<https://www.tutorialspoint.com/angularjs/angularjs_interview_questions.htm>

<https://www.codementor.io/angularjs/tutorial/angularjs-interview-questions-sample-answers>

**What is AngularJS?**

AngularJS is a framework to build large scale and high performance web application while keeping them as easy-to-maintain.

Features:

AngularJS is open source

AngularJS is a powerful JavaScript based development framework to create RICH Internet Application

AngularJS provides developers options to write client side application (using JavaScript) in a clean MVC (Model View Controller) way

Application written in AngularJS is cross-browser compliant. AngularJS automatically handles JavaScript code suitable for each browser.

**What are the basic steps to unit test an AngularJS filter?**

1. Inject the module that contains the filter.

2. Provide any mocks that the filter relies on.

3. Get an instance of the filter using $filter('yourFilterName').

4. Assert your expectations.

**What should be the maximum number of concurrent “watches”? Bonus: How would you keep an eye on that number?**

To reduce memory consumption and improve performance it is a good idea to limit the number of watches on a page to 2,000. A utility called ng-stats can help track your watch count and digest cycles.

**How do you share data between controllers?**

Create an AngularJS service that will hold the data and inject it inside of the controllers.

However, there are couple of other ways to implement data sharing between controllers, like:

– Using events

– Using $parent, nextSibling, controllerAs, etc. to directly access the controllers

– Using the $rootScope to add the data on (not a good practice)

**What is the difference between ng-show/ng-hide and ng-if directives?**

ng-show/ng-hide will always insert the DOM element, but will display/hide it based on the condition. ng-if will not insert the DOM element until the condition is not fulfilled.

ng-if is better when we needed the DOM to be loaded conditionally, as it will help load page bit faster compared to ng-show/ng-hide.

**What is a digest cycle in AngularJS?**

In each digest cycle Angular compares the old and the new version of the scope model values. The digest cycle is triggered automatically. We can also use $apply() if we want to trigger the digest cycle manually.

**Where should we implement the DOM manipulation in AngularJS?**

In the directives. DOM Manipulations should not exist in controllers, services or anywhere else but in directives.

**Is it a good or bad practice to use AngularJS together with jQuery?**

It is definitely a bad practice. We need to stay away from jQuery and try to realize the solution with an AngularJS approach.

**If you were to migrate from Angular 1.4 to Angular 1.5, what is the main thing that would need refactoring?**

Changing .directive to .component to adapt to the new Angular 1.5 components

**How would you specify that a scope variable should have one-time binding only?**

By using “::” in front of it. This allows the check if the candidate is aware of the available variable bindings in AngularJS.

**What is the difference between one-way binding and two-way binding?**

– One way binding implies that the scope variable in the html will be set to the first value its model is bound to (i.e. assigned to)

– Two way binding implies that the scope variable will change it’s value everytime its model is assigned to a different value

**Explain how $scope.$apply() works**

$scope.$apply re-evaluates all the declared ng-models and applies the change to any that have been altered (i.e. assigned to a new value)

Explanation: $scope.$apply() is one of the core angular functions that should never be used explicitly, it forces the angular engine to run on all the watched variables and all external variables and apply the changes on their values

**What directive would you use to hide elements from the HTML DOM by removing them from that DOM not changing their styling?**

The ngIf Directive, when applied to an element, will remove that element from the DOM if it’s condition is false.

**What makes the angular.copy() method so powerful?**

It creates a deep copy of the variable.

**What is the role of services in AngularJS and name any services made available by default?**

AngularJS Services can be created using a factory method or a service method.

An AngularJS service allows developing of business logic without depending on the View logic which will work with it.

AngularJS Services help create reusable components.

Ex: $http, $log

**When creating a directive, it can be used in several different ways in the view. Which ways for using a directive do you know? How do you define the way your directive will be used?**

When you create a directive, it can be used as an attribute, element or class name.

The restrict option is typically set to:

‘A’ – only matches attribute name

‘E’ – only matches element name

‘C’ – only matches class name

**When should you use an attribute versus an element?**

Use an element when you are creating a component that is in control of the template. Use an attribute when you are decorating an existing element with new functionality.

