

Angular Interview Preparation Roadmap (Beginner → Advanced)

Stage 1 – Core Angular Foundations (Beginner)

- Topic 1: Angular Basics – Components, templates, interpolation, directives (Coding: product list app, Q&A:: data binding).
- Topic 2: Modules & Bootstrapping – NgModule, imports/exports (Coding: feature module, Q&A:: forRoot vs forChild).
- Topic 3: Lifecycle Hooks – constructor, ngOnInit, ngOnDestroy (Coding: log lifecycle, Q&A:: constructor vs ngOnInit).
- Topic 4: Dependency Injection & Services – DI hierarchy, providers (Coding: service with API call, Q&A:: root vs module provider).
- Topic 5: TypeScript Essentials – Interfaces, generics, classes (Coding: generic array function, Q&A:: interface vs type).

Stage 2 – Intermediate Angular

- Topic 6: Forms – Template vs Reactive forms, validators (Coding: login form, Q&A:: custom validator).
- Topic 7: Routing – RouterModule, params, lazy loading (Coding: users route, Q&A:: forRoot vs forChild).
- Topic 8: RxJS Basics – Observables, Subjects, operators (Coding: debounce search, Q&A:: Subject vs BehaviorSubject).
- Topic 9: HTTP & Interceptors – HttpClient, error handling (Coding: JWT interceptor, Q&A:: retry failed requests).
- Topic 10: Guards & Security – CanActivate, CanDeactivate (Coding: AuthGuard, Q&A:: XSS prevention).

Stage 3 – Advanced Angular

- Topic 11: Change Detection – Default vs OnPush (Coding: optimize list with trackBy, Q&A:: markForCheck usage).
- Topic 12: State Management – NgRx basics (Coding: counter app, Q&A:: NgRx flow).
- Topic 13: Testing – Jasmine, TestBed, mocks (Coding: service test, Q&A:: fakeAsync vs async).
- Topic 14: Performance Optimization – Lazy loading, virtual scroll (Coding: CDK Virtual Scroll, Q&A:: reduce bundle size).
- Topic 15: Advanced Angular Features – Signals, standalone components (Coding: convert BehaviorSubject to Signals, Q&A:: signals vs observables).

Stage 4 – System Design + Senior Rounds

- Topic 16: Angular Architecture – Core/shared modules, monorepo (Coding: shared module, Q&A:: large project structure).
- Topic 17: Deployment & CI/CD – Angular build, environments (Coding: env config, Q&A:: ng build --prod).

- Topic 18: System Design Case Studies – Dashboard with auth & role-based access (Discussion-based).