

Full-Stack Angular Development

This intermediate Full-Stack Angular Development training prepares learners to build, deploy, and maintain interactive web applications using Angular and the full MEAN stack (MongoDB, Express.js, Angular, Node.js). Master coding, testing, deployment, and data storage for scalable apps. Ideal for onboarding new app developers, team training, or as an Angular reference resource.

[CBT Nuggets course material](#) →

WEEK 1

Basic Angular Concepts and Syntax

165 min.

Introduction	1
Main Benefits of Angular	15
Create and Run an Angular App	18
Angular Project Structure	24

Angular Components

Overview	1
Introduction	1
Create and Display Angular Components	20
Insert Variables Into Component HTML	13
Introduction to Component Inputs	16

Data and Styling in Angular Applications

Overview	1
Introduction	1
Creating Custom Types	15
Adding Fake Data For Development	14
Adding Styles to Angular Components	23

WEEK 2

Basic Event Handling in Angular

151 min.

Overview	1
Introduction	1
Displaying Components in Different Containers	10
Handling Click Events	10
How is Angular's Event-Handling Different?	6
Adding Click-Handlers to Entire Components	25

Introduction to Component State

Overview	1
Introduction	1
Creating a Welcome Message	11
Showing and Hiding Elements With The ngIf Directive	9
Other Methods for Hiding Elements	12
Using State to Keep Track of Favorites	11

Angular Component State In-Depth

Overview	1
Introduction	1
Where Should We Put Application State?	21
Keeping Variables In Sync with Setters	10
Displaying Lists with the ngFor Directive	15

Create Reusable Components

Overview	1
----------	---

WEEK 3

155 min.

Introduction	1
Creating a Reusable Component	11
Displaying the Same Component with Different Data	18
Keeping Variables in Sync with Getters	11
Passing Functions as Inputs	13

Introduction to Angular Routing

Overview	1
Introduction	1

Adding Routing to an Application	14
Creating Page Components	8
URL Parameters	14
Linking Between Pages	11

Advanced Angular Routing

Overview	1
Introduction	1
Navigating Programmatically	17
Passing Multiple Functions as Inputs	15
Creating a 404 Page	10
Displaying 404 Pages Intentionally	6

WEEK 4

Local Data Persistence in Angular

159 min.

Overview	1
Introduction	1
Additional Routing Techniques	9
Persisting Data in LocalStorage	25
Automatically Persisting Member Variables	11

Advanced Data Persistence & Applications

Overview	1
Introduction	1
Persisting Data in SessionStorage	5
Persisting Data in Cookies	18
Sharing Data Between Pages	15
Adding Main Application Data to LocalStorage	12

Introduction to Angular Forms

Overview	1
Introduction	1
How Forms Used to Work	13
Creating A "New" List Item	13
Creating Two-Way Form Bindings	12
Adding Fields to Forms	17

WEEK 5

Advanced Forms and Reusability

153 min.

Overview	1
Introduction	1
Two-Way Bindings with ngModel	9
Creating a Reusable Form Component	10
Pre-Populating Form Values	26

Introduction to Angular Services

Overview	1
Introduction	1
What Are Angular Services?	8
Creating and Injecting Services	13
Loading Data from a Service	11
Storing Complex Logic in Services	15

Multi-Service Applications in Angular

Overview	1
Introduction	1
Basic CRUD Operations in Services	11
Loading Resources by ID in Services	7

Updating Resources in Services	6
Creating Resources in Services	6
Deleting Resources in Services	5
Creating Another Service	17

WEEK 6

Introduction to Redux

160 min.

Overview	1
Introduction	1
Basic Redux Concepts	12
Basic Application Setup	10
Creating Actions and Reducers	19
Reading Redux Values and Dispatching Actions	13

Advanced Redux Concepts

Overview	1
Introduction	1
Adding Types to a Redux App	10
Accessing Multiple Values in Redux	16
Creating Redux Selectors	22

Use Redux with Different Inputs

Overview	1
Introduction	1
Using MaterialUI Sliders with Redux	18
Converting Buttons to Sliders	13
Creating a Reusable Color Slider	18

WEEK 7

Build a Color-Mixer with Redux

157 min.

