Angular Interview Questions

Brighter future together







**Basic Level Angular Interview Questions**

Components

1. What is the component?
2. What are the life cycle hooks in components?
3. How to send data from Parent to Child?

Templates

1. What is interpolation?
2. What is data binding?
3. What is pipe? Name some built in pipes?
4. What is class and style binding

Directives

1. What are built in directives available ?
2. What is the Use of ngFor and ngIf?

Dependency Injection

1. What Dependency Injection?

Routing & Navigation

1. How to enable routing?
2. What is syntax for routing?
3. What is SPA (Single page application)?
4. How to provide a link to another page in html template?
5. How to navigate dynamically to path /page from ts(class)?

Forms

1. Which module do we need to include for using forms in app and where?
2. What are the types of forms ?
3. What is ngModel ?
4. What is formControl?
5. How to initialize reactive form?
6. How to initialize template driven form?
7. Difference between dirty and touched?

HTTP Client

1. How to consume an JSON REST api (server)?
2. Which service use for hit an api?
3. Difference between get and post?
4. What is a header?

Testing

1. What is testing?
2. What is Unit test?
3. What is Karma?
4. What is Jasmine?

Internationalization (i18n)

1. How to localize the app?

Animation

1. How to use transition in Angular?
2. Which module supports Animation?

Schematics

1. How to generate Component using cli?
2. What is angular cli?
3. How to add angular material?
4. How to make prod build?

RxJS

1. What is Observable?
2. How to unsubscribe Observable?

**Intermediate Level Angular Interview Questions**

Components

1. What is the difference between directive and the component?
2. Difference between ngOnChanges and ngDoCheck?
3. [How to send data from child to parent?](https://acharyaks90.medium.com/how-to-send-data-from-the-parent-to-child-component-in-angular-mostly-asked-interview-question-8931377d80a)
4. What is Change detection and type of change detection?
5. What is view encapsulation?
6. What is Shadow dom?
7. What is EventEmitter? Can we use it in service if yes then how to tell the use case?

Templates

1. Can we put maths expressions in interpolation?
2. What is event binding?
3. What is the difference between impure and pure pipe?
4. Can we apply pipe in ngFor ? How to get the length of the filtered result?
5. Make a groupby pipe?
6. What is property binding?
7. What is attribute binding?
8. What is a template reference variable? What are all the use cases?

Directives

1. What are types of directives available ?
2. Why \* (start) asterisk before ngFor ?
3. Can we use ngFor and ngIf on the same element?
4. Write syntax for custom directive ?
5. Difference between Attribute and structure directive?
6. What is ng template , ng container?
7. Where to use ngSwitch syntax ?

Dependency Injection

1. What is Injectable?
2. What is provided in types (root etc)?
3. Difference between public and private service injection?
4. What is a provider?
5. How to create multiple instances of a service (sandboxing)?

Routing & Navigation

1. What is codespliting?
2. What is lazy loading ?
3. How to get current route information?
4. What is a wildcard route?
5. How set display a 404 page?
6. How to do nesting routing?
7. What is the relative path?
8. Difference between query param and parm?
9. What is a route guard? Use of canactivate?
10. Difference location strategies ?
11. What activate route and snapshot route?
12. Difference between for root and for child ?

Forms

1. Difference between Reactive form and template driven form?
2. What is a control value accessor?
3. What is the use of a formArray ?
4. What is the use of formGroup?
5. In which form reactive or template driven form model is implicit?
6. How does data flow in both forms?
7. What is mutability of data model?
8. What is form validation? How to define custom validation on both forms?
9. How to put validation error in template driven form?
10. Difference between sync and async validator function?
11. What is abstract control?
12. How to put a validation class on the form element?
13. Difference between set and patch value?

HTTP Client

1. What is an http interceptor?
2. What are different options in request ?
3. What are different response type?
4. How to cancel any request?
5. How to handle multiple request hit one after another any once can come first or second etc?
6. What is JSONP?
7. How to read non json data?
8. How to handle errors?
9. How to retry a failed request?

Testing

1. What is code coverage? How to check it?
2. How to test services with multiple dependencies ?
3. What is spy object?
4. What is testbed ?
5. What is a component fixture?
6. How to do query in html dom in testing?
7. What is the use of detectChanges?
8. How to test async service?
9. How to test input and output ?
10. How to test routing?
11. How to test pipes?

Internationalization (i18n)

1. How to provide the translation files?
2. How to localize currency ?
3. How to localize time?

Animation

1. What is multiple transition state?
2. How to animate entering and leaving view?
3. What is complex animation sequence ?
4. What is stagger group and sequence?

