

Node.JS Workshop



Node.js is probably THE most popular and modern server-side programming language you can dive into these days. Node.js developers are in high demand and the language is used for everything from traditional web apps with server-side rendered views over REST APIs, Not to mention its applications in build workflows for projects of all sizes. This course will teach you all of that from scratch.

You must know!

Duration:

40 Hours

Who should attend?

Beginner or advanced web developers who want to dive into backend (server-side) development with NodeJS, A basic understanding of JavaScript is required.

Main Topics:

- File System
- Building servers & APIs
- Async Patterns
- ExpressJS
- Working With Data
- Authentication With Passport and JWT
- Hosting Standalone Node
- Docker
- Node.js API design

Course Modules

Module 1 – Introduction

- What is Node.js.
- Node.js Event loop
- The Node.js process

Module 2 – File System

- The FS Module.
- Reading Directories
- Reading Files
- Streams

Module 3 – Building servers

- Creating servers with HTTP
- HTTP streaming
- The Http server class
- Parsing requests

Module 4 – Building APIs using modules, events and packages

- CommonJS Modules
- The global object
- Directories as Modules
- npm Packages
- Managing Dependencies
- npm scripts

Module 5 – Async Patterns

- Asynchronous Javascript
- Asynchronous Control Flow with Callbacks
- Promises
- Async/Await
- The EventEmitter API
- Third Party Async packages

Module 6 – ExpressJS

- REST
- Introduction to ExpressJS
- Routing
- Responding
- Configuration
- Views
- Middlewares
- Receiving Data
- Error Handling

Module 7 – Working With Data

- MongoDB
- Mongoose ODM
- Mongoose Schema
- Mongoose Model
- Querying with Mongoose

Module 8 – Authentication With Passport and JWT

- Stateful vs. Stateless Authentication
- OAuth2
- Passport
- JWT – JSON Web Tokens

Module 9 – Hosting Standalone Node

- Why do we need hosts
- Forever
- PM2
- Node on Windows
- Node as a Windows Service
- IISNode

Module 10 – Hosting Complex Node Architectures with Docker

- What is Docker
- Docker CLI
- Docker File system & Volumes
- Docker Files
- Containers Communication
- Docker Compose

Module 11 – Best Practices

- NPM
- Best Practices
- Node.js API design
- Error Handling
- Debugging



המרכז הבינלאומי
ללימודי הייטק וחדשנות

* 6377

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קמפוסים בפריסה ארצית:

באר שבע

רחוב האנרגיה 77
פארק ההייטק

ירושלים

רחוב יפו 34

רחובות

רחוב אופנהיימר 5
פארק המדע

תל אביב

ראול ולנברג 36
קריית עתידים