### NodeJS - The Complete Guide

(incl. Deno.js, REST APIs, GraphQL)

**✓** = Video watched

Yellow = Item with work-along exercise also done by me

Note: Items not in Yellow are videos to watch with no work-along exercises

#### Week 1

### **01-Getting Started**

1.	Introduction (1:55)
2.	What is Node.js? (4:42)
3.	Installing Node.js and Creating our First App (7:41)
4.	Join our Online Learning Community
5.	Understanding the Role & Usage of Node.js (7:32)
6.	Course Outline (7:31)
7.	How To Get The Most Out Of The Course (3:54)
8.	Working with the REPL vs Using Files (2:58)
9.	Using the Attached Source Code

### 02-Optional: JavaScript - A Quick Refresher

1.	Module Introduction (1:36)	<b>✓</b>
2.	JavaScript in a Nutshell (2:35)	<b>✓</b>
3.	Refreshing the Core Syntax (4:34)	<b>✓</b>
4.	let & const (2:27)	<b>✓</b>
5.	Understanding Arrow Functions (5:17)	<b>✓</b>
6.	Working with Objects, Properties & Methods (3:19)	<b>✓</b>
7.	Arrays & Array Methods (4:16)	<b>✓</b>
8.	Arrays, Objects & Reference Types (2:13)	<b>✓</b>
9.	Understanding Spread & Rest Operators (6:40)	<b>✓</b>
10.	Destructuring (5:37)	<b>✓</b>
11.	Async Code & Promises (10:28)	<b>✓</b>

12. Template Literals	<b>✓</b>
13. Wrap Up (0:50)	<b>✓</b>
14. Useful Resources & Links	~

# **03-Understanding the Basics**

1.	Module Introduction (1:50)	<b>✓</b>
2.	How The Web Works (4:11)	<b>✓</b>
3.	Creating a Node Server (13:22)	<b>✓</b>
4.	The Node Lifecycle & Event Loop (4:53)	<b>✓</b>
5.	Understanding Requests (3:10)	<b>✓</b>
6.	Sending Responses (5:37)	<b>✓</b>
7.	Controlling the Node.js Process	<b>✓</b>
8.	Routing Requests (5:48)	<b>✓</b>
9.	Redirecting Requests (4:10)	<b>✓</b>
10.	Parsing Request Bodies (11:12)	<b>✓</b>
11.	Understanding Event Driven Code Execution (6:00)	<b>✓</b>
12.	Blocking and Non-Blocking Code (5:04)	<b>✓</b>
13.	Node.js - Looking Behind the Scenes (12:01)	<b>✓</b>
14.	Using the Node Modules System (10:05)	<b>✓</b>
15.	Wrap Up (5:15)	<b>✓</b>
16.	Assignment - Basics (Problem) (2:32)	<b>✓</b>
17.	Assignment - Basics (Solution) (11:32)	<b>✓</b>
18.	Useful Resources & Links	<b>✓</b>

# **04-Improved Development Workflow and Debugging**

1.	Module Introduction (0:40) ✓	
2.	Understanding NPM Scripts (7:03) ✓	1
3.	Installing 3rd Party Packages (8:20) ✓	1
4.	Global Features vs Core Modules vs Third-Party  Modules	
5.	Using Nodemon for Autorestarts (1:36) ✓	
6.	Global & Local npmPackages	
7.	Understanding different Error Types (1:49) ✓	
8.	Finding & Fixing Syntax Errors (3:10)	
9.	Dealing with Runtime Errors (2:47)	

10. Logical Errors (6:32)	<b>✓</b>
11. Using the Debugger (3:10)	<b>✓</b>
12. Restarting the Debugger Automatically After Editing our App (6:21)	<b>✓</b>
13. Changing Variables in the Debug Console (1:26)	<b>✓</b>
14. Wrap Up (3:14)	<b>✓</b>
15. Useful Resources & Links	~

