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JOIN OUR MERN FULL STACK DEVELOPMENT COURSE. THE COURSE NOT ONLY EQUIPS STUDENTS WITH TECHNICAL KNOWLEDGE BUT ALSO FOSTERS PROBLEM-SOLVING AND COLLABORATION SKILLS CRITICAL IN TODAY'S TECH-DRIVEN WORLD.

**JOB Assistance  
Opportunity**



**NILADVANTAGE  
TECHNOLOGIES  
PVT LTD.**

**ADVANTAGE TO OUR  
CUSTOMERS, ALWAYS...**

**CONTACT US**



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# Index

## OUR MISSION

WELCOME TO OUR TRANSFORMATIVE FULL STACK DEVELOPMENT COURSE, A JOURNEY INTO THE DYNAMIC REALTIME OF WEB DEVELOPMENT. IN THIS IMMERSIVE PROGRAM, WE DELIVER DEEP INTO THE MERN STACK (MONGODB, EXPRESS.JS, REACT, NODE.JS) TO EQUIP YOU WITH THE SKILLS NEEDED TO CRAFT CUTTING-EDGE WB APPLICATIONS. OUR COURSE OFFERS A COMPREHENSIVE ROADMAP



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# ABOUT NILADVANTAGE

AFTER 20 YEARS IN THE IT INDUSTRY, WE DECIDED TO ALTER DIRECTION. NOW, WE SHARE USE OUR IT KNOWLEDGE AND EXPERIENCE TO HELP OTHERS. OUR RAMP UP PROCESS IS DESIGNED TO EMPOWER YOUR IT CONSULTANT TEAM AND OUTFIT THEM WITH THE TOOLS THEY NEED TO SUCCEED. OUR SERVICE INCLUDES A COMPREHENSIVE IT CONSULTING TO HELP IDENTIFY GAPS AND OPPORTUNITIES, A COMPREHENSIVE REPORT THAT INCLUDES A PROJECT PLAN WITH TIMELINES AND MILESTONES, A COST ANALYSIS, AND A SCHEDULE. WE ALSO OFFER A SUITE OF QUALITY PRODUCTS THAT WILL HELP YOU GET THERE QUICKLY AND SMOOTHLY.

## OUR AIM IS SIMPLE:

DEVELOP UNIQUE SKILLSET  
THAT OPENS DOORS TO  
DIVERSE CAREER PATHS,  
ENTREPRENEURIAL ENDEAVORS.

## MERN FULL STACK DEVELOPMENT

IT AIMS TO DELIVER CONCEPTUAL KNOWLEDGE ALONG WITH HANDS ON-EXPERIENCE TO ENSURE A SUCCESSFULL START FOR YOUR CARRER.



**NILADRI DAS**  
**DIRECTOR AND FOUNDER**

# ABOUT MERN FULL STACK

Welcome to our transformative Full Stack Development course, a journey into the dynamic realm of web development. In this immersive program, we delve deep into the MERN stack (MongoDB, Express.js, React, Node.js) to equip you with the skills needed to craft cutting-edge web applications. Whether you're a novice seeking a new career or an experienced developer looking to expand your horizons, our course offers a comprehensive roadmap. Join us and unlock the power to create, innovate, and excel in the ever-evolving world of full stack development. Your journey to mastery begins here.

## 1. Problem-Solving Proficiency:

- Sharpen your problem-solving abilities by troubleshooting issues on both the client and server sides.
- Identify and address challenges more efficiently.
- Seamlessly transition between front-end and back-end tasks based on project requirements or personal preferences.
- Adapt to the evolving needs of the industry.

## 2. Personal Projects and Portfolios:

- Create personal web applications, portfolios, or side projects to showcase your capabilities to potential employers or clients.
- Build a strong online presence.

