



Node.js Certification Training

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About the Program

Intellipaat's Node.js training and certification course will make you proficient in developing and deploying scalable web applications with Express and Nginx. You will learn how to build MongoDB-enabled applications, drill-down into REST APIs and implement tests, and gain in-depth knowledge of concepts such as Express.js, Node Package Manager (NPM), asynchronous programming, CRUD operations, microservice architecture, and more. After completing this Node.js training, you can establish your credibility with our industry-recognized Node.js certification and get lucrative jobs!

About Intellipaat

Intellipaat is one of the leading e-learning training providers with more than 600,000 learners across 55+ countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

Our courses are delivered by subject matter experts from top MNCs, and our world-class pedagogy enables learners to quickly learn difficult topics in no time. Our 24/7 technical support and career services will help them jump-start their careers in their dream companies.

Key Features



**24 HRS INSTRUCTOR-LED
TRAINING**



24 HRS SELF-PACED TRAINING



**48 HRS REAL-TIME
PROJECT WORK**



LIFETIME ACCESS



24/7 TECHNICAL SUPPORT



**INDUSTRY-RECOGNIZED
CERTIFICATION**



**JOB ASSISTANCE THROUGH
80+ CORPORATE TIE-UPS**



FLEXIBLE SCHEDULING

Career Support



SESSIONS WITH INDUSTRY MENTORS

Attend sessions from top industry experts and get guidance on how to boost your career growth



MOCK INTERVIEWS

Mock interviews to make you prepare for cracking interviews by top employers



GUARANTEED INTERVIEWS & JOB SUPPORT

Get interviewed by our 400+ hiring partners



RESUME PREPARATION

Get assistance in creating a world-class resume from our career services team



Why take up this course?

The average salary of a Node.js Developer is around US\$114,438 in the United States and ₹612,000 in India – ZipRecruiter and PayScale

Node.js has become one of the most widely used JavaScript tools in recent years. Since JavaScript is known by millions of developers across the world, learning Node.js can take your career to a new level. By equipping yourself with its concepts, you can even write JavaScript on the client-side and the server-side. Plus, it offers a lower learning curve; thus, you can easily become a Full Stack Developer.

Also, Intellipaat's Node.js certification training gives you hands-on experience in implementing Node.js skills in real-world projects. Therefore, you will be equipped with all the necessary skills to get the best jobs in the Node.js domain.

Who should take up this course?

This Node.js online course is designed for professionals who want to familiarize themselves with Node.js to create highly scalable real-time applications and become application developers. This Node.js training is meant for:

- Freshers who want to learn Web Development using Node.js
- Web Developers
- Testing Professionals
- Software Architects
- Project Managers, etc.

Program Curriculum

Node.js Course Content

1. INTRODUCTION TO NODE.JS

- What is Node.js?
- Why Node.js?
- Node modules
- Node built-in packages
- Creating your own package
- Importing your own package
- NPM (Node Package Manager)
- Local and global packages

Hands-on Exercise:

- *Install Node.js*
- *Run a simple Node.js script*
- *Create a Node module and use it in your code*
- *Search in the NPM repository to find a package and install it in your project*

2. ASYNCHRONOUS PROGRAMMING

- What is asynchronous programming in JavaScript?
- JavaScript EventLoop
- Callbacks
- Callback Hell
- Promises
- Promise chaining
- Async Await

Hands-on Exercise:

- *Demonstrate the use of callbacks, promises, and async-await*

3. FILESYSTEM

- Synchronous vs Asynchronous IO
- File constants (`__dirname` and `__filename`)
- Synchronous file operations
- Asynchronous file operations
- FileSystem Watcher

Hands-on Exercise:

- *Write Node.js code to asynchronously perform file operations*
- *Write Node.js code to log in to the console if a file changes in a directory*

4. STREAMS & EVENTS

- What are streams in Node.js?
- Reading and writing streams
- Understanding and using the EventEmitter class
- Emitting events
- Responding to events