## Week 2

## **05-Working with Express.js**

ob working with Express.	,5
1. Module Introduction (2:15)	
2. What is Express.js? (3:43)	<b>Z</b>
3. Installing Express.js (3:47)	<b>Z</b>
4. Adding Middleware (5:13)	<b>Z</b>
5. How Middleware Works (2:58)	
6. Express.js - Looking Behind the S	Scenes (3:42)
7. Handling Different Routes (4:59)	<b>Z</b>
8. Assignment - Express.js (Problem	u) (1:52)
9. Assignment - Express.js (Solution	u) (6:21)
10. Parsing Incoming Requests (8:00)	
11. Limiting Middleware Execution t	o POST Requests (1:48)
12. Using Express Router (8:04)	<b>Z</b>
13. Adding a 404 Error Page (2:30)	
14. Filtering Paths (3:38)	
15. Creating HTML Pages (5:09)	
16. Serving HTML Pages (7:19)	
17. Returning a 404 Page (2:00)	<b>Z</b>
18. Using a Helper Function for Navi	gation (3:37)
19. Styling our Pages (13:58)	<b>Z</b>

20. Serving Files Statically (7:49)	<b>✓</b>
21. Assignment - Navigation (Problem) (1:11)	~
22. Assignment - Navigation (Solution) (8:32)	~
23. Wrap Up (3:36)	<b>✓</b>
24. Useful Resources & Links	~

# **06-Working with Dynamic Content & Adding Templating Engines**

1. Module Introduction (2:31)	
2. Sharing Data Across Requests & Users (8:05) ✓	
3. Templating Engines - An Overview (4:40) ✓	
4. Installing & Implementing Pug (11:04)	
5. Outputting Dynamic Content (11:02)	
6. Converting HTML Files to Pug (5:55)	
7. Adding a Layout (5:35)	
8. Finishing the Pug Template (5:50)	
9. Working with Handlebars (5:08)	
10. Converting our Project to Handlebars (7:41) ✓	
11. Adding the Layout to Handlebars (8:41)	
12. Working with EJS (8:19)	
13. Working on the Layout with Partials (9:33)	
14. Wrap Up (3:46)	
15. Assignment - Templating Engines (Problem) (1:36)	
16. Assignment - Templating Engines (Solution) (25:02)	
17. Useful Resources & Links	

### Week 3

## **07-The Model View Controller (MVC)**

1.	Module Introduction (0:52)	<b>✓</b>
2.	What is the MVC? (2:48)	<b>✓</b>
3.	Adding Controllers (9:20)	<b>✓</b>
4.	Finishing the Controllers (2:37)	<b>✓</b>
5.	Adding a Product Model (8:05)	<b>✓</b>
6.	Storing Data in Files Via the Model (9:39)	<b>✓</b>
7.	Fetching Data from Files Via the Model (3:55)	<b>✓</b>
8.	Refactoring the File Storage Code (4:25)	<b>✓</b>
9.	Wrap Up (2:15)	<b>✓</b>
10.	Useful Resources & Links	<b>✓</b>

## **08-Optional: Enhancing the App**

1.	Module Introduction (1:21)	<b>✓</b>
2.	Creating the Shop Structure (5:34)	<b>✓</b>
3.	Working on the Navigation (2:49)	<b>✓</b>
4.	Registering the Routes (11:04)	<b>✓</b>
5.	Storing Product Data (5:15)	<b>✓</b>
6.	Displaying Product Data (3:02)	<b>✓</b>
7.	Editing & Deleting Products (4:47)	<b>✓</b>
8.	Adding Another Item (2:08)	<b>✓</b>
9.	Useful Resources & Links	<b>✓</b>

# **09-Dynamic Routes & Advanced Models**

1.	Module Introduction (1:07)	<b>✓</b>

2. Preparations (1:23)	<b>✓</b>
3. Adding the Product ID to the Path (4:34)	<b>✓</b>
4. Extracting Dynamic Params (4:32)	<b>✓</b>
5. Loading Product Detail Data (4:52)	~
6. Rendering the Product Detail View (5:26)	<b>✓</b>
7. Passing Data with POST Requests (7:19)	~
8. Adding a Cart Model (12:29)	<b>✓</b>
9. Using Query Params (7:54)	<b>✓</b>
10. Pre-Populating the Edit Product Page with Data (6:46)	<b>✓</b>
11. Linking to the Edit Page (2:20)	<b>✓</b>
12. Editing the Product Data (8:58)	<b>✓</b>
13. Adding the Product-Delete Functionality (5:34)	<b>✓</b>
14. Deleting Cart Items (8:11)	<b>✓</b>
15. Displaying Cart Items on the Cart Page (8:45)	<b>✓</b>
16. Deleting Cart Items (5:24)	<b>✓</b>
17. Fixing a Delete Product Bug (1:31)	<b>✓</b>
18. Wrap Up (1:46)	<b>✓</b>
19. Useful Resources & Links	<b>✓</b>

