



## Angular Js

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### ABSTRACT

Science gateways provide user-centric views to cyber infrastructure resources, simplifying usage and enabling a richer user experience. To enable the goals of a science gateway and the communities of scientists it supports, gateway developers need to be able to spend more time on designing and developing the user experience and less time on wrestling with the underlying technology (such as HTML5, CSS, and JavaScript). In this seminar, we describe our experiences using Twitter Bootstrap and Angular JS frameworks to address this balance between design and implementation, empowering developers to create better styled and easily maintainable websites.

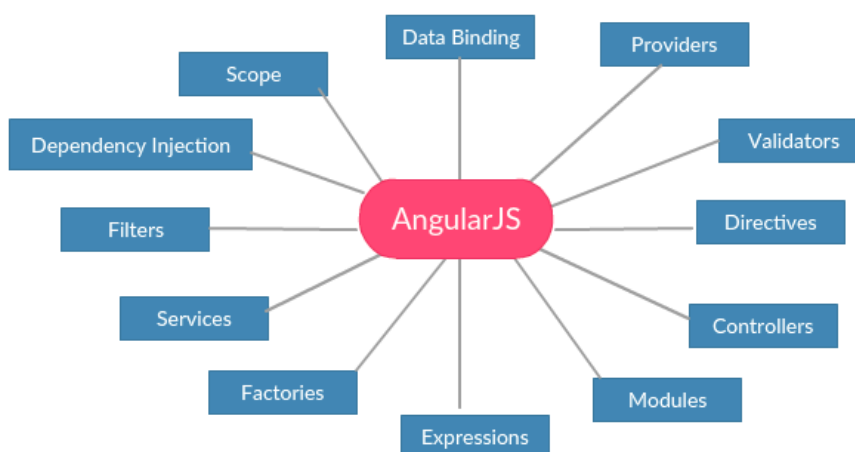
### 1. INTRODUCTION

Angular Js is a Structured, javaScript Framework Used for Dynamic Single page Application. Being a framework it uses code templates written in HTML in order to perform particular function or command. The data binding and dependency functionalities of Angular JS saves time invested in writing lengthy codes.

AngularJS is a structural framework for dynamic web applications. It lets you use HTML as your template language and lets you extend HTML's syntax to express your application components clearly and succinctly. Its data binding and dependency injection eliminate much of the code you currently have to write. And it all happens within the browser, making it an ideal partner with any server technology. It was originally developed by Misko Hevery and Adam Abrons.

HTML is great for declaring static documents, but it falters when we try to use it for declaring dynamic views in web-applications. AngularJS lets you extend HTML vocabulary for your application. The resulting environment is extraordinarily expressive, readable, and quick to develop.

### 2. IMPORTANT PARTS OF ANGULAR



(<https://s1.o7planning.com/en/11791/images/24569763.png>)

- **Controller:-**These are JavaScript functions bound to a particular scope.
- **Services:-**AngularJS comes with several built-in services such as \$http to make a XMLHttpRequests. These are singleton objects which are instantiated only once in app.

- **Filters:**-These select a subset of items from an array and returns a new array.
- **Directives:**-Directives are markers on DOM elements such as elements, attributes, css, and more. These can be used to create custom HTML tags that serve as new, custom widgets. AngularJS has built-in directives such as ngBind, ngModel etc.
- **Templates:**-These are the rendered view with information from the controller and model. These can be a single file (such as index.html) or multiple views in one page using partials.
- **Routing:**-It is concept of switching views.
- **Model View Whatever:**-MVW is a design pattern for dividing an application into different parts called Model, View, and Controller, each with distinct responsibilities. AngularJS does not implement MVC in the traditional sense, but rather something closer to MVVM (Model-View-ViewModel). The Angular JS team refers it humorously as Model View Whatever.
- **Deep Linking:** Deep linking allows you to encode the state of application in the URL so that it can be bookmarked. The application can then be restored from the URL to the same state.
- **Dependency Injection:** AngularJS has a built-in dependency injection subsystem that helps the developer to create, understand, and test the applications easily.

### 3. UNDERSTANDING PIPES

Pipes are simple functions to use in template expressions to accept an input value and return a transformed value. Pipes are useful because you can use them throughout your application, while only declaring each pipe once. For example, you would use a pipe to show a date as April 15, 1988 rather than the raw string format.

#### *Built-In-Pipes*

The Following Are Built in pipes for Data Formatting

- **DatePipe:** Formats a date value according to locale rules.
- **UpperCasePipe:** Transforms text to all upper case.
- **LowerCasePipe:** Transforms text to all lower case.
- **CurrencyPipe:** Transforms a number to a currency string, formatted according to locale rules.
- **DecimalPipe:** Transforms a number into a string with a decimal point, formatted according to locale rules.
- **PercentPipe:** Transforms a number to a percentage string, formatted according to locale rules.

### 4. EXAMPLE OF ANGULAR JS

There is The Source Code

```
<!DOCTYPE html>
<html>
<head>
  <title>First AngularJS Application</title>
  <script src="~/Scripts/angular.js"></script>
</head>
<body ng-app >
  <h1>First AngularJS Application</h1>  Enter Numbers to Multiply:
  <input type="text" ng-model="Num1" /> x <input type="text" ng-model="Num2" />  = <span>{{Num1 * Num2}}</span>
</body>
</html>
```

## First AngularJS Application

Enter Numbers to Multiply:  x  = 60

(<https://www.tutorialsteacher.com/Content/images/ng/first-ng-app-ui.png>)

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## 5. CONCLUSION

AngularJS can do everything that jQuery does and much more, yet is roughly equivalent in download size. It is easy to both write and run unit tests and end-to-end tests for AngularJS applications. Dependency management is effortless and intuitive. Binding dynamic data to your views is straightforward and powerful. Directives, routing, services, validation, resources, animation and localization - are equally thought out and useful tools. AngularJS is a solid foundation for building testable web applications that scale [1-7]

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## 6. FUTURE SCOPE

Angular JS is one of the outstanding frameworks at present.

It is expected that there is going to be significant growth in the field of Web applications and Web development in the coming days. Most of the Job portal sites in India have stated that many companies are looking for a Developer with knowledge in Angular JS frameworks.

It is also stated that, In the IT field, the Angular2 Version is used predominantly by the developers. Hence, this is one of the reasons for the scope of Angular JS.

AngularJS Course in Chennai helps to learn the perfect framework to develop new dynamic web applications. Companies ranging from small, medium, and large scale are using Angular JS frameworks to support their projects. The Job opportunities and the scope of Angular JS Developers are high and one can enhance their career by joining Angular JS Training and learn the course professionally.

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## References

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