Why should you hire an Angular developer?

Besides JavaScript's capabilities to build interactive and scalable applications, the reason behind the presence of frameworks is that they assist developers in providing the right tools to create applications. At the same time, it also helps to define how the application must be designed, a code to be structured and much more. As the client-side UI components tend to become more and more complex over the years, the client-side frameworks such as React.js, Angular.js, knockout.js, Vue.js, Node.js, etc. started to gain popularity and dominate over the course of the application development.

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About Angular:

One of the most popular JavaScript frameworks is the Angular (formerly, AngularJS) framework. According to a Stack Overflow 2020 survey, Angular is

the third-most popularly used web framework. Released first in 2010, it primarily focused on developing Single Page Applications (SPAs) - at the time when the popularity of SPAs was growing, which in turn rose the popularity of the Angular framework too. It can be used for creating efficient and robust Single Page Applications - right from developing the application to optimizing enterprise-level complex SPAs.

HTML is a great choice when we need to declare static content but to declare dynamic views in a web application, we need to rely on Angular JS. Angularjs lets you extend the HTML (vocabulary) with custom attributes and elements. Therefore, it uses the HTML's syntax to express the components clearly and concisely.

Features:

1. **Document, Object, Model (DOM):** Angular behaves like a regular DOM, i.e. it updates the entire HTML page until it reaches the data to be updated. In case, if there are 100+ updates in a web page, instead of updating all the changes one by one, Angular updates the entire page.

2. **Controller:** The controller is in charge of the behaviour behind the DOM elements. You need not update DOM, register callbacks (which clutters your code) or track changes in the model as Angular lets you to express the behaviour in a most convenient and easy-to-read manner.

3. **Directives:** One of the powerful and striking features of Angular is the Directives. It allows the developer to create new syntax in HTML (generally, HTML is document-centric) that are specific to the developing application and project requirements.

4. **Data binding:** It follows a two-way data binding, i.e. any changes in the UI state (View) will be reflected in the corresponding Model state, and similarly, any changes in the Model state will be reflected in the

corresponding UI state. This two-way data binding in Angular is very useful to eliminate manipulating HTML DOM pragmatically as it is cumbersome and error-prone.

5. **Plain old JavaScript Object (POJO):** Since the Angular models use the plain old JavaScript objects, you need not wrap the model in accessors methods (by inheriting from the proprietary types which in turn makes your code free of boilerplate - easy to re-use, test and maintain.

6. **TypeScript:** A superset of JavaScript, and using which the Angular framework is written. By providing a better syntactic structure, it makes the codebase easier to understand and maintain. It can be installed as an npm package.

What can we build using Angular?

Written in TypeScript and maintained by Google, Angular framework is designed to build web, native desktop and mobile applications. Further, Angular provides advanced capabilities for developing mobile apps, internationalization, animation, server-side rendering, and much more as discussed below.

- **Reusable components:** Generally, the components are the ones that help you to hide CSS, complex DOM structure and behaviour. In Angular, using directives, you can create custom and reusable components that enable you to concentrate more on how the application looks and what it does.

- **Forms & validation:** Client-side form validation is the pillar behind fostering a great user experience. With Angular, you need only to write fewer codes and can declare the validation rules of the forms. To create such custom form controls and hassle-free validation experience, the forms in Angular are built upon the standard HTML forms.

- **Deep Linking:** By default, Round trip applications automatically facilitate the users with the benefit of deep linking, i.e. to reflect users where they are in the app, the current residing address. This deep linking feature comes handy when a user needs to bookmark and email links to locations within the application, but when it comes to AJAX apps, such a feature is absent. With Angular, you need not worry about the deep linking feature as it combines this feature with desktop-app like behaviour.

- **Internationalization (i18n):** It prepares the application to be available for the international audience through built-in pipes to display numbers and currencies in local format; and marking up text, plural expressions and alternate text for translation. Later, it uses the stemming directives via CLI to make the application available in all locales.

- **Server communication:** With Angular built-in services on top of XHL (as well as for several other backends) and third-party libraries, retrieving data from the server and modifying/returning the result (using Promises) is made much easier.

- **Dependency Injection (DI):** The dependency injection, in a way, is what forms the core of Angular. It allows a class to receive dependencies from another class which is needed by the class to perform its function. Rather creating dependencies on its own, the class can use the dependencies from the external source. This coding pattern (the DI) considerably improves the efficiency and modularity of Angular applications.

- **Testing:** Angular is designed by keeping testing in mind, and thereby it comes pre-bundled with mocks and behaviour-view separation. The capability of end-to-end scenarios runner allows to understand the inner working of Angular and at the same time avoids test flakiness. Further, Angular uses the Jasmine framework that enables various functionalities to run different test cases and uses Karma as the task- runner for the test cases.