# Placement **Stats**

**65000+**

Carrer Transition

**52%**

Average Salary Hike

**10 LPA**

Average Annual Salary

**500 +**

Hiring Partners



# Program Highlights

**140+**

Hours of Live Classes  
Training

**80+**

Hours of Self Study  
Content

**60+**

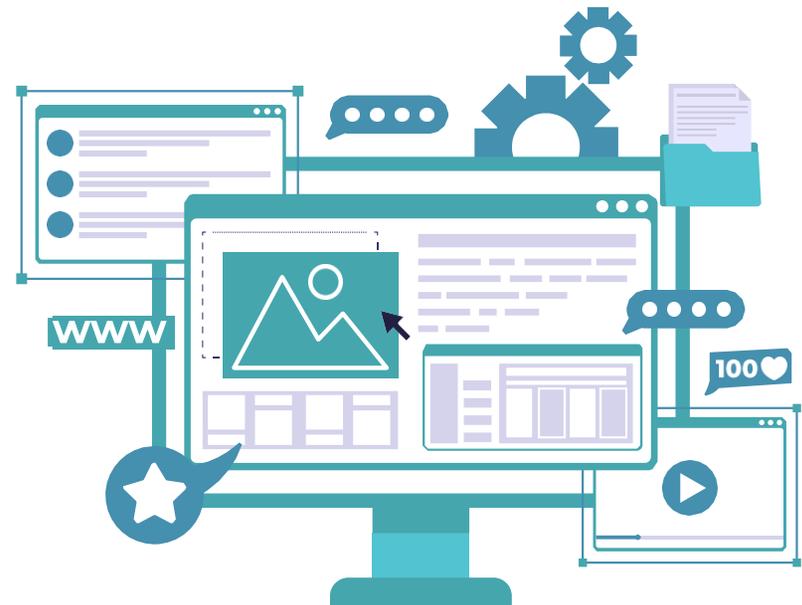
Hours of Problem  
Solving Sessions

**4+**

Mock Interviews

**1+**

Masterclass by  
Experts



# Program Details



## Program Duration

3Months



## Program Fees

~~70000 + GST~~

**Early Bird Discounted Fees**

50000 + GST



## Elegibility Criteria

Graduates/Final-Year Students from any field can enroll

## Admission Process



### Step 1 :

Apply for the program



### Step 2 :

Complete your application



### Step 3 :

Clear the Assessment test



### Step 4 :

Reserve your Seat

# Why Choose MERN

Choosing the MERN stack for web development is a decision that depends on various factors, including the specific requirements of your project, your team's expertise, and your long-term goals. The MERN stack is a popular choice for many developers due to several advantages it offers:

- 1. Full Stack Development:** MERN stands for MongoDB, Express.js, React.js, and Node.js. This combination covers both the front-end and back-end development, allowing you to build a complete web application using a single technology stack. This can lead to faster development and smoother integration between different parts of your application.
- 2. Real-time Applications:** MERN, especially with the addition of libraries like Socket.io, is well-suited for building real-time applications. This makes it a popular choice for chat applications, collaborative tools, and gaming platforms.
- 3. Flexibility in Database Choice:** While MERN traditionally uses MongoDB as its default database, you're not limited to it. Node.js and Express can work with various databases, so you can choose the one that best fits your project requirements.
- 4. RESTful API Development:** With Express.js, it's straightforward to build RESTful APIs, which are widely used for communication between the front-end and back-end of web applications.



# Program Curriculum

## 1. Introduction

- Introduction to Programming
- Syntax & Pseudocode
- Introduction to MERN Full Stack

## 2. Web Development with HTML5

### A. HTML Basic

- HTML Elements, Documents and Attributes
- HTML Structure & Comments
- HTML Tag & Navigation
- HTML Entities & Elements

### B. HTML Table

- Basic HTML Table
- Styling basic HTML Table
- Advanced HTML table
- HTML Nested Tables



# Program Curriculum

## C. HTML Forms

- Basic HTML Form
- Form Attributes, Input Types
- Multiple and Single Select
- HTML FieldSet

