

Week 2

Quiz 10

1. In the following snippets of code, the 'lowered' variable ends up with the exactly the same value: 1 / 1 point

Snippet #1:


```
1 var output = $filter('lowercase');
2 var lowered = output("GIVE ME COOKIES NOW!");
```

Snippet #2:

```
1 var lowered = $filter('lowercase')("GIVE ME COOKIES NOW!");
```

☐ True

☐ False

 **Correct**
The \$filter service **produces** a function that the input to be filtered can be passed to.

2. Assuming value is a .23, what will the following snippet of code produce? 1 / 1 point

```
1 {{ value | currency : '%' : 3 }}
```

☐ It will produce an error.

☐ 23

☐ \$.23%

☒ %0.230


☐ %.230

Quiz 11

1. The name of the function that implements the filter factory function must contain the word "Factory" 1 / 1 point

☐ True

☒ False


 **Correct**
Correct. The name of that function doesn't matter.

2. Assuming 'CustomFilterFactory' function is properly defined, the following is a valid filter declaration: 1 / 1 point

```
1 angular.module('app', [])
2 .filter('custom filter', CustomFilterFactory);
3
```

☐ True

☒ False

 **Correct**
The string name 'custom filter' has a space in it and thus is not a valid AngularJS expression identifier.

3. Given the following filter declaration:

1 / 1 point

```
1 angular.module('app', [])
2   .filter('hello', CustomFilterFactory);
3
```

What is the correct way to inject it into a controller function 'Ctrl'?

☐

```
1 Ctrl.$inject = ['hello'];
2 function Ctrl (hello) {
3   ...
4 }
```

☐

```
1 Ctrl.$inject = ['hello'];
2 function Ctrl ('hello') {
3   ...
4 }
```

☒

```
1 Ctrl.$inject = ['helloFilter'];
2 function Ctrl (helloFilter) {
3   ...
4 }
```

☐

```
1 Ctrl.$inject = ['helloFilter'];
2 function Ctrl ('helloFilter') {
3   ...
4 }
```

Quiz 12

1. If one of the watchers detected a change, what's the least number of times that the Digest Loop will run in total?

1 / 1 point

- ☐ 1
- ☒ 2
- ☐ At least once.
- ☐ 8

✓ Correct

Correct. It needs to run a 2nd time to verify nothing else changed as a result of the detected change.

Quiz 13

1. How many watchers does Angular setup for the following snippet of code?

1 / 1 point

```
1 <input type="text" ng-model="value">
2 <div>{{ value + '!'}}</div>
3 <button ng-click="getValue()">Get Value</button>
4
```

☐ 0

☐ 1

☒ 2

☐ 3

☐ 4

✓ Correct

Correct. ng-model causes 1. Interpolation of {{ value + '!'}} causes another. You would think that since it's the same property, Angular wouldn't create another watcher. However, interpolations *always* create another watch. The prime example of why is the + "!" part. It needs a separate watcher because it's not simply a matter of that property. Inside of a interpolation, you can have operations performed, so another watcher that handles those operations and redisplay the newly created results is needed. The button's ng-click doesn't cause any. So, final answer is 2.

Quiz 14

1. One-time binding improves performance because it never sets up an Angular watch that the Digest Cycle needs to execute.

1 / 1 point

☐ True

☒ False

✓ Correct

Yes! It **does** set up a watch, but it removes it right after the value is assigned for the first time.

2. How many watches remain after the user clicks the button, considering this snippet:

1 / 1 point

```
1 <div>{{ ::value }}</div>
2 <button ng-click="value = 3">Get Value</button>
```

☒ 0

☐ 1

☐ 2

✓ Correct

Correct. After clicking the button, the watch for 'value' will be removed.

Quiz 15

1. Assuming 'items' is an array of objects like the following:

1 / 1 point

```
1 {  
2   name: 'Yaakov',  
3   occupation: 'Professional Cookie Eater'  
4 }
```

Identify invalid code below.

☐

```
1 <div ng-repeat="item in items">  
2   name: {{ item.name }} <br>  
3   occupation: {{ item.occupation }}  
4 </div>
```

☐

```
1 <div ng-repeat="person in items">  
2   name: {{ person.name }} <br>  
3   occupation: {{ person.occupation }}  
4 </div>
```

☒

```
1 <div ng-repeat="item in items">  
2   name: {{ items.item.name }} <br>  
3   occupation: {{ items.item.occupation }}  
4 </div>
```

☐

```
1 <div ng-repeat="item in items | filter: 'Yaakov'">  
2   name: {{ item.name }} <br>  
3   occupation: {{ item.occupation }}  
4 </div>
```

☐

```
1 <div ng-repeat="item in items">  
2   {{ $index }} - name: {{ item.name }} <br>  
3   occupation: {{ item.occupation }}
```

Quiz 16

1. Given the following code snippet, what will be the output of the statement on line 6.

1 / 1 point

```
1 var student1 = {  
2   message: "I LOVE this course!"  
3 };  
4  
5 var student2 = Object.create(student1);  
6 console.log(student2.message);
```

- ☐ undefined
- ☐ empty string or ""
- ☒ I LOVE this course!
- ☐ Uncaught ReferenceError: message is not defined

✓ Correct

The message property is inherited from 'student1' through Prototypal Inheritance.

