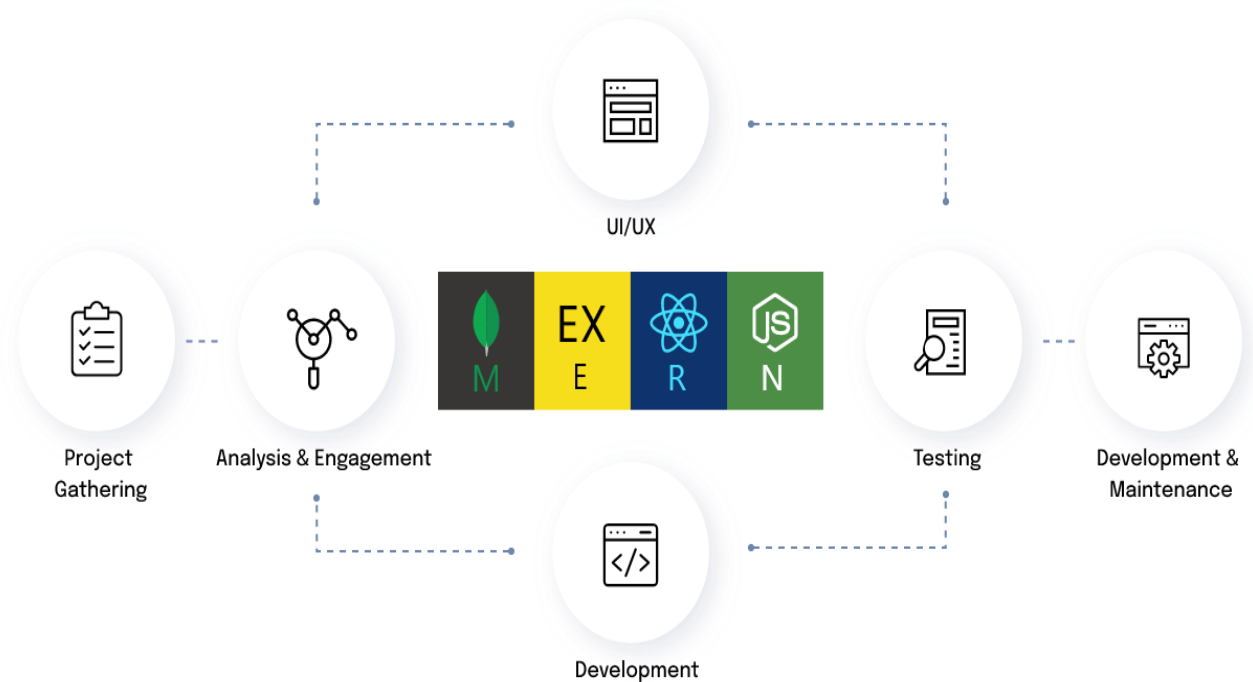




# MERN FULL STACK



# Static Website Design

This course helps you build a strong foundation on web technologies such as HTML, CSS. With this, you will create and publish simple and beautiful websites from scratch.

## Software Development Fundamentals

- Importance Of Frontend
- Fundamentals
  - Syntax
  - Debugging
  - Tweaking Code

## HTML Basics

- Getting Started
- HTML Elements
- HTML Headings
- HTML Paragraphs
- HTML Buttons
- HTML Attributes
- HTML Hyperlinks
- HTML Containers
- HTML Lists

## CSS Basics

- CSS Rulesets
- CSS Properties
- CSS Colors
- CSS Units
- CSS Box Models
  - CSS Margins
  - CSS Paddings
  - CSS Borders

## Bootstrap Components

- Carousel
- Embedding Videos

## CSS Layouting

- CSS Flexbox
  - Display
  - Flex-direction
  - Justify-content
  - Align-items
  - Flex-items
  - Flex-flow
  - align-content
  - align-self

- flex-grow
- flex-shrink
- order
- Sizing Elements
- Overflow
- Box Sizing
  - Content Box
  - Border Box

## **CSS Media Queries**

- Media Query
- Media Types
- Media Features
  - Width, min-width, max-width
  - Height, min-height, max-height
  - Orientation
- Combining Multiple Media Features in a single Query.
  - Logical Operators (and)
  - Logical Operators (not)
  - Logical Operators (,)

# Dynamic Web Applications

In this course, you will understand the fundamental concepts in JavaScript and apply them to build dynamic and interactive web projects. You will also learn scope, hoisting and the fundamentals necessary to use modern frameworks like React. You'll master key functional methods like map, reduce and filter plus promises and ES6+ asynchronous JavaScript!