## **WEEK 04**

# 10-Working with NoSQL & Using MongoDB

1. Module Introduction (1:17)	~
2. What is MongoDB? (3:57)	~
3. Relations in NoSQL (3:58)	<b>✓</b>
4. Setting Up MongoDB (4:48)	<b>✓</b>

5.	Installing the MongoDB Driver (7:01)	<b>✓</b>
6.	Creating the Database Connection (3:25)	<b>✓</b>
7.	Finishing the Database Connection (4:21)	<b>✓</b>
8.	Using the Database Connection (5:14)	<b>✓</b>
9.	Creating Products (2:08)	<b>✓</b>
10.	Understanding the MongoDB Compass (2:38)	<b>✓</b>
11.	Fetching All Products (4:34)	<b>✓</b>
12.	Fetching a Single Product (7:45)	<b>✓</b>
13.	Making the "Edit" & "Delete" Buttons Work Again (2:21)	<b>✓</b>
14.	Working on the Product Model to Edit our Product (7:14)	<b>✓</b>
15.	Finishing the "Update Product" Code (3:57)	<b>✓</b>
16.	One Note About Updating Products (1:46)	<b>✓</b>
17.	Deleting Products (3:30)	<b>✓</b>
18.	Fixing the "Add Product" Functionality (1:28)	<b>✓</b>
19.	Creating New Users (7:00)	<b>✓</b>
20.	Storing the User in our Database (5:40)	<b>✓</b>
21.	Working on Cart Items & Orders (7:13)	<b>✓</b>
22.	Adding the "Add to Cart" Functionality (6:14)	<b>✓</b>
23.	Storing Multiple Products in the Cart (7:01)	<b>✓</b>
24.	Displaying the Cart Items (9:20)	<b>✓</b>
25.	Fixing a Bug (1:02)	<b>✓</b>
26.	Deleting Cart Items (4:02)	<b>✓</b>
27.	Adding an Order (4:36)	<b>✓</b>
28.	Adding Relational Order Data (6:21)	<b>✓</b>
29.	Getting Orders (3:20)	<b>✓</b>

30. Removing Deleted Items From the Cart (2:58)	<b>✓</b>
31. Wrap Up (2:19)	~
32. Useful Resources & Links	

# 11-Working with Mongoose

<ol> <li>Module Introduction (1:23)</li> <li>What is Mongoose? (2:04)</li> <li>Connecting to the MongoDB Server with Mongoose (4:47)</li> <li>Creating the Product Schema (6:01)</li> <li>Saving Data Through Mongoose (6:10)</li> <li>Fetching All Products (2:27)</li> <li>Fetching a Single Product (1:24)</li> <li>Updating Products (4:14)</li> <li>Deleting Products (1:19)</li> </ol>
3. Connecting to the MongoDB Server with Mongoose (4:47)  4. Creating the Product Schema (6:01)  5. Saving Data Through Mongoose (6:10)  6. Fetching All Products (2:27)  7. Fetching a Single Product (1:24)  8. Updating Products (4:14)
<ul> <li>(4:47)</li> <li>4. Creating the Product Schema (6:01)</li> <li>5. Saving Data Through Mongoose (6:10)</li> <li>6. Fetching All Products (2:27)</li> <li>7. Fetching a Single Product (1:24)</li> <li>8. Updating Products (4:14)</li> </ul>
<ul> <li>5. Saving Data Through Mongoose (6:10)</li> <li>6. Fetching All Products (2:27)</li> <li>7. Fetching a Single Product (1:24)</li> <li>8. Updating Products (4:14)</li> </ul>
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<ul> <li>7. Fetching a Single Product (1:24)</li> <li>8. Updating Products (4:14)</li> </ul>
8. Updating Products (4:14)
9. Deleting Products (1:19)
10. Adding and Using a User Model (6:36)
11. Using Relations in Mongoose (3:44)
12. One Important Thing About Fetching Relations (3:53)
13. Working on the Shopping Cart (5:25)
14. Loading the Cart (5:12)
15. Deleting Cart Items (2:45)
16. Creating & Getting Orders (9:56)
17. Storing All Order Related Data (1:52)
18. Clearing the Cart After Storing an Order (1:59)
19. Getting & Displaying the Orders (3:40)
20. Wrap Up (1:37)

21. Useful Resources & Links

