

CERTIFIED

# FULL STACK COURSE

CLASSROOM | ONLINE

IN ASSOCIATION WITH



Microsoft



## Why Trust Us?

- 100+Batches
- Dedicated placement support
- 25+ hiring partners
- Senior Data scientists as faculty
- 2000+ passed out students
- Guaranteed internship opportunity
- Placement assistance

Companies that hire for Full Stack











# FAQS?



#### Duration

Weekday: 4 Months
Weekends: 5 Months



OS: Windows X, Ram: 6GB, HDD: 1TB

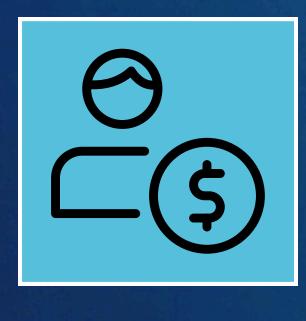




Eligibility

BE/MBA/BSc/B.Tech.MSC M.Tech - IT/Statistics/CSE Avg. Packages
3.2-5 LPA (Fresher)

5-15 LPA (Experienced)



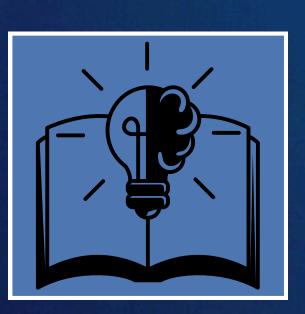


Certifications

White Scholars and microsoft

Pre Requisite

No pre-requisites to learn Full Stack

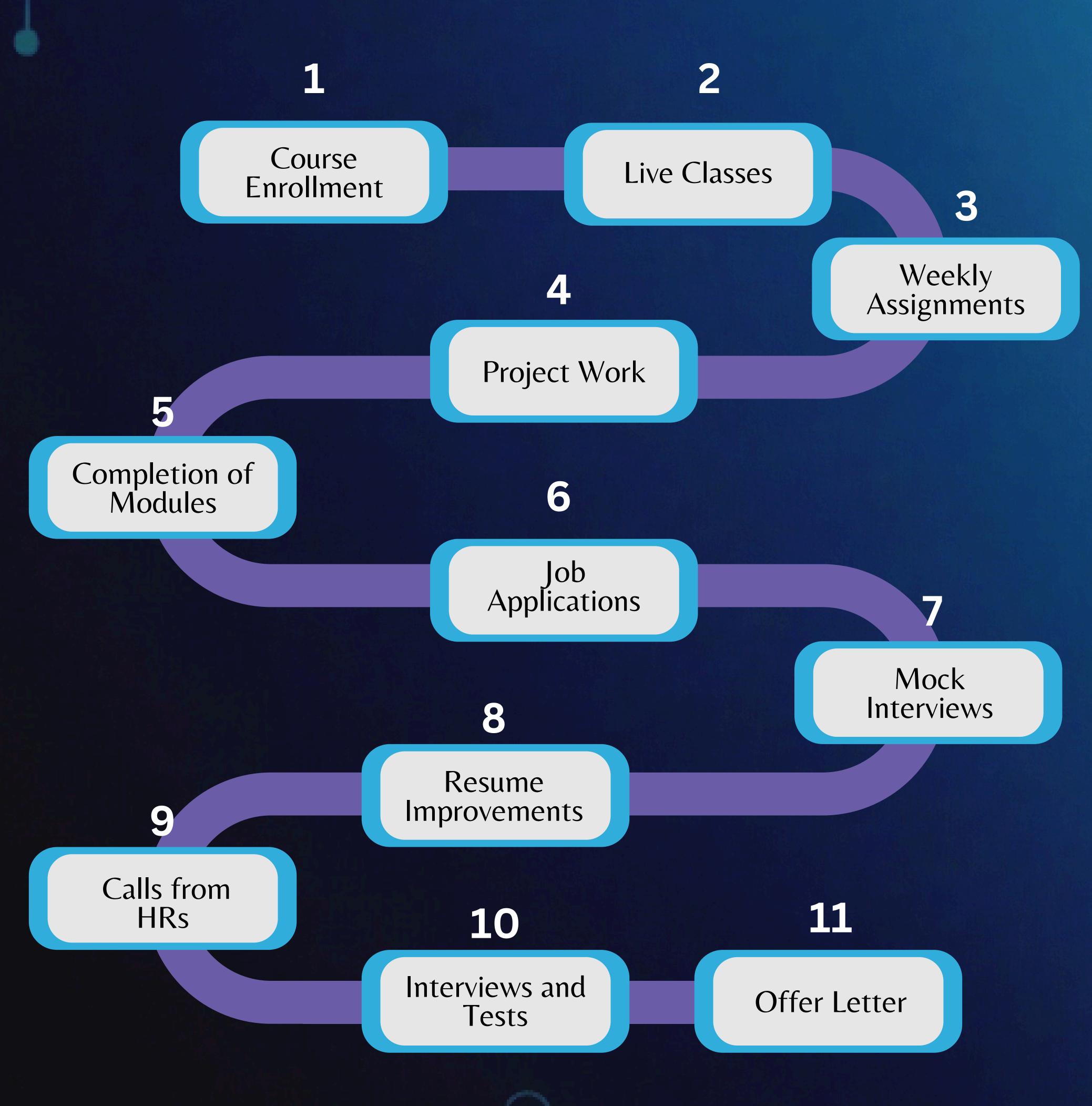




#### Roles

Backend Developer, Frontend Developer, MERN Stack