## 2. Web Development with CSS3

### A. CSS Basic

- CSS Synatx
- Link CSS Using Inline Method
- Link CSS Using Internal Method
- Link CSS Using External Method
- Width and Height Property
- Box Model
- Padding, Border, Margin
- Inline vs Block Elements Explain



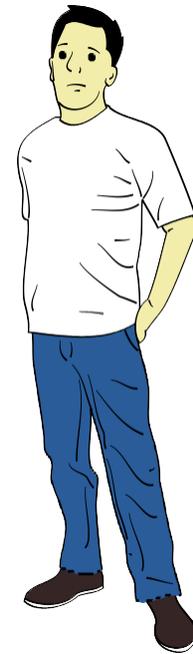
# Program Curriculum

## B. CSS Selectors

- Element Selector
- Class Selector
- ID Selector
- Descendent Selector
- Child Selector
- Adjacent Sibling Selector
- General Sibling Selector
- Input Pseudo Classes
- User Action Pseudo Classes
- Location Pseudo Classes
- Pseudo Elements

## C. CSS Colors & Position

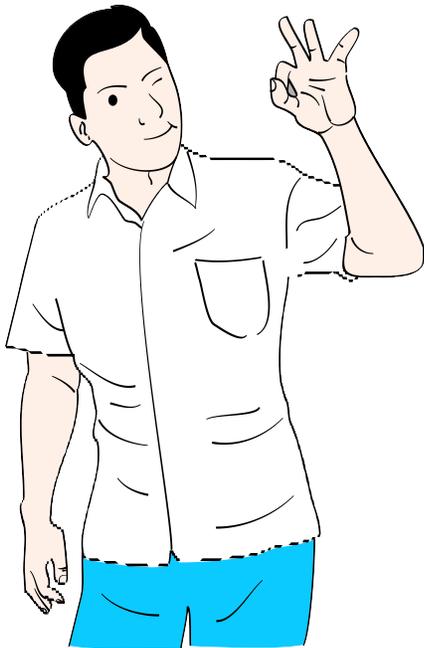
- HEX & RGB & RGBA Colors
- Absolute Position
- Fixed Position
- Relative Position



# Program Curriculum

## D. CSS Flexbox & Responsive

- Flex Container
- Flex Direction
- Main vs Cross Axis
- Main vs Cross Axis Visualisation
- Justify Content
- Align items
- Flex Grow and Order
- Align Self
- Flexbox Playground
- Media Query
- Responsive Header
- Responsive Navbar
- Navbar Media Query
- Responsive Footer



# Program Curriculum

## 2. Web Development with JavaScript

### A. JavaScript Basic

- Basic JavaScript Explain
- My First JavaScript Code
- Ways of Including JavaScript in HTML

### B. JavaScript Fundamental

- Variable and Synatx
- Variable Declaration code
- Data Type
- Operators
  1. Arithmetic
  2. Media Query
  3. Responsive Header
  4. Responsive Navbar
  5. Navbar Media Query



### C. JavaScript Control Structurel

- Control Structure Explain

# Program Curriculum

- Types of Decision Making Structure
  1. If-Else
  2. Nested If-Else
  3. Switch

## D. JavaScript Loops

- For Loop
- While Loop
- Do-While Loop

## E. JavaScript Functions Basic

- Function Define
- Function Arguments vs Function Parameters
- Do-While Loop

## F. JavaScript String Method

- String Concatenation
- Template Literals
- String Length Method



# Program Curriculum

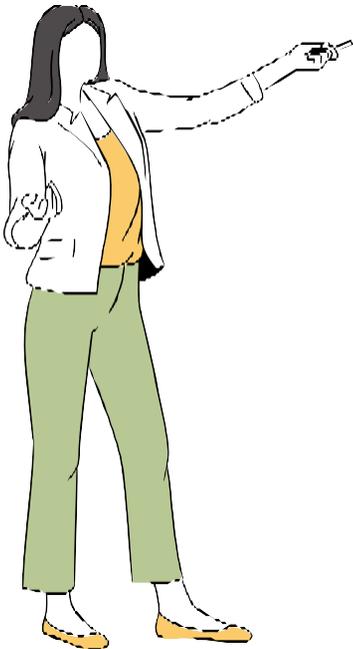
- indexOf()-toUpperCase -toLowerCase
- Split()-reverse()-join() method
- StartWith() method
- includes() method
- Slice() method
- String Comparison

