

Complete Angular Developer Course Guide

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2. Bootstrapping Angular

The Angular CLI

- Angular CLI - <https://angular.io/cli>

Everything Else

- section-3-16-COMPLETE.zip

3. Optional: TypeScript

Installing TypeScript

- TypeScript - <https://www.typescriptlang.org/>

Variables

- Primitive Types - <https://www.typescriptlang.org/docs/handbook/2/everyday-types.html#the-primitives-string-number-and-boolean>

Why Decorators?

- TC39 Proposals - <https://github.com/tc39/proposals>

TypeScript Configuration

- TSConfig - <https://www.typescriptlang.org/tsconfig>

Writing Decorators

- Section-2-13-COMPLETE.zip

4. Component Fundamentals

Property Binding

- Dog Image - <https://picsum.photos/id/237/500/500>

Type Assertions

- Lorem Picsum - <https://picsum.photos/images>
- EventTarget Interface - https://microsoft.github.io/PowerBI-JavaScript/interfaces/_node_modules_typedoc_node_modules_typescript_lib_lib_dom_d_eventtarget.html

Input Aliases

- Style Guide - <https://angular.io/guide/styleguide#avoid-aliasing-inputs-and-outputs>

Emitting Events

- Prefix Guideline - <https://angular.io/guide/styleguide#dont-prefix-output-properties>

Discovering Lifecycle Hooks

- Lifecycle Hooks - <https://angular.io/guide/lifecycle-hooks>

Scoped CSS

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5. Transforming Content

Pipes Basic

- Pipes - <https://angular.io/api?type=pipe>

Angular Dev Tools

- Angular Devtools - <https://angular.io/guide/devtools>

Pipe Parameters

- Custom Format Options - <https://angular.io/api/common/DatePipe#custom-format-options>

Dealing with Numbers

- Currency Codes - https://en.wikipedia.org/wiki/ISO_4217

Debugging with Pipes

- JSON Pipe - <https://angular.io/api/common/JsonPipe>

Understanding Directives

- Directives - <https://angular.io/api?type=directive>

The ngIf Directive

- Shorthand Examples - <https://angular.io/guide/structural-directives#shorthand-examples>

The ngFor Directive

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6. Master Project: Component Design

Introduction to Master Project

- HTML Template.zip

What is Tailwind?

- TailwindCSS - <https://tailwindcss.com/>
- Purge CSS - <https://purgecss.com/>

Configuring Tailwind

- Tailwind Configuration - <https://tailwindcss.com/docs/configuration>

Loading Static Assets

- Autoplay Policy Changes - <https://developers.google.com/web/updates/2017/09/autoplay-policy-changes>

Creating a User Module

- Common Module - <https://angular.io/api/common/CommonModule>

Preventing the Default Behavior

- section-6-34-COMPLETE.zip

7. Master Project: Reactive Forms

Form Validation

- Validation Functions - <https://angular.io/api/forms/Validators>

Form Controller Status

- AbstractControl Class - <https://angular.io/api/forms/AbstractControl>

Validating Emails

- Email Validator - <https://angular.io/api/forms/Validators#email>

Validating Numbers

- Validators Min - <https://angular.io/api/forms/Validators#min>

Input Masking

- NGX Mask - <https://www.npmjs.com/package/ngx-mask>

Disabling Buttons

- FormGroup Class - <https://angular.io/api/forms/FormGroup>
- Tailwind States - <https://tailwindcss.com/docs/hover-focus-and-other-states>

Designing an Alert Component

- section-7-19-COMPLETE.zip

8. Master Project: Template Forms

Registering a New Form

- NgForm - <https://angular.io/api/forms/NgForm>

Two-way Binding

- NgModel - <https://angular.io/api/forms/NgModel>

Attribute Validation

- Constraint Validation - https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Constraint_validation

