work?
- >>HTML vs CSS vs Javascript
- >>HTML files
- >>Doctype & HTML Boilerplate
- >>Spaces & Line Breaks
- >>Heading Tag
- >>Paragraph & Pre Tag
- >>Difference between Elements, Attributes & Tags
- >>Comments
- >>Useful Tags
- >>Nesting of Tags
- >>Extensions in HTML
- >>Live Server in VSCode
- >>Formatting Tags
- >>Article in HTML
- >>Time & Address Tag
- >>Quote & Cite
- >>Strike
- >>Progress Bar
- >>Anchor Tag Styling
- >>Image Tag
- >>HTML Table
- >>List
- >>Input Tags,iframe

>>Forms

>>Video & Audio

>>iframe

>>Embed pdf

>>Maps

>>Symbols

>>Meta Tags

>>SVG

>>Emoji

>>Validate your HTML Code

**>CSS:**

>>CSS Introduction

>>Inline vs Internal vs External

>>Priority between Inline, Internal & External

>>Multiple Properties in Single Element

>>Types of Selectors

>>Priority between Id, Class & Element

>>Comments

>>Colors

>>Backgroud

>>Border

>>Height & Width

>>Padding

- >>Margin
- >>Box Model
- >>Text Properties
- >>Anchor Tag Styling
- >>Fonts
- >>Cursor
- >>!Important in CSS
- >>Box Shadow
- >>Opacity
- >>Filter
- >>Gradient
- >>Overflow
- >>List
- >>Tables
- >>Box Sizing
- >>Inherit & Initial
- >>Object Fit
- >>Pseudo Classes
- >>Pseudo Elements
- >>Display
- >>Position
- >>Z-Index
- >>Floats
- >>2D Transform

>>Transitions

>>Flex

>>Flex Direction & Wrap

>>Justify & Align in Flex

>>Order in Flex

>>Grow & Basis in Flex

>>Aling Items in Flex

>>Grids

>>Rows, Columns & Gap in Grids

>>Justify & Align in Grids

>>CSS Validator (Final Video)

## **>JAVASCRIPT:**

>>Introduction

>>Running Javascript in Browser

>>Console

>>Strings & Numbers

>>var, let & const

>>Data Types

>>Type Conversions

>>Arithmetic Operators

>>Assignment Operator

>>Comparision Operator

>>Logir Not, Or and And

- >>Swap Numbers
- >>String Handling
- >>String Searching
- >>Arrays
- >>Objects
- >>Dates
- >>Maths
- >>If & Else
- >>Challenge - If & Else
- >>Switch Case
- >>Challenge - Switch Case
- >>JS Loops
- >>For Loops
- >>Nested Loops
- >>Break & Continue
- >>Arrays, Strings & Objects
- >>For-in
- >>For-of
- >>While Loops
- >>Do while Loops
- >>Loops Exercies
- >>Functions
- >>Variable Scopes in Functions
- >>Nested Functions

>>Parameters & Arguments

>>How function is useful?

>>Return in Function

>>Anonymous Functions

>>Calculator Exercise

>>Arrow Functions

>>forEach

>>maps

>>String Literals

>>Filter, Reduce & Every

>>Spread Operator

>>Challenege

>>Window & Document

>>Document Access

>>innerText & innerHTML

>>HTML Calculator

>>Query Selector

>>Styling in JS

>>Advance DOM Manipulation

>>Events

>>Basic Events

>>Time Events

>>Pop-up Boxes

>>Error Handling



- >>Form Validation
- >>Asynchronous JS
- >>this keyword
- >>useStrict
- >>Hoisting
- >>Local Storage
- >>Session Storage
- >>Cookies
- >>Cookies vs Local Storage vs Session Storage
- >>JSON vs Object literals
- >>API
- >>Fetching
- >>Methods & Status Codes
- >>Post Method
- >>Put Method
- >>Guess the Number
- >>Generators
- >>Regex

## **>Bootstrap:**

- >>Introduction
- >>Bootstrap in Project
- >>Containers
- >>Buttons

- >>Alerts
- >>Badges
- >>Button Groups
- >>Cards in Bootstrap
- >>Grids
- >>Advance Column Properties
- >>Image Slider
- >>Dropdowns
- >>Modal in Bootstrap
- >>OffCanvas
- >>Popovers
- >>Spinners
- >>Toast
- >>Accordion
- >>Bootstrap Navs
- >>NavBars in Bootstrap
- >>Forms
- >>Helper Classes
- >>Utilities Classes
- >>Flex
- >>Interactions
- >>Utilities Properties
- >>TypoGraphy in Bootstrap
- >>Handling in Images & Tables

>>Build a Bootstrap Website

## >Nodejs:

>>Introduction & Installation

>>Global Objects

>>Modules

>>OS Module

>>Path Module

>>Fs Module

>>Advance Fs

>>NPM

>>Http Server

>>Events

>>Streams

>>Express

>>Serving Files

>>Router

>>Post ,Query & Parameters

>>Adding routes & Validation

>>Middlewares

>>Controllers

>>Serving FTP & Compression

>>Async Express Route

>>Save API's from DDoS Attack

>>Uploading & Downloading

>>Nodemailer

>>Error Handling

>>Embedded Javascript Templates

## **>DataBase:**

>>SQL

>>SQL Basic Query with Nodejs

>>Mongo Shell

>>MongoDB Compass

>>MongoDB with Express

>>Mongoose Intro

>>ToDo API\_01

>>ToDo API\_02

>>ToDo API\_03

>>ToDo API\_04

>>ToDo API\_05

>>ToDo API\_06

>>ToDo API\_07

>>MongoDB Atlas

>>Sequelize

>>Redis

>>Redis with Nodejs

## **>Validation:**

>>Joi Basics

>>Joi In-depth

>>Joi with Express

## **>JWT:**

>>Introduction

>>Using JWT

>>Basics

>>Setup

>>Database & Schema

>>Registering Users to Database

>>Validating Data

>>Hashing the password

>>Signin with JWT

>>Login Implementation

>>Verifying JWT Token

>>Generating Refresh Tokens

>>Generating pair of Refresh & Access Token

>>Saving Refresh Token in Redis

>>JWT Logging Out User

>>Implementing Controllers

## **>TYPESCRIPT:**

- >>Introduction
- >>Strings, Number & Booleans
- >>Objects, Arrays & Enums
- >>Unions, Literals & Alias
- >>Functions
- >>Configurations
- >>Express App

## **>Swagger:**

- >>Introduction
- >>Setting up Swagger in Express
- >>Get the Data

## **>React:**

- >>Introduction
- >>Folder Structure
- >>JSX
- >>Expressions and Literals
- >>CSS in React
- >>Nested Components
- >>Greeting App
- >>Props
- >>Conditional Rendering
- >>useState

>>Arrays & Objects in useState

>>Forms

>>ToDo app with useState

>>useEffect

>>useRef

>>React Router Dom

>>Context

>>fetch API

>>Axios

>>React-Hooks-Forms

>>Memo

>>Callback

>>Sockets

>>Charts with Sockets

>>Custom Hooks

>>React Redux Introduction

>>Redux

>>Redux-thunk

>>Ecommerce with Redux

>>React Bootstrap Introduction

>>React Bootstrap

>>Material-ui Introduction

>>Material-ui Buttons

>>Material-ui Slider

>>Material-ui Typography

>>Material-ui Forms

>>Material-ui Grids

>>Material-ui Cards

**>GraphQL:**

>>Introduction

>>GraphQL with Node

>>Apollo Server with GraphQL

>>Create, Read and Delete in MERNG 1

>>Create, Read and Delete in MERNG 2