Developer, Database Admin, Database Manager, Website
Developer, Software Developer, Website Designer, Backend
Engineer, Node. JS Developer, Express JS Developer, React JS
Developer

## Training Flow



## Monthon Month Journey

### **Introduction and Setup**

- Overview of Web Development
- JavaScript Refresher
- Advanced JavaScript Concepts
- Introduction to Node.js

#### MongoDB and Express.js

- Introduction to NoSQL and MongoDB
- CRUD Operations in MongoDB
- Introduction to Express.js
- **RESTful APIs**



#### React.js Basics and **Advanced Concepts**

- Introduction to React.js
- Event Handling and Forms
- React Router
- Context API and Advanced Hooks



#### Integration, Deployment, and **Live Project**

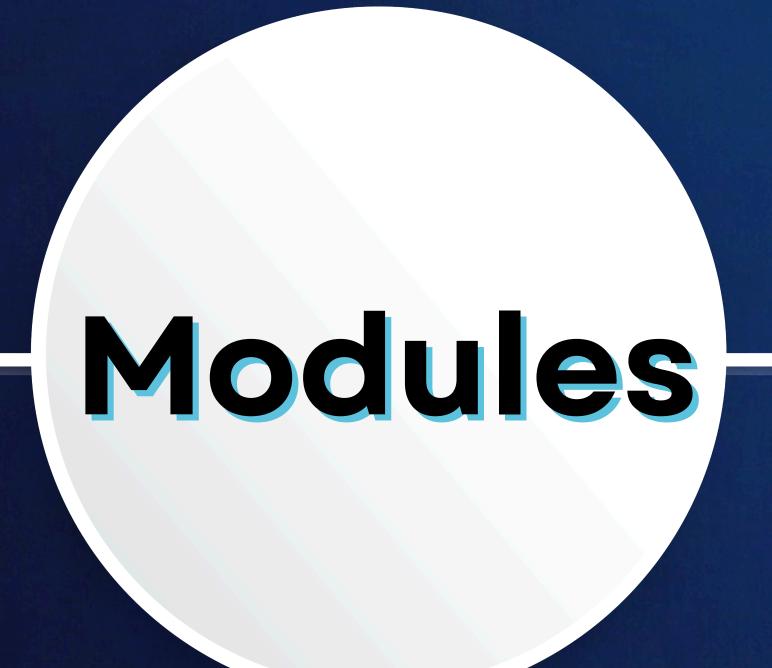
- Create Live Project
- E-Commerce App Development
- Social Media App
- Single and Multivendor app