9. Master Project: Intro to RXJS

Introduction to RXJS

- section-9-1-STARTER.zip

Unsubscribing from Observables

- Subscription Object - <https://rxjs.dev/guide/subscription>

Declarative Programming with Operators

- RXJS Reference - <https://rxjs.dev/api>

The of and from Operators

- JSON Placeholder - <https://jsonplaceholder.typicode.com/>

Marble Diagram

- Map Operator - <https://rxjs.dev/api/operators/map>

Understanding Flattening Operators

- JSON Placeholder URL - <https://jsonplaceholder.typicode.com/todos/1>

Handling Errors

- section-9-23-COMLETEE.zip

10. Master Project: Authentication

Setting up Firebase

- Firebase - <https://firebase.google.com/>

Reviewing the Rules

- Firebase Rules - <https://firebase.google.com/docs/rules>

Installing AngularFire

- Firebase Web Setup - <https://firebase.google.com/docs/web/setup>
- AngularFire - <https://firebaseopensource.com/projects/angular/angularfire2/>

User Registration

- AngularFire Authentication - <https://github.com/angular/angularfire/blob/master/docs/auth/getting-started.md>

Handling the Response

- Authentication SDK - <https://firebase.google.com/docs/reference/js/firebase.auth.Auth>

Connecting the User with their Data

- Create Account Function - <https://firebase.google.com/docs/reference/js/auth#createuserwithemailandpassword>

Database Rules

- Firebase Request Auth - <https://firebase.google.com/docs/reference/rules/rules.firestore.Request#auth>

The Async Pipe

- Async Pipe - <https://angular.io/api/common/AsyncPipe>

Initializing Firebase First

- Firebase Installation - <https://firebase.google.com/docs/web/setup>

Setting up the Login

- signInWithEmailAndPassword - <https://firebase.google.com/docs/reference/js/firebase.auth.Auth.html#signinwithemailandpassword>

Sidebar: JSON Web Tokens

- JWT - <https://jwt.io/>
- Base64- <https://www.base64decode.org/>
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11. Master Project: Custom Validators

Validating Unique Emails

- AsyncValidator - <https://angular.io/api/forms/AsyncValidator>
- fetchSignInMethodsForEmail - <https://firebase.google.com/docs/reference/js/auth#fetchsigninmethodforemail>

Finalizing the Validator

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12. Master Project: Routing

Understanding Routing

- Angular Router - <https://angular.io/api/router>

Registering Routes

- Route - <https://angular.io/api/router/Route>

Active Links

- RouterLinkActive Directive - <https://angular.io/api/router/RouterLinkActive>

Forcing Redirection

- Router - <https://angular.io/api/router/Router>

Learning more about Query Parameters

- Navigate Function - <https://angular.io/api/router/Router#navigate>

13. Master Project: Uploading Files

Handling Files

- HTML5 Video - https://en.wikipedia.org/wiki/HTML5_video#Browser_support

Uploading Files with Firebase

- UUID - <https://www.npmjs.com/package/uuid>

Firebase Rules and Validation

- Firebase Secure Files - <https://firebase.google.com/docs/storage/security/secure-files>

Handling Errors and Successful Uploads

- Error Code - <https://firebase.google.com/docs/storage/web/handle-errors>

Fallback Upload

- Drag and Drop Support - <https://caniuse.com/dragndrop>

Redirection after Upload

- Document Reference - <https://firebase.google.com/docs/reference/node/firebase.firestore.DocumentReference>

Deleting a Clip from the Storage/Database

- Delete Files - <https://firebase.google.com/docs/storage/web/delete-files>
- Storage Security Rules - https://firebase.google.com/docs/firestore/security/rules-structure#granular_operations

Composite Indexes

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14. Master Project: WebAssembly & Rust

What is WebAssembly

- Figma and WebAssembly - <https://www.figma.com/blog/webassembly-cut-figmas-load-time-by-3x/>
- WebAssembly Languages - <https://github.com/appcypher/awesome-wasm-langs>