Types of projects built/powered with Angular:

With Angular, you can build sophisticated and dynamic sites and applications like e-commerce apps, calculators, games, tutorials, forms, native desktop apps and so forth which can be served by any technologies such as PHP, Java, Node. NET, etc. and deployed to any environment. Some of the most popular companies that use Angular Framework are Google, Nike, Forbes, HBO, Sony, AIESEC, Upwork, etc. The following are the types of projects that can be built using Angular.

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1. **Progressive web apps**

   With the growing popularity of PWAs, Google equipped the built-in PWA support in Angular 5, and the new CLI feature in Angular 6 enables you to perform the seamless transformation from web apps into progressive web apps.

2. **Enterprise web apps**

   Since Angular is written in TypeScript, it has the ability to build large-scale projects as it comes with autocompletion, navigation features, advanced refactoring and much more.

3. Dynamic web apps

The main objective of Angular is to build Single Page Applications, and thereby, it comes with a wide range of tools and technologies needed to develop and optimize SPAs.

Some of the popular websites and applications that are built using Angular are as follows.

- Netflix.com - yet another online streaming platform including videos, movies and tv series.
- YouTube for Sony PlayStation3 - the largest online platform to watch and share videos.
- Weather.com - a platform to provide weather reports across the world.
- GoodFilms.com - a mobile application to find ratings and reviews of the movies.
- Freelancer.com & Upwork - online job marketplaces to find potential freelancers.
- Angularjs.org - a platform dedicated to the learning of AngularJS
- Jetblue.com
- Wikiwand.com - a redesigning of wikipedia to promote rich interaction between the website and users.
- Istockphoto.com - a medium to purchase photos, photo clips and videos.

To know more about what are the other applications that are built using Angular framework, go to https://www.madewithangular.com/ Need to build one of the above-mentioned project types or custom applications? Connect with our team to receive instant support and recruitment of a skilful Angular developer.

Angular: Why & Where it is helpful

Before exploring in what ways and functionalities Angular help create and develop applications, let us consider the following question. Is JavaScript ideal for creating Single Page Applications that require modularity, testability and other such features? Apparently, the answer is NO, and this is where the JavaScripts' libraries and frameworks play its parts. With the help of the JavaScript library such as jQuery and frameworks like React, Angular and Node.js, one can overcome these limitations of JavaScript.

Now that we have cleared the way for why we do use frameworks, let's dive deep into the reasons to choose Angular from other frameworks. The alternatives of Angular frameworks merely abstracts the shortcomings of HTML (or CSS & JavaScript). In reality, no other frameworks except Angular addresses the root cause of the HTML's misfit with dynamic views. As mentioned previously, Angular using its *directives* adds new constructs to HTML and thereby, highly reduces the mismatch between the static document and dynamic application.

i) Especially in accessibility:

According to the accessibility evaluation conducted by WebAIM in February 2020 of the home pages for the top 1 million websites and the additional interior pages for over 100,000 sites, **" 98.1% of home pages had detectable WCAG2 failures"**. The above fact ensures the failure of the application development to value accessibility. When an application is to be built/developed via Angular, such accessibility issues and the failure to meet the conformance can be completely eliminated. Angular provides high-quality components, CDK (Components

Development Kit) and various tools to improve user accessibility drastically. Some of them are listed below.

1. A mix-in, *cdk-high-contrast* for high-contrast users.
2. A *LiveAnnouncer* for visually impaired users.
3. Usage of native elements with proper semantic tags.
4. Update availability with title and meta services.
5. *ListKeyManager* for maintaining keyboard navigation
6. Inclusion of Codelyzer and accessibility rules.

In order to know more about the available tools and techniques in Angular to increase user accessibility, visit https://material.angular.io/cdk/a11y/overview

ii) Benefits of using Angular:

● Actively maintained (since it's maintained by Google)
● A single framework for multiple platforms
● Decoupled components
● To write less code (need not to reinvent the wheel)
● Easy bootstrapping the application
● Fully extensible and works well with other libraries
● Simplified Unit testing
● Control over the automated tests (in initialization process)
● Improved code readability

Thus with Angular, you can bring structure and consistency to the overall development of web applications, and it highly contributes when it comes to application's scalability and maintainability. Now that we have decoded the use cases of Angular Framework, you now know why you need to choose/not to choose a competent Angular developer. Got your answer! But worried about where to find the right one, contact Starkflow to start immediate hiring of the Angular developer as per your specification and requirements.