

1) Why were client-side frameworks like Angular introduced?

It was designed by Google to enable developers to create dynamic and interesting web applications. Using this framework, developers can build front-end-based apps without using any other plugins or frameworks.

2)How does an Angular application work?

An Angular Application is nothing more than a tree of Components. At the root of that tree, the top level Component is the application itself. And that's what the browser will render when “booting” (a.k.a bootstrapping) the app. One of the great things about Components is that they're composable.

3) What are some of the advantages of Angular over other frameworks?

An Angular framework **makes it easy to develop web applications**. Combining dependency injection, declarative templates, end-to-end tooling, and integrated best practices, it solves almost all the challenges when creating a web app.

4)What are the advantages of Angular over React?

Angular supports dependency injection, which allows it to have distinct lifecycles for different stores. Instead, React does not entirely support dependency injection, having a global state for all the components, which does not comply with data immutability and the concept of functional programming.

5) List out differences between AngularJS and Angular?

AngularJS is based on JavaScript, while Angular is based on TypeScript. There are several similarities between these two front-end, open-source frameworks that are used to create dynamic web applications and SPAs.

6)How are Angular expressions different from JavaScript expressions?

No.	Key	AngularJS	Angular
	Architecture	AngularJS works on MVC, Model View Controller Design. Here View shows the information present in the model and controller processes the information.	Angular uses components and directives. Here component is directive with a template.
	Language	AngularJS code is written in javascript.	Angular code is written in typescript.
	Mobile	AngularJS code is not mobile friendly.	Angular developed applications are mobile browser friendly.
	Expression syntax	{{}} are used to bind data between view and model. Special methods, ng-bind can also be used to do the same.	() and [] attributes are used to bind data between view and model.
	Dependency Injection	DI is not used.	Hierarchical DI system is used in Angular.
	Routing	@routeProvider.when, then are used to provide routing information.	@Route configuration is used to define routing information.
	Management	AngularJS project is difficult to manage with increasing size of the source code.	Angular code is better structured, is easy to create and manage bigger applications.

7)What are Single Page Applications (SPA)?

An SPA (Single-page application) is a web app implementation that loads only a single web document, and then updates the body content of that single document via JavaScript APIs such as [XMLHttpRequest](#) and [Fetch](#) when different content is to be shown. **Gmail, Paypal.**

8)What are templates in Angular?

A template is a form of HTML that tells Angular how to render the component.

Views are typically organized hierarchically, allowing you to modify or show and hide entire UI sections or pages as a unit. The template immediately associated with a component defines that component's host view.

9).What are directives in Angular?

Directives are defined as **classes that can add new behavior to the elements in the template or modify existing behavior**. The purpose of Directives in Angular is to maneuver the DOM, be it by adding new elements to DOM or removing elements and even changing the appearance of the DOM elements.

10) Explain Components, Modules and Services in Angular

Components ---- interact with the .html file of the component. A component should present properties and methods for data binding to mediate between the view and the application logic.\

Modules ---**Module** in Angular refers to a place where you can group the components, directives, pipes, and services, which are related to the application.

Services ---we can access methods and properties across other components in the entire project.

11)What is the scope?

The scope is **the binding part between the HTML (view) and the JavaScript (controller)**. The scope is an object with the available properties and methods. The scope is available for both the view and the controller

12)What is data binding in Angular?

Data binding in AngularJS is the synchronization between the model and the view. When data in the model changes, the view reflects the change, and when data in the view changes, the model is updated as well.

13)What is two way data binding in Angular?

Two-way data binding refers to **sharing data between a component class and its template**. If you change data in one place, it will automatically reflate at the other end. For example, if you change the value of the input box, then it will also update the value of the attached property in a component class.

14) What are Decorators and their types in Angular?

A **decorator** is a function that adds metadata to a class, its members, or its method arguments. A decorator is just a function that gives you access to the target that needs to be decorated.

- Class decorators like @Component, @NgModule
- Property decorators like @Input and @Output
- Method decorators like @HostListener · Parameter decorators like @Injectable

6)What are annotations in Angular ?

Annotations: These are hard-coded language feature. Annotations are only metadata set on the class that is used to reflect the metadata library. When user annotates a class, the compiler creates an attribute on that class called **annotations**, stores an **annotation** array in it, then tries to instantiate an object with the same name as the annotation, passing the metadata into the constructor.

`@ComponentAnnotation`