What is Angular?

Angular is a JavaScript (actually a TypeScript based open-source full-stack web application) framework which makes you able to create reactive Single Page Applications (SPAs). Angular is completely based on components. It consists of several components which forms a tree structure with parent and child components. Angular's versions beyond 2+ are generally known as Angular only. The very first version Angular 1.0 is known as AngularJS.

"Angular is a complete rewrite of AngularJS by the same team that built AngularJS."

What is Single Page Application (SPA)?

A single page application is a web application or a website which provides users a very fluid, reactive and fast experience similar to a desktop application. It contains menu, buttons and blocks on a single page and when a user clicks on any of them; it dynamically rewrites the current page rather than loading entire new pages from a server. That's the reason behind its reactive fast speed.

Angular Features

A list of most important features and benefits of Angular:

- 1) Angular supports multiple platforms: Angular is a cross platform language. It supports multiple platforms. You can build different types of apps by using Angular.
- 2) **Desktop applications:** Angular facilitates you to create desktop installed apps on different types of operating systems i.e. Windows, Mac or Linux by using the same Angular methods which we use for creating web and native apps.

- 3) **Progressive web applications:** Progressive web applications are the most common apps which are built with Angular. Angular provides modern web platform capabilities to deliver high performance, offline, and zero-step installation apps.
- 4) **High Speed, Ultimate Performance**: Angular is amazingly fast and provides a great performance due to the following reasons:
- a) Universal support: Angular can be used as a front-end web development tool for the programming languages like Node.js, .Net, PHP, Java Struts and Spring and other servers for near-instant rendering in just HTML and CSS. It also optimizes the website for better SEO.
- **b)** Code splitting: Angular apps are fast and loads quickly with the new Component Router, which delivers automatic code-splitting so users only load code required to render the view they request.
- c) Code generation: Angular makes your templates in highly optimized code for today's JavaScript virtual machines which gives the benefits of hand-written code.
- **5) Productivity:** Angular provides a better productivity due to its simple and powerful template syntax, command line tools and popular editors and IDEs.
- a) Powerful templates: Angular provides simple and powerful template syntax to create UI view quickly.
- **b) IDEs:** Angular provides intelligent code completion, instant errors, and other feedback in popular editors and IDEs.
- c) Angular CLI: Angular CLI provides command line tools start building fast, add components and tests, and then instantly deploy.