



Presented by  
Subhash EP



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Technology Series

AngularJS

04



**ANGULARJS**  
by Google®

# Course Agenda – Introduction

- 01
  - AngularJS core concepts
  - Two-way binding
- 02
  - Routing basics
  - Templating basics
  - Validations introduction
  - Directives concepts
  - What is dependency injection
- 03
  - Development environment
  - Chrome
  - Chrome plugins for AngularJS – Batarang, ng-Inspector
  - Sublime Text
  - Angular seed project
  - Anatomy of Angular Project
  - MVW, MVC, MVVM

# Course Agenda – Structuring AngularJS

- 01
  - Modules
  - Built-in
  - Own modules
  - Best practices
- 02
  - Controllers
  - Scope
- 03
  - From a simple HTML page to a complex AngularJS app
  - Ng-prefix
  - Expressions
  - Adding Logic
  - Properties
  - Functions
  - Nesting
  - Dependency Injection and controllers

# Course Agenda – Client Side

- 04
  - Events
  - Services
- 05
  - Form element
  - Controls
  - Form Validations

# Course Agenda – Routing

- 06
  - Views
  - Routing
  - Factories
  - Providers

# Course Agenda – Let us go deeper

- 07
  - AJAX
  - \$http
  - Data binding
  - Two-way Data Binding
  - Simple Page Applications
- 08
  - Directives
  - More on DI

# Agenda Validation

# Built-in Directives for Validation

- **ng-maxlength:** Validates the maximum allowable characters in a field.
- **ng-minlength:** Validates the minimum allowable characters in a field.
- **ng-required:** Marks the fields that are mandatory.
- **ng-pattern:** Validates a field against a given regex (regular expression).

# Form Status - \$invalid

- The \$invalid property of the form
  - is set to true
  - if at least one field in the form is invalid

# Agenda Routing

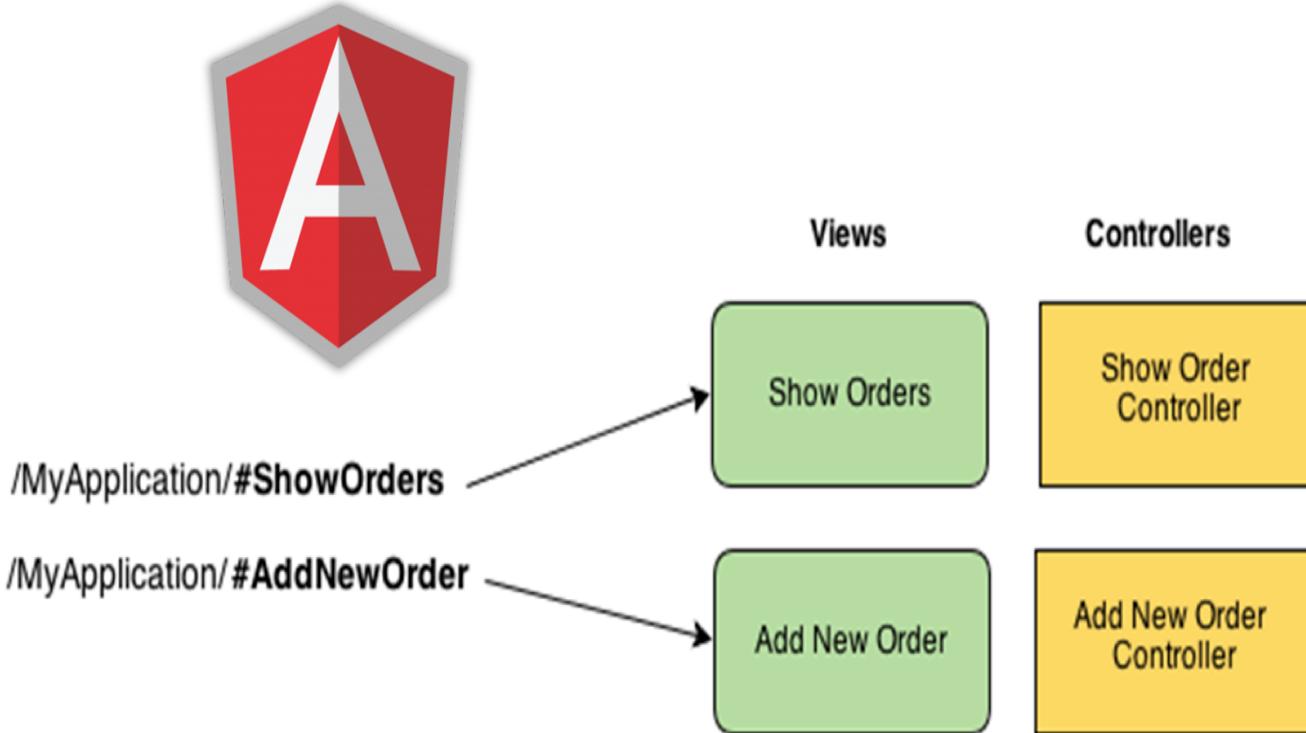
# Agenda Routing

06

Views  
Routing

# Creating Routes in AngularJS

- Routes, Templates and Controllers



# Agenda Routing

06

Factories  
Providers

# Providers (1)

- 4 types
  - Factory
  - Service
  - Value
  - Provider

# Providers - Factory

- We define a function that returns an object to which we have attached methods and properties that will be accessible by factory users later
- This object is available everywhere in the module in which the factory was defined via Dependency Injection

# Factory example (1) – defining the factory

```
module.factory('factory_id', function() {  
    return {  
        functionname: function() {  
            return "this is a function";  
        },  
        anotherfunction: function() {  
            // make a request and get data from backend  
            return data;  
        }  
    };  
});
```

## Factory example (2) – using the factory

```
Module.controller('ControllerName', function  
    ControllerName($scope, factory_id) {  
  
    $scope.methodname = function() {  
  
        factory_id.functionname();  
  
    }  
  
});
```

# Providers - Service

- You define a function in which additional functions and properties are defined via the this keyword

# Service example (1) - defining a service

```
module.service('service_name', function() {  
    this.function_name = function() {  
        return "this is a function's result";  
    };  
    this.anotherfunction = function() {  
        // make a request to backend  
        // and fetch data  
        return data;  
    };  
});
```

## Service example (2) - using a service in a controller

```
Module.controller('ControllerName', function  
    ControllerName($scope, service_name) {  
        $scope.methodname = function() {  
            service_name.function_name();  
        }  
    });
```

# Providers - value

- Similar to constants
- Could be used to store configuration properties

# Value example (1) - defining a value

```
module.value('value_name', 'value');
```

## Value example (2) - using a value in a controller

```
Module.controller('ControllerName', function  
    ControllerName($scope, value_name) {  
        $scope.methodname = function() {  
            if (value_name == '1') {  
                // do something based on  
                // specific value of the constant  
            }  
        }  
    }  
});
```

# Providers - provider

- Define \$get method in a function that returns the object to be injected
- The object can have various properties and methods similar to the object returned by factory

# Provider example (1) - defining a provider

```
module.provider('provider_name', function() {  
    this.$get = function() {  
        return {  
            function_name: function() {  
            },  
            another_function: function() {  
            }  
        }  
    }  
});
```

## Provider example (2) - Using a provider

```
Module.controller('ControllerName', function  
    ControllerName($scope, provider_name) {  
        $scope.methodname = function() {  
            provider_name.function_name();  
        }  
    });
```

# That's all



## End of Session

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