**How do you reset a $timeout, $interval(), and disable a $watch()?**

To reset a timeout and/or $interval, assign the result of the function to a variable and then call the .cancel() function.

var customTimeout = $timeout(function () {

// arbitrary code

}, 55);

$timeout.cancel(customTimeout);

**Explain what is a $scope in AngularJS**

Scope is an object that refers to the application model. It is an execution context for expressions.

Scope acts like a bridge between view and model.

**What are Directives?**

Directives are markers on a DOM element (such as an attribute, element name, comment or CSS class) that tell AngularJS’s HTML compiler ($compile) to attach a specified behavior to that DOM element (e.g. via event listeners), or even to transform the DOM element and its children. Angular comes with a set of these directives built-in, like ngBind, ngModel, and ngClass.

**What is DDO Directive Definition Object?**

DDO is an object used while creating a custome directive.

**What is a singleton pattern and where we can find it in Angularjs?**

Is a great pattern that restricts the use of a class more than once. We can find singleton pattern in angular in dependency injection and in the services.

**What is an interceptor? What are common uses of it?**

An interceptor is a middleware code where all the $http requests go through.

**How would you validate a text input field for a twitter username, including the @ symbol?**

You would use the ngPattern directive to perform a regex match that matches Twitter usernames

**How would you implement application-wide exception handling in your Angular app?**

Angular has a built-in error handler service called $exceptionHandler which can easily be overridden

**How do you hide an HTML element via a button click in AngularJS?**

You can do this by using the ng-hide directive

<div ng-controller="MyCtrl">

<button ng-click="hide()">Hide element</button>

<p ng-hide="isHide">Hello World!</p>

</div>

function MyCtrl($scope){

$scope.isHide = false;

$scope.hide = function(){

$scope.isHide = true;

}

}

**How do you disable a button depending on a checkbox’s state?**

We can use the **ng-disabled** directive and bind its condition to the checkbox’s state.

<label><input type="checkbox" ng-model="checked"/>Disable Button</label>

<button ng-disabled="checked">Select me</button>

**What is data binding in AngularJS?**

Data binding is the automatic synchronization of data between model and view components. ng-model directive is used in data binding.

**What are the controllers in AngularJS?**

Controllers are JavaScript functions that are bound to a particular scope. They are the prime actors in AngularJS framework and carry functions to operate on data and decide which view is to be updated to show the updated model based data

**What are the filters in AngularJS?**

Filters select a subset of items from an array and return a new array. Filters are used to show filtered items from a list of items based on defined criteria.

**Explain templates in AngularJS.**

Templates are the rendered view with information from the controller and model. These can be a single file (like index.html) or multiple views in one page using "partials".

**What is routing in AngularJS?**

It is concept of switching views. AngularJS based controller decides which view to render based on the business logic.

**What is deep linking in AngularJS?**

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.

**What are the advantages of AngularJS?**

AngularJS provides capability to create Single Page Application in a very clean and maintainable way.

AngularJS provides data binding capability to HTML thus giving user a rich and responsive experience.

AngularJS code is unit testable.

AngularJS uses dependency injection and make use of separation of concerns.

AngularJS provides reusable components.

With AngularJS, developer writes less code and gets more functionality.

AngularJS applications can run on all major browsers and smart phones including Android and iOS based phones/tablets.

**Explain ng-repeat directive.**

ng-repeat directive repeats html elements for each item in a collection.

**What is use of $routeProvider in AngularJS?**

$routeProvider is the key service which set the configuration of urls, maps them with the corresponding html page or ng-template, and attaches a controller with the same.

**What is $rootScope?**

Scope is a special JavaScript object which plays the role of joining controller with the views. Scope contains the model data. In controllers, model data is accessed via $scope object. $rootScope is the parent of all of the scope variables.

**What is factory method?**

Using factory method, we first define a factory and then assign method to it.

var mainApp = angular.module("mainApp", []);

mainApp.factory('MathService', function() {

var factory = {};

factory.multiply = function(a, b) {

return a \* b

}

return factory;

});

**What are the differences between service and factory methods?**

factory method is used to define a factory which can later be used to create services as and when required whereas service method is used to create a service whose purpose is to do some defined task.

**Which components can be injected as a dependency in AngularJS?**

AngularJS provides a supreme Dependency Injection mechanism. It provides following core components which can be injected into each other as dependencies.

Value, factory, service, provider, constant

**What is provider?**

provider is used by AngularJS internally to create services, factory etc. during config phase(phase during which AngularJS bootstraps itself).