Getting Started with Rust

- Rust Installation Page- <https://www.rust-lang.org/tools/install>
- Rustup Book - <https://rust-lang.github.io/rustup/>
- Crates - <https://crates.io/>

Exploring the Starter Project

- Cargo Manifest File - <https://doc.rust-lang.org/cargo/reference/manifest.html>

Data Types

- Rust Data Types - <https://www.codingame.com/playgrounds/365/getting-started-with-rust/primitive-data-types>

Control Flow

- Operators and Symbols - <https://doc.rust-lang.org/book/appendix-02-operators.html>

Vectors

- section-14-10-COMPLETE.zip

Results

- Error Handling - <https://doc.rust-lang.org/book/ch09-00-error-handling.html>
- section-14-13-COMPLETE.zip

Installing Webpack

- Webpack - <https://webpack.js.org/>

Configuring Webpack

- rust-image-starter.zip

Reading Files

- File Reader Methods -

<https://developer.mozilla.org/en-US/docs/Web/API/FileReader#methods>

Compiling Rust with Webpack

- WASM Pack - <https://rustwasm.github.io/wasm-pack/>

Importing WebAssembly

- wasm-bindgen Crate - <https://crates.io/crates/wasm-bindgen>

Logging Files

- web-sys Crate - <https://crates.io/crates/web-sys>

Base64 Decoding

- Base64 Crate - <https://crates.io/crates/base64>

Loading an Image from Memory

- Image Crate - <https://crates.io/crates/image>

Grayscale an Image

- load_from_memory() Function - https://docs.rs/image/0.19.0/image/fn.load_from_memory.html

App Deployment

- Vercel - <https://vercel.com/>

15. Master Project: Processing Video with WebAssembly

Understanding FFmpeg

- FFmpeg - <https://www.ffmpeg.org/>
- FFmpeg WASM - <https://github.com/ffmpegwasm/ffmpeg.wasm>

Custom Asset Paths

- Node Glob - <https://github.com/isaacs/node-glob>

Initializing FFmpeg

- Material Icons - <https://fonts.google.com/icons>

- Tailwind Animations - <https://tailwindcss.com/docs/animation>

Generating a Screenshot

- FFmpeg - <https://www.ffmpeg.org/>

Deleting Screenshots

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16. Master Project: Playing Videos

Fixing Cross Origin Issues

- Gsutil - https://cloud.google.com/storage/docs/gsutil_install

Installing Videojs

- Videojs - <https://videojs.com/>

Copying Links to the Clipboard

- Clipboard API - <https://caniuse.com/clipboard>
- execCommand() - https://caniuse.com/mdn-api_document_execcommand

Lazy Loading Modules

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17. Master Project: Deployment

Production Budgets

- Configuring Budgets - <https://angular.io/guide/build#configuring-size-budgets>

Deploying an App with Vercel

- Vercel - <https://vercel.com>
- Project Configuration - <https://vercel.com/docs/cli#project-configuration>
- GitHub Desktop - <https://desktop.github.com/>
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18. Master Project: Testing

Understanding Karma and Jasmine

- Karma - <https://karma-runner.github.io/6.4/config/configuration-file.html>
- Karma Browsers - <http://karma-runner.github.io/6.4/config/browsers.html>

Writing a Sanity Test

- Jasmine Matchers - <https://jasmine.github.io/api/4.3/matchers>

Angular's Test Bed Utility

- TestBed Class - <https://angular.io/api/core/testing/TestBed>

Testing a Component's Instance

- Component Fixture - <https://angular.io/api/core/testing/ComponentFixture>

Installing Cypress

- Cypress - <https://www.cypress.io/>
- Protractor - <https://protractor.angular.io/>

Exploring Cypress

- Configuration File - <https://docs.cypress.io/guides/references/configuration#Configuration-File>

Testing the Video Player

- Chai - <https://www.chaijs.com/>
- jQuery - <https://jquery.com/>
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