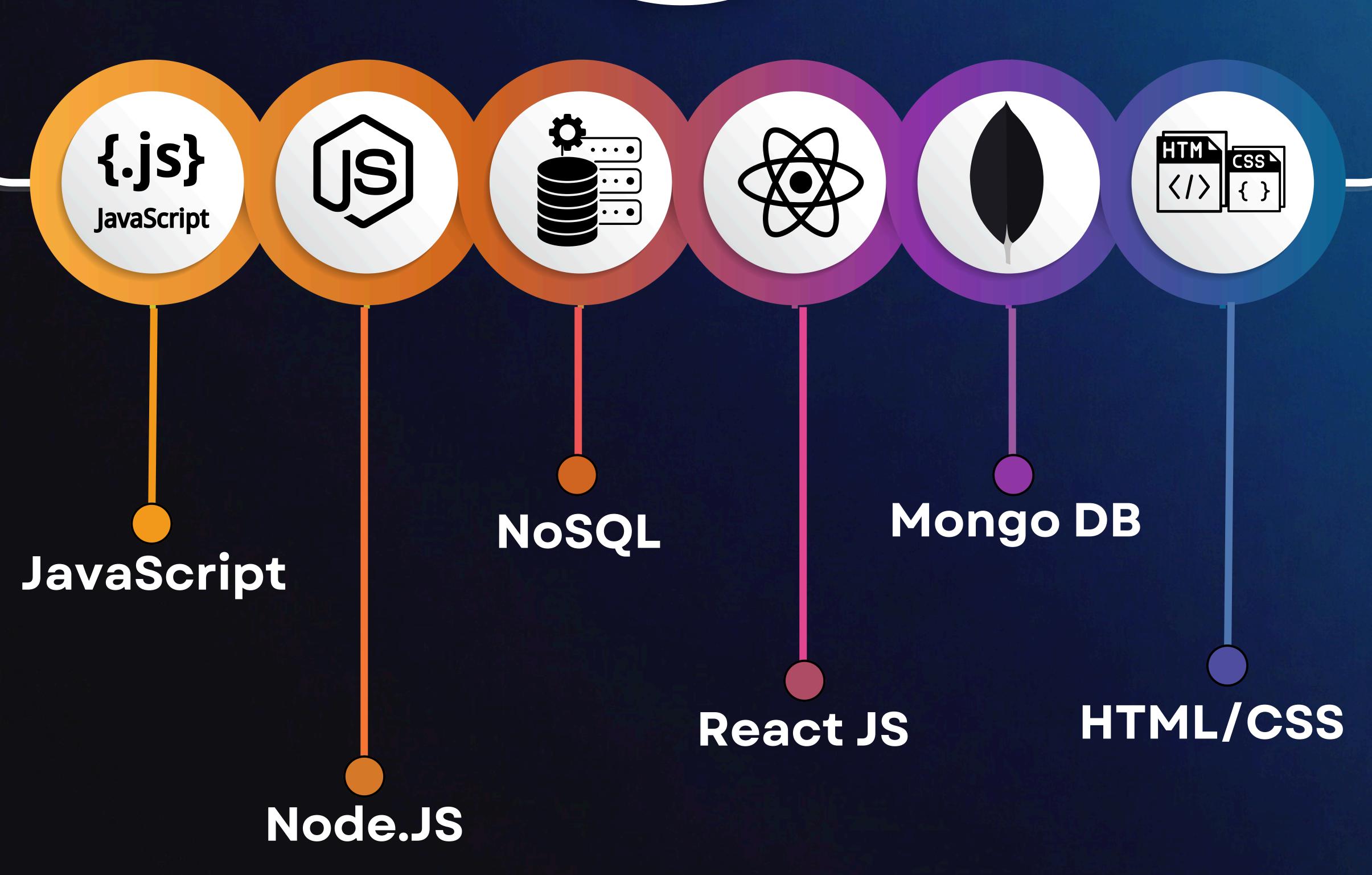


#### **Apply for Job and Internship**

- Identify the right jobs and apply on Naukri I Linkedin
- Analytics Vidhya | Datajobs
- Kaggle Job Portal
- Internshala
- indeed.co

## Curriculum





## Introduction and Setup

## WEEK1-2

#### Basics

- 1. Overview of Web Development
- Understanding client-server architecture
- Introduction to front-end and backend technologies
- Overview of MERN stack (MongoDB, Express.js, React.js, Node.js)