Schematics

1. How to generate module with routing using cli
2. How to create component without spec file?

PWA and Service worker

1. What is PWA Progressive web app ?
2. What is service work?
3. Is Server Side render support service worker?
4. How make app aware new version is available?

RxJS

1. Explain the operator catchError,retry?
2. What is Of and from operator?
3. Explain switchmap?
4. Define Subject and its types with difference?
5. Difference between hot and cold observable?
6. Define unicasting and multicasting?
7. After an observable error will it get new value?

Security

1. How to keep your app secure?
2. How to bypass angular security?

Performance and optimization

1. How you optimize your app?
2. Difference between defer and async?
3. What is CDN?
4. How to make components lighter?
5. How many ngmodel we can put in single page?
6. What is tree shaking?

**Expert level Angular Interview Questions Part -1**

Components

1. [How is changing the CD strategy to onPush impact component?](https://acharyaks90.medium.com/how-is-changing-the-cd-strategy-from-default-to-onpush-impact-component-248d041bfb70)
2. How to make child component data two way data binding?
3. [What is the dynamic component?](https://acharyaks90.medium.com/what-is-the-dynamic-component-dynamic-loading-in-angular-3c98cd786397)
4. What is an angular element?
5. What is a component factory resolver?
6. In Parent to child component communication. Suppose an object have two properties only change in one property in parent, Will change reflect in the child component?

Like : — Employee = { name : ‘Anil’ , department:’Engineering’}

Templates

1. Explain Styling precedence ?
2. Difference between @Attribute() vs @Input()?
3. How to use svg file as templates?
4. Template type checking in custom directive?
5. Describe 3 Mode of template type checking?
6. Enlight the ngAfterContentChecked and ngAfterViewChecked?
7. Write code for custom pipe for change the string to title case? How impure pipe impact angular.
8. How pipe change detection works for primitive and references objects ?
9. What is use of Async pipe ?
10. Which have higher precedence between pipe and ternary operator ?
11. What is innerHtml? If we bind a string like

Title = ‘Template <script>alert(“evil never sleeps”)</script> Syntax’;

<p><span>”{{Title}}” title.</span></p>

will it bind?

12. How to made custom two way binding like ngModel?

13 . What happens if assign template local reference variable on ng-template?

Directives

1. What is template input variable?
2. Which Module need to import for using built in directives?
3. Is angular selector support parent child relationship ?
4. Explain Hostbinding, Hostlistener?
5. Explain ContentChildren and ViewChild ?
6. Write the syntax for ngClass use cases?
7. Tell the use case of ngModel Change ?
8. Explain the use of trackby?
9. How to host a directive without Dom?
10. What is ElementRef use?
11. How to stop/Deactivate the processing of directive or binding ?
12. How to create template fragments ?
13. What is template guard?

Dependency Injection

1. What is a provider token?
2. How to provide an alternative Class provider?
3. What is a factory provider?
4. What is a parameter decorator?
5. Making dependency option and search with a host?
6. How to alias class interface?
7. How to inject an object? syntax also?
8. What is the use of @Inject or How to supply a custom provider?

Routing & Navigation

1. What is the difference between canLoad and canActivate?
2. What is a router event ? name the any of ?
3. Differentiate the param and query param in lazyloading?
4. How to redirect any path ?
5. What does pathMatch signifies ?
6. What are auxiliary routes?
7. What is canResolve route guard?
8. What is the location strategy? Please enlighten the type also? Or There are two kind of Url one with hash one without hash compare both?
9. Explain the properties of the activated route?
10. How to use a scroll event in navigation?
11. Name the navigation event trigger when loading lazyload routes?

Forms

1. What form approaches are available ? Among them which is best and why?
2. In Which form of approach data model is immutable?
3. How does data flow differently in template and reactive forms?
4. What is benefit of ngForm Driective ?
5. Differentiate the pristine dirty touched ?
6. How to put custom validation in template driven forms?
7. What is use of remove Control ?
8. How to use Update Model?
9. How to show validation errors in dynamic template driven form and reactive forms ?
10. Write code for custom validation for reactive forms ?
11. What is cross field validation?
12. Implement async validator for template driven form?
13. How to compose dynamic form content?