Overview	1
Introduction	1
Adding a "New Color" Input	11
Deleting Colors	8
Combining Hex Colors Using Selectors	21
Redux DevTools	8

Essentials of the MEAN Stack

Overview	1
Introduction	1
Basic MEAN Stack Structure	16
Front-end Setup	18
Back-end Setup	17

Angular Network Request Basics

Overview	1
Introduction	1
Create "Read" and "Create" Endpoints	19
Create "Update" and "Delete" Endpoints	8
Load Data with HttpClient and RxJS	14
Make "Update" and "Delete" Requests	8

WEEK 8

MEAN Stack Database Basics

155 min.

Overview	1
Introduction	1
Make Network Requests from Services	13

Basic MongoDB Queries	20
Convert Server Endpoints to use MongoDB	12

Angular Full-Stack Conversion: Loading Data

Overview	1
Introduction	1
Basic Full-stack Conversion Strategy	10
Full-stack Setup and File Structure	16
Basic "Read" Endpoints	12
Loading Data from the Server	14

Angular Full-Stack Conversion: Creating, Modifying, and Deleting Data

Overview	1
Introduction	1
Write "Create" Server Endpoints	11
Make "Create" Requests	9
Write "Delete" Server Endpoints	6
Make "Delete" Requests	8
Write "Update" Server Endpoints	6
Make "Update" Requests	9

WEEK 9

Angular Full-stack Conversion: Convert a Server to MongoDB

Overview	1
Introduction	1
Set Up A Mongo Database	9
Convert "Read" Endpoints to MongoDB	12
Convert "Create" Endpoints to MongoDB	11

Convert "Delete" Endpoints to MongoDB	7
Convert "Update" Endpoints to MongoDB	8

Firestore Auth Basics with Angular

Overview	1
Introduction	1
What is Firebase Auth?	15
Add Firebase Auth to Angular	9
Create Login and Home Pages	10
Log In and Log Out	9

Account Creation and Error Handling in Firebase

Overview	1
Introduction	1
Protect Pages from Unauthenticated Users	17
Auth Error Handling	12
Create New Accounts	15

Firestore Auth In Full-Stack Angular Apps

Overview	1
Introduction	1
Back-end Firebase Setup	20

WEEK 10

157 min.

Display Firebase Auth User Data	13
Store Extra User Data	12

MEAN Stack Endpoint Security with Firebase Auth

Overview	1
Introduction	1
Send and Verify Firebase Auth Tokens	15
Create an Edit Info Page	11
Create Services for Auth Logic	20

Add Firebase Auth to Existing Angular Apps

Overview	1
Introduction	1
Basic Front-end Setup	9
Add a Login Page	8
Add a Create Account Page	19
Encapsulate Firebase Auth in a Service	20

Use Firebase Auth to Support Multiple Users

Overview	1
Introduction	1
Protect Application Pages	8
Rethink Data Structure to Support Multiple Users	13

WEEK 11

161 min.

Load User Data and Allow Logging Out	11
Use the User's ID in Server Requests	14

Create and Delete Users In Existing MEAN Stack Apps

Overview	1
Introduction	1

Create New Users from the Front-end	20
Rethinking Our Create-Account Strategy	8
Create New Users from the Back-end	13
Delete User Accounts	9

Add Endpoint Security to Existing MEAN Stack Apps

Overview	1
Introduction	1
Endpoint Security Basics	10
Protect GET Endpoints	20
Protect Endpoints with Express Middleware	18

MEAN Stack Firebase Auth Best-Practices

Overview	1
Introduction	1
Refactor Front-End Auth-Token Logic	14
Make Authed Requests Automatically	15

WEEK 12

19 min.

Automatic Auth with POST, PUT, and DELETE Requests	18
--	----