

Angular Level 1 Certification

1. Understanding Angular
 - What is Angular?
 - Brief history and versions
 - Overview of Single Page Applications (SPA)
2. Setting Up the Development Environment
 - Installing Node.js and npm
 - Angular CLI installation and setup
 - Creating an Angular project
 - Exploring the Angular project structure
3. Introduction to TypeScript
 - Why TypeScript?
 - Basic types, arrays, and objects
 - Interfaces and classes
4. ES6+ Features Used in Angular
 - Let and Const
 - Arrow functions
 - Modules and their usage
 - Template literals
5. Components and Modules
 - Creating a new component
 - Understanding modules and components
 - Component templates, metadata, and data binding
6. Directives and Pipes
 - Built-in structural and attribute directives
 - Creating custom directives
 - Using and creating pipes for data transformation
7. Services and Dependency Injection
 - Why services?
 - Creating and injecting services
 - Singleton services and their scope
8. Communicating with Backend
 - HTTPClient Module
 - Making GET and POST requests
 - Handling observable data
 - Using async pipes
9. Understanding Routing in Angular
 - Configuring routes
 - Router outlet and router links
 - Route parameters
10. Advanced Routing Techniques
 - Lazy loading modules

- Guards and their types (AuthGuard, ResolveGuard)
11. Template-Driven Forms
 - Building a simple form
 - Form validation
 - Understanding ngModel
 12. Reactive Forms
 - Introduction to reactive forms
 - Form controls and form groups
 - FormArray and FormBuilder
 - Reactive forms validation
 13. Testing Angular Applications
 - Introduction to Jasmine and Karma
 - Writing unit tests for components and services
 - Debugging techniques
 14. Using Angular DevTools
 - Installing Angular DevTools
 - Exploring components, profiling change detection
 15. Final Project
 - Project: Building a Small Angular Application
 - Requirements and specifications
 - Design and development