## G. JavaScript Array

- Create Array
- Access Array Elements
- Iterating over Array
- Array Method
  1. Array Reduce
  2. Array Find
  3. Array Filter

## H. JavaScript Objects

- Create an Object
- Access Object Properties
- Update Object Properties



# Program Curriculum

- Delete Object Properties
- Adding Method to Object
- Use of this Keyword
- Iterating Object for in loop
- Iterating Object | Object.Keys()
- Iterating Object | for each loop (exceptional)
- Iterating Object | Object.Values()
- Iterating Object | Object.entries()

## I. JavaScript Math Object

## J. JavaScript Array of Object

- Define
- Data Mutation
- Iterating Using ForEach()
- Iterating Using map()
- Iterating Using map()
- Iterating Using reduce()



# Program Curriculum

## K. JavaScript Advanced ES6

- Array Destructuring
- Object Destructuring
- Destructuring with Default Values
- Destructuring Parameters
- Rest Parameters
- Arrow Functions
- Spread Operators

## L. JavaScript Advanced Functions

- Global Scope
- Block Scope
- Function Scope
- Lexical Scope

## M. JavaScript Advanced Asynchronous

- Diff. Between Asynchronous and Synchronous
- Explain Synchronous
- Explain Asynchronous



# Program Curriculum

- ways of Write Asynchronous code
- Callback Function
- Promise
- Async/Await

## M. JS Advanced Web API & HTTP Request

- API Define
- Fetch API- HTTP Request
- GeoLocation API Project
- Battery API Project

## 4. Backend Development with Node JS

### A. Node JS Basic

- Define
- Installing Node JS
- First Node JS Code

### B. Node JS Core Module

- File System-Create File
- Async/Await



# Program Curriculum

- File System- Read File
- File System- Rename File
- File System- Copy File
- File System- Append File
- File System- Truncate File
- File System- Get Statistics File
- File System- Delete File

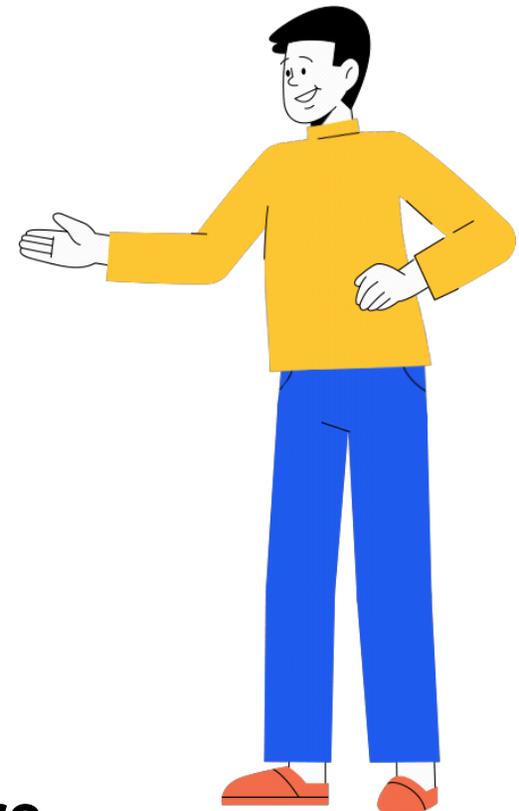
## C. Node JS NPM

- Explain and It's Uses

## D. Node JS | Web Server

- My First Node js Web Server
- Create HTML files using fs modules
- Response to GET Request
- Making Post Request

