100 Angular Interview Questions



Introduction to Angular

- 1. What is the main purpose of Angular?
- 2. What's the difference between AngularJS and Angular?
- 3. What is Angular Ivy, and how does it improve performance?
- 4. What is differential loading in Angular?
- 5. What is the purpose of Zone.js in Angular?
- 6. What is AOT (Ahead-of-Time) compilation in Angular?
- 7. What is JIT (Just-in-Time) compilation in Angular?
- 8. What are the advantages of AOT over JIT compilation?
- 9. How do you enable AOT compilation in Angular?

Angular Components & Modules

- 1. What are components and modules in Angular?
- 2. What are decorators in Angular?
- 3. What is metadata or annotations in Angular?
- 4. What is the importance of Angular component hooks/life cycles?
- 5. Explain Angular life cycle hooks in detail.
- 6. Differentiate between constructor and ngOnInit().
- 7. What is change detection in Angular?
- 8. How does Angular handle change detection?
- 9. What is OnPush change detection strategy?

Templates, Directives & Data Binding

- 1. What are templates in Angular?
- 2. What are directives in Angular and how many types of directives exist?
- 3. Explain data bindings and the different types.
- 4. What is a template reference variable?
- 5. What are entry components in Angular?
- 6. What is a Pure Pipe vs. an Impure Pipe?
- 7. What are pipes in Angular?
- 8. Can you give examples of inbuilt Angular pipes?
- 9. How do you write a custom pipe?

Dependency Injection & Services

- 1. How does dependency injection work in Angular?
- 2. What are services in Angular?
- 3. What is a singleton service in Angular?

Forms & Validation

- 1. What are template-driven forms in Angular?
- 2. What are reactive forms in Angular?
- 3. What are the key differences between template-driven and reactive forms?
- 4. How do you handle form validation in Angular?
- 5. What is FormBuilder in Angular?
- 6. How do you handle form submission in Angular?
- 7. How do you reset a form in Angular?
- 8. How do you handle conditional validation in Angular forms?
- 9. What are async validators in Angular forms?
- 10. How do you dynamically add form fields in Angular?

Routing & Navigation

- 1. Explain the importance of routing in Angular & how to implement it.
- 2. What is SPA and how do you implement it in Angular?
- 3. What is a router outlet in Angular?
- 4. What is routerLink and how is it used?
- 5. What is route guarding in Angular?
- 6. What are different types of route guards in Angular?
- 7. How do you implement route guards in Angular?
- 8. How do you pass data in Angular routes?
- 9. What is a wildcard route in Angular?
- 10. How do you handle route parameters in Angular?
- 11. What is canActivate and canDeactivate in Angular?
- 12. What is a resolver in Angular routing?

Lazy Loading & Optimization

- 1. What is lazy loading in Angular?
- 2. How do you implement lazy loading in Angular?
- 3. What is tree shaking in Angular?
- 4. How do you implement server-side rendering (SSR) in Angular?
- 5. What is Angular Universal?
- 6. What is Webpack and how does Angular use it?
- 7. What is Service Worker in Angular and how is it used?

HTTP & API Handling

- 1. What is HttpClient in Angular?
- 2. How do you make an HTTP GET request in Angular?
- 3. How do you make an HTTP POST request in Angular?
- 4. How do you handle HTTP errors in Angular?
- 5. How do you use interceptors for HTTP requests?
- 6. How do you use async/await with HttpClient in Angular?
- 7. What is the difference between HttpClient and Fetch API?
- 8. What are interceptors in Angular?
- 9. How do you implement interceptors?
- 10. What are some uses of interceptors, and can we provide multiple interceptors?

State Management & RxJS

- 1. What is RxJs and why is it needed?
- 2. What are observables and observers?
- 3. What is a stream in RxJs?
- 4. What is the use of subscribe in RxJs?
- 5. How do you unsubscribe from a stream?
- 6. What are operators in RxJs?
- 7. Where have you used RxJs in Angular?
- 8. Differentiate between RxJs and Promises.
- 9. How do you install RxJs?
- 10. Why is RxJs called push/reactive and not pull/imperative?
- 11. Name some RxJs operators.
- 12. What is the difference between BehaviorSubject and Subject in RxJS?

Performance Optimization & Miscellaneous

- 1. How can you optimize an Angular application's performance?
- 2. What is the need for Angular CLI?
- 3. Why do we need ViewChild and ViewChildren in Angular?
- 4. Explain ContentChild and ContentChildren
- 5. Differentiate between ViewChild, ViewChildren, ContentChild, and ContentChildren.
- 6. What is { static: true } in ViewChild?
- 7. How do you pass data between components?
- 8. How do you implement HTTP in Angular?
- 9. What is a wildcard route in Angular?
- 10. What is a resolver in Angular routing?

Performance Optimization & Miscellaneous

- 1. Why is the node_modules folder important?
- 2. What is package.json?
- 3. What is TypeScript?
- 4. What is Node.js?
- 5. What is NPM?
- 6. What is a singleton service in Angular?
- 7. What is content projection in Angular?
- 8. When would you use content projection?
- 9. Explain content projection slots in Angular.