

## Quiz Submissions - CS571 Fall 2021: Web Technologies Exam 2



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### Attempt 1

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### Submission View

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### 1St Half Course Questions

#### Question 1

2 / 2 points

[2 Points] A drawback of the eval() function is its vulnerability.

- ✓ ☐ True  
☐ False

#### Question 2

2 / 2 points

[2 Points] Select all statements that are TRUE of the <!DOCTYPE> declaration. Select all that apply.

- ✓ ☐ The <!DOCTYPE> declaration must only appear once
- ✓ ☐ The <!DOCTYPE> declaration for HTML5 is
- ```
<!DOCTYPE html>
```
- ✓ ☐ The <!DOCTYPE> declaration is case sensitive.
- ✓ ☐ The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly

#### Question 3

2 / 2 points

[2 Points] Consider the following example from w3schools.com.

```
<!DOCTYPE html>  
<html>  
<body>
```

```
<h2 class="example">A heading with class="example"</h2>
<p class="example">A paragraph with class="example".</p>

<p>Click the button to add a background color to the first element in
the document with class="example".</p>

<button onclick="myFunction()">Try it</button>

<script>
function myFunction() {
  document.querySelector(".example").style.backgroundColor = "red";
}
</script>

</body>
</html>
```

What happens when one clicks the "Try it" button?

- ☒ Adds red background color to the heading with text *A heading with class="example"*
- ☐ Adds red background color to the paragraph with text *A paragraph with class="example"*.
- ☐ Adds red background color to both the header and the paragraph

#### Question 4

2 / 2 points

[2 Points] HTTP Strict-Transport-Security (HSTS) is a security feature that disallows insecure communication.

- ☒ True
- ☐ False

#### Question 5

2 / 2 points

[2 Points] CSS describes how HTML elements are to be displayed on screen, paper, or in other media.

- ☒ a) True
- ☐ b) False

#### Question 6

2 / 2 points

[2 Points] Consider the following Python code:

---

```
>>> word = 'Python'
```

```
>>> word[-2]
```

---

What gets printed?

- ☐ 'n'
- ☐ 'y'
- ✓ ☒ 'o'

### Question 7

2 / 2 points

[2 Points] Select all statements that are true of JavaScript variables and identifiers. Select all that apply.

- ✓ ☒ Identifiers can be short names (like x and y) or more descriptive names (age, sum, totalVolume)
- ✓ ☒ JavaScript variables are containers for storing data values
- ✓ ☒ JavaScript identifiers are case-sensitive
- ✓ ☒ All JavaScript **variables** must be **identified** with **unique names**
- ✓ ☒ Unique variable names are called **identifiers**

### REST Questions

### Question 8

2 / 2 points

[2 Points] What is the purpose of URLs in REST design patterns. Select one answer.

- ☐ Uniquely identify the server
- ☐ Work in the presence of firewalls
- ✓ ☒ Uniquely identify a resource
- ☐ Distinguish every resource entity

### Serverless Questions

## Question 9

2 / 2 points

[2 points] Which of the following are properties of a container like Docker? Select all that apply.

- ✓ ☐ Containers on same host share single Linux kernel
- ✓ ☐ Container images can be shared
- ✓ ☐ Not portable

## Question 10

2 / 2 points

[2 points] Select the components of a Microservice. Select all that apply.

- ✓ ☐ a data store
- ✓ ☐ a FaaS
- ✓ ☐ a Container
- ✓ ☐ a REST endpoint

## Question 11

1.333 / 2 points

[2 points] Select which of the following is true of AWS Lambda? Select all that apply.

- ➡ ✓ ☐ Functions are unit of deployment
- ✗ ☐ Can be triggered by HTTP only
- ➡ ✓ ☐ Adapts to rates of incoming requests

## Question 12

2 / 2 points

[2 points] Which of the following are properties of a container like Docker? Select all that apply.

- ✓ ☐ Package an application with all its dependencies into a standardized unit for software development
- ✓ ☐ Solve security issues
- ✓ ☐ Independent of VM
- ✓ ☐ Lightweight

## HTML5 Questions

## Question 13

2 / 2 points

[2 points] Which of the following are new elements in HTML5. Select all that apply.