## E. Node JS | Express Middleware



# Program Curriculum

- Explain
- How to middleware works
- Create Middleware
- Middleware Chaining
- Protected Route Middleware
- isAdmin Middleware
- Third Party Middleware

## F. Node JS Serving Static Files and EJS

- How to Serve Assets
- What is Template Engine
- Setting and Syntax EJS
- Rendering Pages
- EJS Partials

## G. DataBase | MongoDB Part-I

- What is MongoDB
- Understanding JSON Document
- Why MongoDB
- Diff Between Database vs Collection vs Documents



# Program Curriculum

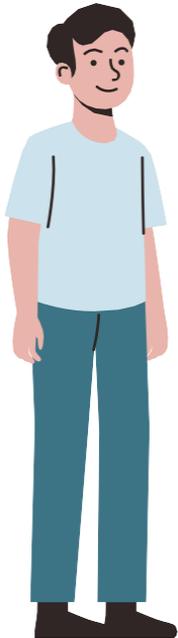
- Create MongoDB Account
- Install MongoDB
- Connect MongoDB to our Project
- CRUD Operations- Create Document
- CRUD Operations- Fetch All Document
- CRUD Operations- Querying Document
- CRUD Operations- Update Document
- CRUD Operations- Delete Document

## H. DataBase | MongoDB Part-II

- Mongoose Schema vs Mongoose Model
- How to connect Mongoose
- Schema and Schema Types
- Mongoose Model
- Create, Fetch and Update document

## I. Mongoose DataBase Modelling

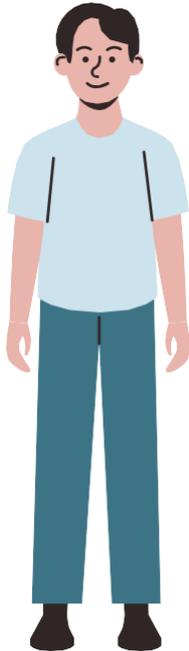
- Embedded Method
- Referencing Method



# Program Curriculum

## J. Node JS Advanced

- How Authentication Works
- Low Level Authentication Register & Login User- Backend
- Low Level Authentication Login and Register - Frontend
- Low Level Authentication Encrypting Password - Backend
- Low Level Authentication Login After Encrypting - Frontend
- Cookies Based Authentication
- Cookies Based Authentication- Authorization with cookies
- Cookies Based Authentication- Securing Cookies
- Cookies Based Authentication- Logout
- Session Based Authentication
  1. Authentication with Session
  2. Protecting Routes
  3. Logout User
  4. Save Session into Database
- Token(JWT) based Authentication
  1. Generate Token
  2. Verify Token
  3. User Profile



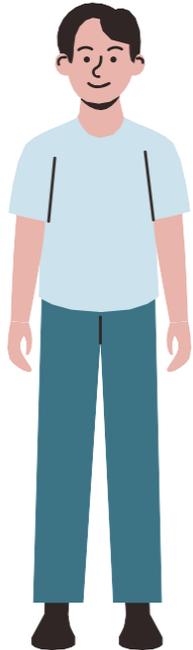
# Program Curriculum

4. Refactoring
5. Protect Route
6. Save Token in Local Storage

## **K. Node JS Advanced | Build Nodemailer**

## **L. Node JS Advanced | MVC Design**

- Explain MVC
- Model and Dummy Routes
- Express Routing
- Implementing Controllers
- Create, Update, Delete and Fetch Student Controller



## **M. Git & GitHub**

- Difference between Git and Github
- Install Git
- Common Git Command
- Git Branches Explain