#### Setting Up Development Environment

- Installing Node.js and npm
- Setting up MongoDB locally and using cloud services (MongoDB Atlas)
- Installing VS Code or other IDEs
- Introduction to version control with Git and GitHub
- Basic Git commands and workflows

#### JavaScript Refresher

- ES6+ features (let/const, template literals, destructuring, spread/rest operators)
- Functions (arrow functions, callbacks, higher-order functions)
- Asynchronous JavaScript (promises, async/await)
- JavaScript DOM manipulation

## WEEK3-4

#### **Advanced JavaScript Concepts**

- Scope, closures, and the 'this' keyword
- Prototypes and inheritance
- Modules and namespaces
- Error handling and debugging

#### Introduction to Node.js

- Node.js architecture and its asynchronous nature
- Understanding the event loop and event-driven programming
- Core modules (fs, path, http, etc.)
- Building a simple HTTP server

## MongoDB and Express.js

## WEEK5-6

## Introduction to NoSQL and MongoDB

- Differences between SQL and NoSQL databases
- JSON/BSON and document-based storage
- Setting up MongoDB locally and on the cloud

#### CRUD Operations in MongoDB

- Creating, reading, updating, and deleting documents
- MongoDB queries and aggregations
- Indexing and performance optimization

#### Mongoose ODM

- Setting up Mongoose
- Creating schemas and models
- Data validation and schema design
- Middleware and hooks in Mongoose

## WEEK 7-8

#### Introduction to Express.js

- Setting up an Express server
- Understanding middleware and routing
- Handling different types of requests (GET, POST, PUT, DELETE)

#### **Building RESTful APIs**

- REST principles and best practices
- Structuring API routes and controllers
- Implementing CRUD operations
- Error handling and logging

#### **Advanced Express.js Concepts**

- Middleware functions (built-in and third-party)
- Handling file uploads with Multer
- Authentication and authorization (basic auth, JWT)

## React.js Basics and Advanced Concepts

### WEEK 9-10

#### Introduction to React.js

- What is React and why use it?
- Setting up a React environment with Create React App
- JSX syntax and expressions
- Functional components and props

#### State and Lifecycle in React

- Understanding state and setState
- Component lifecycle methods
- Introduction to Hooks (useState, useEffect)

#### **Event Handling and Forms**

- Handling events in React
- Controlled vs uncontrolled components
- Building and validating forms

## WEEK111-12

#### **React Router**

- Setting up React Router
- Defining routes and nested routes
- Programmatic navigation

#### State Management with Redux

- Introduction to Redux and its core principles
- Setting up Redux in a React project
- Actions, reducers, and the Redux store
- Connecting React components to Redux

## Context API and Advanced Hooks

- Using the Context API for state management
- Custom hooks and reusable logic
- Optimizing performance with React.memo and useCallback

## Integration, Deployment, and Live Project

## WEEK13-14

#### **Making HTTP Requests**

- Using fetch API and Axios for AJAX calls
- Handling API responses and errors
- CORS and cross-origin requests

## Authentication and Authorization

- Implementing JWT-based authentication
- Protecting routes and user roles
- Securing API endpoints with middleware

## WEEK19-20

#### Live Project Deployment

- Defining project requirements and scope
- Implementing features and functionalities
- Integrating front-end and back-end
- Testing and debugging

#### **Final Project Presentation**

- Presenting the live project
- Code review and feedback
- Future learning paths and resources

### WEEK 15-16

#### **E-commerce App Development**

- Defining project requirements and scope
- Implementing features: user authentication, product listings, shopping cart, checkout process
- Integrating front-end and back-end
- Testing and debugging

#### **Final Project Presentation**

- Presenting the e-commerce app
- Code review and feedback
- Future learning paths and resources

## Prerequisites:

 No prerequisite required. Anyone can learn.

### Recommended Tools:

- Visual Studio Code
- Git and GitHub
- Postman for API testing
- MongoDB Compass

## Learning Outcomes:

- Develop and deploy full-stack applications using the MERN stack.
- Understand and implement modern web development practices.
- Gain proficiency in both front-end and back-end development.
- Build a portfolio of projects showcasing your skills.