- ✓ ☐ aside

- ✓ ☐ applet
- ✓ ☐ article
- ✓ ☐ header
- ✓ ☐ column

**Question 14****2 / 2 points**

[2 points] Which of the following attributes are not supported in HTML5? Select all that apply.

- ✓ ☐ controls
- ✓ ☐ align
- ✓ ☐ bgcolor
- ✓ ☐ colspan
- ✓ ☐ border

**Question 15****2 / 2 points**

[2 Points] Consider the following code from W3Schools.

```
<!DOCTYPE html>
<html>
<body>
```

```
<canvas id="myCanvas" width="300" height="150" style="border:1px solid
#d3d3d3;">
```

```
Your browser does not support the HTML5 canvas tag.</canvas>
```

```
<script>
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.fillRect(20, 20, 150, 100);
</script>
```

```
</body>
</html>
```

What gets displayed?

- ✓ ☐ A rectangle filled with black
- ☐ A square filled with black

☐ A rectangle filled with red

☐ A square filled with red

## Cookies and Privacy Questions

### Question 16

2 / 2 points

[2 points] Which of the following are ways to opt out of cookies?

- ✓ ☐ Select “do not track” in browser
- ✓ ☐ Upload opt-out cookies
- ✓ ☐ Check account preferences on registration sites
- ✓ ☐ Use cookie management tools in browser
- ✓ ☐ View current cookies and delete what you do not need

### Question 17

2 / 2 points

[2 points] Cookies include a number of components, some required, some optional. What are the two (2) required components? Select only those two.

- ✓ ☐ Domain
- ✓ ☐ HttpOnly flag
- ✓ ☐ Name / value pair
- ✓ ☐ Secure flag
- ✓ ☐ Expiration date

### Question 18

1.5 / 2 points

[2 Points] Select all valid attributes of cookies. Select all that apply.

- ➡ ✓ ☐ HttpOnly
- ➡ ✗ ☐ SameSite
- ➡ ✓ ☐ Expires
- ➡ ✓ ☐ Path

➡ ❌ ☐ SameParty

➡ ✔️ ☐ Max-age

✔️ ☐ Last Accessed

➡ ✔️ ☐ Secure

## Ajax Questions

### Question 19

2 / 2 points

[2 points] Fonts on a web page may be requested across domains using CORS.

✔️ ☐ True

☐ False

### Question 20

2 / 2 points

[2 points] The web browser displays a visual progress indicator while the XMLHttpRequest is being processed.

☐ True

✔️ ☐ False

### Question 21

2 / 2 points

[2 points] Synchronous XMLHttpRequest() has been deprecated.

✔️ ☐ True

☐ False

### Question 22

2 / 2 points

[2 points] Select which XMLHttpRequest method actually triggers the request to the server?

☐ open()

✔️ ☐ send()

### Question 23

2 / 2 points

[2 points] Consider the following code snippet:

```
j = eval("(" + text + ")");
```

Select all answers that are TRUE for such code.

- ✓ ☐ It is part of JSON.parse()
- ✓ ☐ It is very unsafe
- ✓ ☐ It only works with some browsers

### Question 24

1.5 / 2 points

[2 points] What are some of the characteristics of Ajax applications? Select all that apply.

- ➡ ✓ ☐ They have visual effects
- ➡ ✓ ☐ They present live content
- ➡ ✗ ☐ They are single page
- ✓ ☐ They have static icons

### Question 25

1.333 / 2 points

[2 points] Consider the following object:

```
var xhr = new XMLHttpRequest();
```

Which values should be checked in the callback? Select all that apply.

- ➡ ✓ ☐ xhr.status is 404
- ➡ ✗ ☐ xhr.statusText is OK
- ➡ ✓ ☐ xhr.readyState is 4

### Question 26

2 / 2 points

[2 points] Consider the following code from one of the Ajax example shown in class:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN">
<html><head><title>My Third Ajax Script</title>
<script src="script03.js" type="text/javascript" language="Javascript">
</script></head>
<body><div id="pictureBar"> </div></body></html>
```

And this JavaScript:

```
window.onload = initAll;
var xhr = false;
function initAll() { same as previously except it calls getPix }
function getPix() { xhr.open("GET", "flickrfeed.xml", true);
xhr.onreadystatechange = XXXXX1;
```