## Introduction to JavaScript

- Data Types
- Variables
- Basic Operators
- Conditionals
- Loops
- Functions
- Arrays
- Objects
- Control Flow
- Comments
- Math Functions

## DOM Manipulation

- The JavaScript Console
- Introduction to the DOM
- Defining the DOM
- Select and Manipulate

- Important Selector Methods
- Manipulating Style
- Manipulating Text and Content
- Manipulating Attributes
- Local Storage

## Forms

- The form element
- The label element
- The input element
- The option element
- The opt group element
- The button element
- The select element
- The text area element
- Form Validations and input validations

## Array Methods

- Adding & Removing Elements
  - Push
  - Unshift
  - Splice
  - Pop
  - Shift

- Finding Elements
  - Find
  - IndexOf
- Contact

## Events, Fetch & Callbacks

- How to add Event Listeners
- Callbacks
- Schedulers
  - Set Timeout
  - Clear Timeout
  - Set Interval
  - Clear Interval
- Hypertext Transfer Protocol (HTTP)
  - HTTP Requests using Fetch
  - HTTP Responses
  - Working with JSON data

# Intermediate JavaScript

In this course, you will learn the concepts like Events, Scope, Hoisting, this, ES6 Classes, Error handling, More about Objects and how to handle Asynchronous JavaScript.

## Rest Parameters and Spread Syntax

- Destructuring Arrays
- Destructuring Objects

## More Objects

- Constructor Functions
- Constructor Method
- Factory Functions
- New Keyword

## this

- this in methods
- this in function declarations
- window scope
- this in events



## Prototype & ES6 Classes

- Built-in Constructor Functions
- Inheritance
- Constructor Property
- this in classes

## Asynchronous JS

- Async/Await
- Promises

## Scope & Hoisting in JavaScript

### Array Methods

- map
- filter
- reduce

### String Manipulations

- Trim & split Methods
- toUpperCase & toLowerCase Methods
- includes Method

# React JS – Getting Started

In this course, you will learn how to build stateful web applications with the ReactJS library. When you finish this course, you will be comfortable creating an application in ReactJS, from scratch.

## Introduction to React JS

- Why React?
- Stateful + Stateless Components
- Hello World
- Introducing JSX
- Rendering Elements
- Components & Props
- State & Lifecycle
- Handling Events
- Conditional Rendering
- Lists & Keys
- Forms
- Composition vs Inheritance
- Thinking In React

## CSS in JS

- Styled Components
- Emotion

## Routing

- Query Parameters
- Path Parameters

## Authentication and Authorization

# React JS Hooks

In this course, you will learn how to build stateful web applications with the React JS Hooks.

## Introduction to Hooks

- Introducing Hooks
- useState
- useEffect
- useContext
- Hooks with Local Storage
- Hooks with React Router
- Data fetching using Hooks
- Writing Custom Hooks

# Relational and Non Relational Databases

Learn about the incredibly prevalent databases today. Through this course, you'll develop strong fundamentals and be proficient in concepts related to Databases and DBMS. Most importantly, you'll also be able to perform powerful queries on databases using SQL.

## Relational Databases

- Introduction
- SQL
- Aggregation, Relationships, Join
- Normalisation & Advanced SQL Querying
- ACID Properties

## Non Relational Databases (MongoDB)

- Introduction to MongoDB
- CRUD Operations
- Querying Documents
- Aggregations
- Nested Documents

# Backend Development with Node and Express

In this course, you'll learn how to build a backend web application using one of the most popular and mature JavaScript web development frameworks, Express. It lets you build better web apps quicker, and with less code. This course covers various aspects of web application development like database routing, urls etc.

## Introduction to NodeJS

- Node REPL
- Modules
- NPM CLI
  - Usage of NPM Packages

## Introduction to Express Web Application Framework

- HTTP Server
- Routers
- Handling HTTP Request
- Preparing Http Response

## Fundamentals of Application Building in Express

- Integration with Database
- CRUD Operations
- Error Handling
- Middlewares

## Securing APIs

- Json Web Token(JWT)
- Authentication vs Authorization
- Building Secure Web API`s with Express

## Debugging

- Node inspect
- Visual Debugging