**Expert level Angular Interview Questions Part -2**

HTTP Client

1. How to consume an JSON REST api (server)?
2. Which service is used for hitting an api?
3. Differentiate between get and post?
4. What is a header?
5. In Auth 2 how to manage token expire scenario by renew it using refresh token without impact of user experience?
6. Where do we put http params in the request ?
7. What are different type of response type available in angular?
8. What is role of observe in request ?
9. How get upload progress of file request ?
10. How t request a typed response?
11. How to read the full response?
12. How to make and consume a jsonp request?
13. How to request non json data ? like download a file.
14. Write code for interceptor ? also where do we need it to inject?
15. In provider array we use multi true what it does ?
16. How can we apply caching in request?
17. How to apply debouncing in request?
18. How you can secure the requests?
19. How to handle more than one request suppose need to get path of 100 of images in an array ?

Testing

1. Write the code for testing a service ?
2. Why we need before each?
3. Difference between equal to and tobe()?
4. Why we need fake service?
5. Testing without before each ?
6. How to test http service?
7. What is needed for component dom test?
8. Use of by.css
9. What is the debug element?
10. How to test attribute directive?
11. Explain tick , discard periodic task , component fixture auto detect?
12. Explain compilecomponent?
13. How replace meta data ?
14. How to reset the test environment?
15. Please enlist the component fixture methods?
16. What is isStable ?
17. What is listener in testing?
18. What is By.directive ?

Internationalization (i18n)

1. How to change the currency according to timezone?
2. Name the local package?
3. How to support the translation?
4. In which file we put localize configuration ?

Animation

1. Enlist the some animation functions we import from modules?
2. Write and animation code ?
3. Explain delay and easing?
4. What is trigger in animation Where we put the trigger?
5. What is use of animateChild ?
6. How to create reusable animation?
7. How to add animation in route transition?
8. How to add animation in ngFor for element for leaving and entering?

Schematics

1. How to make custom schematics?
2. How to add any third party library?
3. How to update the angular apps?
4. What is an angular dev kit ?
5. Can we run angular app without ng serve?

PWA and Service worker

1. How to support PWA in angular?
2. What are the benefits of service worker?
3. Which file contain service worker configuration?
4. What is app shell?

RxJS

1. Difference between Observable and Promise ?
2. What is next , error complete?
3. Difference between of and from ?
4. How to convert promise to Observable and vice-versa?
5. How to create observable?
6. List the operators ?
7. Explain the combineLatest, concat , zip, takeuntil debounceTime, DistinctUntil change, switchmap buffertime, tap and share?
8. Can we replace interval with observable if yes then how?
9. Make an observable from keystrokes ?

Security

1. How to prevent cross site scripting?
2. How to trust safe values?
3. What is CSP Content security policy?
4. What are all possible vulnerabilities ?
5. How we can audit an angular app?

**Expert level Angular Interview Questions Part -3**

Performance and optimization

1. How to support accessibility ?
2. How to check version of angular app?
3. How to update old angular third party libraries?
4. What is a lightweight injection token?
5. Step to deploy angular app?
6. How to configure differential loading?
7. What is AOT ?
8. What are the phases included in compilation ?
9. What is non null type assertion operator?
10. What is code folding?
11. What is ivy ?
12. How to disable type checking on template expression?
13. How to make various environment build like development , staging , UAT , prod ?
14. What is SSR ?
15. What is Angular language service?

Mix and Advance

1. What is annotation?
2. What is JIT?
3. What is module?
4. What is ngcc?
5. How handle NPM package dependencies?
6. What is platform?
7. What is polyfill?
8. What is subscriber?
9. What is view engine?
10. What is zone?
11. What is Bazel?
12. What is web worker? Is SSR support the it?
13. What is state function?
14. How Dynamically component can be created?
15. What is basere tag ? where we need to put it?
16. Define mapping rules for mapping custom element to DOM?
17. How to run angular change detection manually ?
18. In script tag we have async , defer and preload, prefech differentiate them?
19. How make anything draggable in angular?
20. How to remove ngAfterViewChangeExpression changes?
21. What is challenging work you have done in angular?
22. How to increase the speed of app?
23. What is ngModule?
24. If we refresh the page how manage the state of the app?
25. What is HMR? ( Hot Module Replacement )
26. Difference between get, post, put and delete?
27. What is a querylist ?
28. What is multi slot projection?
29. What is content projection?
30. What best to handling errors?
31. How to analyse the code?(code analyser)
32. What mean by uglification?
33. What is High order component?
34. What is webpack?
35. When we do ng serve who in background take care browser?
36. Difference between session storage and local storage?
37. Which are the main features of angular?
38. Enlist the steps to upgrade from AngularJS to Angular.