```
xhr.send(null);setTimeout("getPix()",5 * 1000); }  
function showPictures() {  
    var tempDiv = document.createElement("div");  
    var tempDiv2 = document.createElement("div");  
    if (xhr.readyState == 4) {  
        if (xhr.status == 200) {  
            tempDiv.XXXXXX2 = xhr.responseText;  
            var allLinks = tempDiv.getElementsByTagName("a");  
            for (var i=1; i<allLinks.length; i+=2) {  
                tempDiv2.appendChild(allLinks[i].cloneNode(true)); }  
            allLinks = tempDiv2.getElementsByTagName("a");  
            var randomImg = Math.floor(Math.random() * allLinks.length);  
            document.getElementById("pictureBar").innerHTML =  
allLinks[randomImg].innerHTML;  
        } else { alert("There was a problem with the request " +  
xhr.status); } } }
```

What should be the values of the two items listed as XXXXX1 and XXXXX2?

☐

callback and loadHTML

☒

showPictures and innerHTML

## Frameworks Questions

### Question 27

2 / 2 points

[2 points] Select which of the following is NOT true of NodeJS.

☒

uses blocking I/O model

☒

is event driven

☒

handles networking

### Question 28

2 / 2 points

[2 points] Which of the following are true of TypeScript? Select all that apply.

☒

Supports Optionals

☒

Supports MVC

☒

Includes support for classes and modules

### Question 29

2 / 2 points

[2 Points] Consider the following Express code.

```
var express = require('express');  
var cors = require('cors');  
var app = express();
```

<< Missing code >>

```
app.get('/products/:id', function (req, res, next) {  
  res.json({msg: 'This is CORS-enabled for all origins!'})  
});  
  
app.listen(80, function () {  
  console.log('CORS-enabled web server listening on port 80')  
});
```

What code is missing to use CORS?

- ☒ `app.use(cors());`
- ☐ `app.send(cors());`
- ☐ `cors.use(cors());`
- ☐ `app.load(cors());`

### Question 30

2 / 2 points

[2 points] Select which of the following are true of Angular (version 8+). Select all that apply.

- ☒ Supports *FilterPipe* and *OrderByPipe*
- ☒ Depends on TypeScript, RxJS and Node
- ☒ Includes a reactive programming library for JavaScript

### Question 31

2 / 2 points

[2 points] Select which of the following is true of React. Select all that apply.

- ☒ Does not implement MVC
- ☒ Is a framework like Angular

### Web Security Questions

### Question 32

2 / 2 points

[2 points] Which types of hacks can cause damage to the user on the client side? Select all that apply.

- ✓ ☐ Log user keystrokes
- ✓ ☐ Deface pages, altering content
- ✓ ☐ Denial of Service
- ✓ ☐ Stealing cookies
- ✓ ☐ Install malicious software

### Question 33

1.667 / 2 points

[2 points] What are common ways that websites get infected? Select all that apply.

- ➡ ✓ ☐ Using Social networks to infect users
- ➡ ✓ ☐ Attacks on Back-end virtual hosting companies
- ✓ ☐ Cross-site Spoofing
- ➡ ✗ ☐ Cross-site Scripting
- ✓ ☐ XSP Scripting attacks
- ➡ ✓ ☐ SQL Injection attacks

### Question 34

1.667 / 2 points

[2 points] Which of the following are Injection Attacks?

- ➡ ✗ ☐ JavaScript Hijacking
- ➡ ✓ ☐ SQL Injection
- ✓ ☐ Content Spoofing
- ➡ ✓ ☐ Search Worms
- ➡ ✓ ☐ Cross Site Request Forgery (CSRF)
- ✓ ☐ DDoS attack

### Question 35

2 / 2 points

[2 points] Which of the following are authentication attacks?

- ✓ ☐ Cross-Site Request Forgery (CSRF)

- ✓ ☐ **Insufficient Authentication**
- ✓ ☐ **Brute Force Attacks**
- ✓ ☐ **Content Spoofing**
- ✓ ☐ **Weak Password Recovery Validation**

**Question 36****2 / 2 points**

[2 Points] The major reason to deprecating V2 Onion Service is exposure to attacks.

- ✓ ☐ a) True
- ☐ b) False

**High-Performance Websites Questions****Question 37****2 / 2 points**

[2 points] Select the types of files should be compressed to improve web site performance. Select all that apply.

- ✓ ☐ **JSONP files**
- ✓ ☐ **PDF files**
- ✓ ☐ **XML files**
- ✓ ☐ **JPG files**
- ✓ ☐ **Minified JavaScript files**
- ✓ ☐ **Text files**

**Question 38****2 / 2 points**

[2 points] Select all conditions where a “cached object” is fresh.

- ✓ ☐ **A proxy cache has seen the object recently, and it was modified long ago**
- ✓ ☐ **It has expire header with time set in the future**
- ✓ ☐ **Current age is greater than age value given in cache-control header**
- ✓ ☐ **If browser cache has seen the object recently, and has been set to check once per session**
- ✓ ☐ **The origin server is asked to validate the object**

**Question 39****2 / 2 points**

**[2 points] Which of the following are ways to reduce the number of HTTP requests? Select all that apply.**

- ✓ ☐ Use Image Maps
- ✓ ☐ Combine cookies
- ✓ ☐ Combine Style Sheets
- ✓ ☐ Split images
- ✓ ☐ Combine scripts

### JQuery Questions

#### Question 40

2 / 2 points

**[2 points] jQuery has fairly complex ajax support functions.**

- ✓ ☐ True
- ☐ False

#### Question 41

2 / 2 points

**[2 points] Which of the following objects are abstracted by jQuery? Select all that apply.**

- ✓ ☐ XMLHttpRequest
- ✓ ☐ JSON
- ✓ ☐ DOM

#### Question 42

2 / 2 points

**[2 points] What type of selector is the 'contains' selector, as in the following example:**