## **N. Node JS Advanced | Error Handling**

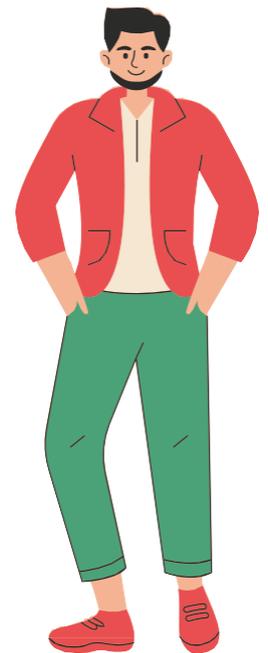
- Not Found Error
- Throwing and Catching Custom Error

# Program Curriculum

- Global Error Handler
- Handling Async Error
- Handling MongoDB Validation Error
- Handling MongoDB Cast Error

## 5. FullStack BLOG Project | Backend

- Folder Structure
- Create Server
- Database Connection
- Express Routing
- User Registration
- Hash User Password
- Login API User
- Global Error Handler Middleware
- App Error Handler
- Catching Errors
- Authencation- Express Session
- Authencation- Protecting Route Middleware
- Authencation- Persisting Express Session



# Program Curriculum

- User Profile API
- User Details API
- Update user Details API
- Update User Password API
- Upload Profile Image API
- Upload Cover Image API

## 6. FullStack BLOG Project POSTS API | Backend



- Create posts API
- Database posts with Image API
- Populate User Posts API
- Fetch Single posts API
- Fetch All posts API
- Delete posts API
- Update posts API

## 7. FullStack BLOG Project Comment API | Backend

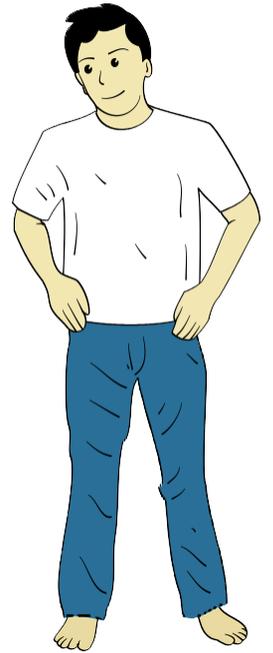
- Create Comment API
- Populate posts with Comments API
- Deleting Comment API

# Program Curriculum

- Update Comment API

## 8. FullStack BLOG Project | Frontend

- Login and Register Form
- Render Profile and Upload Cover Image  
From and Update user from
- Navbar & Footer
- Display Error Message
- Logout User
- Populate User's Post
- Display All Post
- Create Post
- Create CommentI
- Display post Comment
- Delete Comment
- Update Comment
- CSS Styling



**Project - Create E-Commerce Platform Using HTML, CSS & Node JS**

# Program Curriculum

## 9. Web Development with React

### A. React Basic

- Define
- Create React App
- React App folder Structure
- Starting and Stopping React app
- React Component
- Nesting JSX
- Embedding expression in JSX

### B. CSS in React

- Inline Styling
- Using External CSS
- Using Images in React
- Parent and a Child component
- Props Explained

### C. React | Event Handling



# Program Curriculum

- Event Explain
- Creating Event Handler
- Passing arguments to event

## D. React useState Hook | STATE Management

- Explain useState
- Initalizing State
- Updating State Handler
- Decreasing & Resetting State

## E. React Component

- Stateless Component
- Customizing Stateless Component
- Statefull Component

## F. React | Data Rendering

- Render Data using map
- React key prop
- React Fragment



# Program Curriculum

## G. React useState Hook | STATE Management

- Explain Form
- Form Initial State
- Handling onChange Event
- Submit form Handler
- Creating a form using Computed Value

## H. React | Making HTTP Request

- HTTP request using Fetch
- HTTP request using Axios
- Async/Await with useEffect

## I. React | Data Rendering

- Configure React Router Dom
- Navigation using link component
- Protecting Routes
- useParams()





# PROJECTS

1. MERN | URL Shortener
2. MERN | Excel Clone
3. MERN | Resume Builder
4. MERN | Portofolio Website
5. MERN | Blog Website





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# Payment Details

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