**AngularJS** is by far the most popular JavaScript framework available today for creating web applications. And now **Angular 2** and TypeScript are bringing true object oriented web development to the mainstream, in a syntax that is strikingly close to Java 8.

**AngularJS** (commonly referred to as "**Angular.js**" or "**AngularJS 1.X**") is a JavaScript-based [open-source](https://en.wikipedia.org/wiki/Open-source_software) front-end [web application framework](https://en.wikipedia.org/wiki/Web_application_framework) mainly maintained by [Google](https://en.wikipedia.org/wiki/Google) and by a community of individuals and corporations to address many of the challenges encountered in developing [single-page applications](https://en.wikipedia.org/wiki/Single-page_application). The JavaScript components complement [Apache Cordova](https://en.wikipedia.org/wiki/Apache_Cordova), the framework used for developing cross-platform mobile apps. It aims to simplify both the development and the [testing](https://en.wikipedia.org/wiki/Software_testing) of such applications by providing a framework for client-side [model–view–controller](https://en.wikipedia.org/wiki/Model%E2%80%93view%E2%80%93controller) (MVC) and [model–view–viewmodel](https://en.wikipedia.org/wiki/Model_View_ViewModel) (MVVM) architectures, along with components commonly used in [rich Internet applications](https://en.wikipedia.org/wiki/Rich_Internet_application). In 2014, the original AngularJS team began working on [Angular (Application Platform)](https://en.wikipedia.org/wiki/Angular_(Application_Platform)).

AngularJS is used on the websites of [Wolfram Alpha](https://en.wikipedia.org/wiki/Wolfram_Alpha), [NBC](https://en.wikipedia.org/wiki/NBC), [Walgreens](https://en.wikipedia.org/wiki/Walgreens), [Intel](https://en.wikipedia.org/wiki/Intel), [Sprint](https://en.wikipedia.org/wiki/Sprint_Nextel), [ABC News](https://en.wikipedia.org/wiki/ABC_News), and approximately 12,000 other sites out of 1 million tested in October 2016.[[3]](https://en.wikipedia.org/wiki/AngularJS#cite_note-3) AngularJS is the 10th most starred project of all time on GitHub.[[4]](https://en.wikipedia.org/wiki/AngularJS#cite_note-4)

AngularJS is the frontend part of the [MEAN stack](https://en.wikipedia.org/wiki/MEAN_(software_bundle)), consisting of [**M**ongoDB](https://en.wikipedia.org/wiki/MongoDB) database, [**E**xpress.js](https://en.wikipedia.org/wiki/Express.js) web application server framework, **A**ngular.js itself, and [**N**ode.js](https://en.wikipedia.org/wiki/Node.js) server runtime environment.

[Angular 2](https://teamgaslight.com/blog/a-sneak-peek-at-angular-2) is component based. Components combine concepts that we are already familiar with from AngularJS. The Angular 2 Component combines the AngularJS Directive, Controller, and Scope. My article will attempt to make you more comfortable with components by comparing them to what you already know from AngularJS.

In Angular 2, “everything is a component.” Components are the main way we build and specify elements and logic on the page, through both custom elements *and* attributes that add functionality to our existing components.

AngularJS is built on the belief that [declarative programming](https://en.wikipedia.org/wiki/Declarative_programming) should be used to create [user interfaces](https://en.wikipedia.org/wiki/User_interface) and connect [software components](https://en.wikipedia.org/wiki/Software_component), while [imperative programming](https://en.wikipedia.org/wiki/Imperative_programming) is better suited to defining an application's [business logic](https://en.wikipedia.org/wiki/Business_logic).[[5]](https://en.wikipedia.org/wiki/AngularJS#cite_note-5) The framework adapts and extends traditional HTML to present dynamic content through two-way data-binding that allows for the automatic synchronization of models and views. As a result, AngularJS de-emphasizes explicit DOM manipulation with the goal of improving testability and performance.

The AngularJS framework works by first reading the [HTML](https://en.wikipedia.org/wiki/HTML) page, which has embedded into it additional custom [tag attributes](https://en.wikipedia.org/wiki/HTML_attribute). Angular interprets those attributes as [directives](https://en.wikipedia.org/wiki/Directive_(programming)) to bind input or output parts of the page to a model that is represented by standard [JavaScript](https://en.wikipedia.org/wiki/JavaScript) [variables](https://en.wikipedia.org/wiki/Variable_(computer_science)). The values of those JavaScript variables can be manually set within the code, or retrieved from static or dynamic [JSON](https://en.wikipedia.org/wiki/JSON) resources.

Angular 2 was built with simplicity in mind. The team removed a number of recipes of Angular 1 that made us think “Why are we doing this?” (if you want to know what has been removed, I suggest you to take a look at this video titled [Angular 2.0 Core session by Igor and Tobias](https://www.youtube.com/watch?v=gNmWybAyBHI)). Now the framework is made of a small set of building blocks and some conventions to be followed.

Angular 2 is still in alpha at the time of this writing, so the framework and the resources around it are still raw. They’ll go through a number of changes and will get better by the time it will be ready for production.

There is a great number of seed projects to get started with Angular 2 and TypeScript. I think that [this one by Elad Katz](https://github.com/EladRK/angular-starter) could be a good starting point to do some practice. To start, if you want to follow along with this tutorial, clone this repository. Then, follow the instructions mentioned in the readme file to install and run the seed project