```
$("div:contains('John')").css("text-decoration", "underline");
```

- ☐ Basic Text selector
- ✓ ☐ Content Filter selector
- ☐ Basic Filter selector

#### Question 43

1.333 / 2 points

**[2 points] Which of the following selectors are part of the Basic Filter selectors category? Select all that apply.**

**:header selector**



:multiple selector



:first

**Question 44****2 / 2 points****[2 points] What type of selector is the 'header' selector, as in the following example:**

```
$(":header").css({ background: "#ccc", color: "blue" });
```



Basic selector



Basic Filter selector



Basic Color selector

**Question 45****2 / 2 points****[2 points] What type of selector is the ':contains()' selector, as in the following example:**

```
$("div:contains('John')").css("text-decoration", "underline");
```

Select one correct answer.



Content Filter category



Child Filter category



Child Contains category

**Responsive Website Design (RWD) Questions****Question 46****1 / 2 points****[2 points] Select RWD usability guidelines on mobile devices.**

change navigation



maximize text entry



use single or two columns



reduce amount of content

**Question 47****2 / 2 points**

**[2 points] Consider the following media queries:**

```
<link rel="stylesheet" media="only screen and (min-width:320px) and (max-width: 760px)" href="css1.css">
```

```
<link rel="stylesheet" media="only screen and (min-width:761px) and (max-width: 1100px)" href="css2.css">
```

**What different device sizes they fail to support? Select all that apply.**

✓ ☐ Devices with small screens

✓ ☐ Devices with large screens

**Question 48****2 / 2 points****[4 points] Select which concepts are the basis of Responsive Website Design. Select all that apply.**

✓ ☐ CSS3 media queries

✓ ☐ content reduction

✓ ☐ fluid grids

✓ ☐ flexible images

**Question 49****2 / 2 points****[2 points] What are properties of fluid grids? Select all that apply.**

✓ ☐ Define grids based on number of rows and columns

✓ ☐ Defined using relative dimensions

✓ ☐ Have to adjust width manually for certain devices

✓ ☐ Elements will adjust their widths and heights by the specified proportions to their parent container

**Question 50****2 / 2 points****[2 Points] The major difference between different versions of Bootstrap is the number of grid tiers.**

✓ ☐ a) True

☐ b) False

**Attempt Score:**95.33 / 100 - 95.33 %

**Overall Grade (highest attempt):**95.33 / 100 - 95.33 %

Done