Hands-on Exercise:

- *Read data from a file using Input Stream and display on the screen*

5. HTTP

- What is HTTP?
- How does HTTP work?
- Standard HTTP response codes
- Node HTTP module
- Processing form data
- Processing query strings from a URL
- Sending back a response

Hands-on Exercise:

- *Create a simple HTTP Server using Node*

6. EXPRESSJS

- What is ExpressJS?
- Installing ExpressJS
- Creating a simple HTTPServer using ExpressJS

- Routing in Express
- Templating in Express
- Templating using JADE
- Middleware

Hands-on Exercise:

- *Create a simple ExpressJS application with routes and templates*

7. EXPRESSJS & MONGODB

- What is MongoDB?
- MongoDB Advantages
- Documents
- Collections
- Mongoose ODM
- Creating schemas and models using Mongoose
- CRUD Operations in MongoDB using Mongoose and Express

Hands-on Exercise:

- *Create a simple TodoList application using ExpressJS and Mongoose*

8. TESTING

- What is unit testing?
- Why unit testing?
- Unit testing frameworks
- What are mocks and stubs?
- Writing and running tests in Express

Hands-on Exercise:

- *Write and run some unit tests to test a module*

9. REST API USING EXPRESS & MONGOOSE

- What is a REST API?
- Why REST API?
- Data exchange formats
- JSON vs XML
- Monolith architecture

- Microservice architecture

Hands-on Exercise:

- *Build a small application using the REST API*

Project Work

Node.js Project

Project: Build an API Using NodeJS

Industry: General

Problem Statement: Your company wants you to build an API, which can sign up and sign in users based on data provided by the users when using the API.

Topic: In this project, you will use ExpressJS to build and serve the API. The API needs to be able to accept user data and store it in a MongoDB server. At the time of sign up, it needs to check if the user is unique, and at the time of sign in, it has to check if username and password match and are available in the database.

Tasks to be performed:

- Initialize an empty npm project
- Install Express and a MongoDB package (either MongoDB or Mongoose)
- Create routes for sign up and sign in with POST as request method
- During sign up, check if the user does not already exist in the database. If not, then check if the password is at least 5 characters long and add it to the database.
- If either or both conditions return false, then return an error to the user with the appropriate error messages.
- Make sure to hash the password before storing them in the database, (use the bcrypt package)
- During sign in, check if the username exists, and then, check if the given password matches with it. If it does, then return a randomly generated token of 64 length

- If the username does not exist or password is incorrect, then return an error with 404 status code and message incorrect credentials

Note: When comparing passwords, make sure you are comparing the hashed version of the passwords with each other.

Certification

After the completion of the course, you will get a certificate from IntelliPaat.



CERTIFICATE OF COMPLETION

This certificate is awarded to

Your Name

Who has successfully completed

Course Name

Fulfilling all the requirements stipulated by IntelliPaat to achieve professional excellence.

Issued Date: Month XX, XXXX



Success Stories



Kevin K Wada

Thank you very much for your top-class service. A special mention should be made for your patience in listening to my queries and giving me a solution, which was exactly what I was looking for. I am giving you a 10 on 10!



Sampson Basoah

The Intellipaate team helped me in selecting the perfect course that suits my profile. The whole course was practically oriented, and the trainers were always ready to answer any question. I found this course to be impactful. Thank you.



Sugandha Sinha

Intellipaate's course instructors were excellent and well-versed with their concepts. The support team solved all my queries within the promised 24 hours. They explained all topics and concepts well, and the course material was updated and included videos, exercises, etc. I would highly recommend Intellipaate to those who wish to excel in the IT field.



Vishal Pentakota

The best part of this course was the series of hands-on demonstrations that the trainer performed. Not only did he explain each concept theoretically, but he also implemented all those concepts practically. Great job! A must go for beginners.

CONTACT US

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If you have any further queries or just want to have a conversation with us, then do call us.

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