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2. Given the following code snippet, what will be the output of the statement on line 11.

1 / 1 point

```
1  var student1 = {  
2    message: "I LOVE this course!"  
3  };  
4  
5  var student2 = Object.create(student1);  
6  student2.getMessage = function () {  
7    this.message = "Student 1 was paid off by Yaakov to say that!";  
8    return this.message;  
9  };  
10 var coverUp = student2.getMessage();  
11 console.log(student2.message);
```

- ☐ I LOVE this course!
- ☐ undefined
- ☒ Student 1 was paid off by Yaakov to say that!

✓ **Correct**

After calling the method 'getMessage', student2 object got its own 'message' property which overshadowed the parent object's 'message' property... Plus, student 1 was NOT paid off by Yaakov. 😊

3. Given the following function, how must this function be called such that the output of the function is an object with the property name whose value is "Yaakov"?

1 / 1 point

```
1  function Person(name) {  
2    this.name = name;  
3  }
```

- ☐ 1 var p = Person("Yaakov");
- ☐ 1 var p = new Object(Person, "Yaakov");
- ☒ 1 var p = new Person("Yaakov");
- ☐ 1 var p = new Object("Yaakov");

✓ **Correct**

The new keyword is needed to the Javascript engine will know to treat this as a function constructor call and assign 'this' to reference the newly created object.

Quiz 17

1. True or false: given the following code snippet, the code on line 3 causes the Javascript engine to go up the prototype chain.

1 / 1 point

```
1 <div ng-controller="Controller1 as ctrl1">
2   <div ng-controller="Controller2 as ctrl2">
3     {{ ctrl1.name }}
4   </div>
5 </div>
```

- ☒ True
- ☐ False



Correct

'ctrl1' is a property on the parent scope, so it does not directly show up in the child scope of the inner controller.

Quiz 18

1. In the following code snippet, the CustomService function will be treated as a function constructor by the AngularJS framework.

1 / 1 point

```
1 angular.module("MyApp")
2 .service('CustomService', CustomService);
3 ...
4 ...
```

- ☒ True
- ☐ False



Correct

Yes, Angular will instantiate CustomService using 'new CustomService' type of statement.

2. What is a Singleton?

1 / 1 point

- ☐ AngularJS component that can't find its soulmate. 😞
- ☐ It's a Design Pattern that is a central place for producing objects.
- ☒ It's a Design Pattern that restricts the object to always having a single instance.
- ☐ It's a Design Pattern used exclusively for server-side programming

Quiz 19

1. When creating a service with the `.factory()` method, it is ultimately the AngularJS framework that creates the function/object that is the service.

1 / 1 point

- ☐ True
- ☒ False



Correct

Correct. It is YOU, the developer, who must instantiate either an object or create a function as part of the implementation of the factory.

2. The `.factory()` method is limited to producing only Singleton Services. It can't simply produce some object we want to use in our application.

1 / 1 point

- ☐ True
- ☒ False



Correct

Correct. The whole point of a `.factory()` method is that it can produce *whatever* you need. It's a factory! Just order a "widget" and it'll be made for you. 😊

Quiz 20

1. The function passed into `angular.module(...).config(MyFunction)` is guaranteed to run before services, factories, or controllers are created.

1 / 1 point

- ☒ True
- ☐ False



Correct

Correct. That's where you can configure service providers to configure your custom service for the rest of the life of the web app.

2. Fill in:

1 / 1 point

To configure a service, it must be injected into the function passed into the `.config()` function with the extra string " 1 " appended to the 2 .

☐ 1: Config

2: Module name

☐ 1: Provider

2: Name of the function the project was declared with

☒ 1: Provider

2: String name the provider was declared with. (passed into `.provider` as the first argument)



Correct

Quiz 21

1. The ng-if="value" directive inserts "display: none" on the element it's declared on if the 'value' evaluates to 'false', hiding the element.

1 / 1 point

☐ True

☒ False

✓ **Correct**

No, ng-show would do that. ng-if simply removes the element from the DOM.