What two types of compilation does Angular use

With AOT, your code is compiled before App downloaded in Browser. With **JIT**, your code is compiled at runtime in the browser.

An Angular application consists largely of components and their HTML templates. Before the browser can render the application, the components and templates must be converted to executable JavaScript by the Angular compiler.

There is actually only one Angular compiler. The difference between AOT and JIT is a matter of timing and tooling. There are two types of compilation Angular 4 provides.

* **Just-in-time (JIT) compilation:** This is a standard development approach which compiles our Typescript and html files in the browser at runtime, as the application loads. It is great but has disadvantages. Views take longer to render because of the in-browser compilation step. App size increases as it contains angular compiler and other library code that won’t actually need.
* **Ahead-of-time (AOT) compilation:** With AOT, the compiler runs at the build time and the browser downloads only the pre compiled version of the application. The browser loads executable code so it can render the application immediately, without waiting to compile the app first. This compilation is better than JIT because of Fast rendering, smaller application size, security and detect template errors earlier.

What is a best practice to do when using observables

Unsubscribe because of memory leaks

Difference between directive and component

Directives allow us to attach behavior to elements in the DOM, for example, doing something on mouse over or click. In Angular, a Directive decoraor (@Directive) is used to mark a class as an Angular directive and provides additional metadata that determines how the directive should be processed. Below are the metadata properties of a directive.

**A Component** is a directive with a template. So we should use a Component whenever we want reusable set of DOM elements with behaviors of UI. And we should use a Directive whenever we want reusable behavior to supplement the DOM.

**What is Template reference variables?**

A template reference variable (#var) is a reference to a DOM element within a template. We use hash symbol (#) to declare a reference variable in a template.

What’s the difference between CanLoad and CanActivate

**canActivate is** used to prevent unauthorized users from accessing certain routes. ...**canLoad is** used to prevent the application from loading entire modules lazily if the user **is** not authorized to do so.

difference between observable and promise