

Quiz Submissions - CS571 Summer 2022: Web Technologies Exam 2



Attempt 1

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Submission View

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Responsive Website Design (RWD) Questions

Question 1

2 / 2 points

[2 Points] The major difference between different versions of Bootstrap is the number of grid tiers.

- ✓ ☒ a) True
☐ b) False

Question 2

0.667 / 2 points

[2 points] Select all the reasons why hosting a separate `.mobi` website is not recommended. Select all that apply.

- ✗ ☒ May work on multiple device sizes
➡ ✓ ☒ Results in content synchronization issues
➡ ✗ ☐ Nobody is using `.mobi` TLDs

Question 3

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 large screens
✓ ☒ Devices with small screens

Question 4

2 / 2 points

[2 points] Select valid reasons why hosting a `mobile.mycompany.com` website is not recommended. Select all that apply.

- ✓ ☐ It is not approved by ICANN
- ✓ ☒ It requires redirect
- ✓ ☒ It hinders search engines
- ✓ ☒ Requires duplication of content

Question 5**1.5 / 2 points**

[2 points] Select RWD usability guidelines on mobile devices.

- ➡ ✓ ☒ reduce amount of content
- ✗ ☒ maximize text entry
- ✓ ☐ use single or two columns
- ➡ ✓ ☒ change navigation

Serverless Questions**Question 6****2 / 2 points**

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

- ✓ ☐ Complex resource model
- ✓ ☒ Easy to build scalable back-end services
- ✓ ☐ Not suitable for real-time data processing
- ✓ ☒ NoSQL architecture

Question 7**1.5 / 2 points**

[2 points] Which of the following are TRUE of Serverless Architectures? Select all that apply.

- ✓ ☐ Scaling is hard to implement
- ➡ ✓ ☒ Serverless applications depend on custom code that's run in ephemeral containers
- ➡ ✗ ☐ Managing of compute resources is not available
- ➡ ✓ ☒ Provisioning is handled by the service itself

Question 8**2 / 2 points**

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

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

**Question 9****1.75 / 2 points**

[2 Points] In the article "Ten Attributes of Serverless Computing Platforms", ten attributes are mentioned. Select all that apply.

- ✓ ☒ Polyglot platform
- ✓ ☒ API Gateway Integration
- ✓ ☒ Logging and Monitoring
- ✓ ☒ REST Endpoints
- ✓ ☐ Portal support
- ✗ ☐ Job scheduling
- ✓ ☐ Dashboard
- ✓ ☐ Java and .NET support

REST Questions**Question 10****2 / 2 points**

[2 Points] Select all ways that security is handled in REST. Select all that apply.

- ✓ ☒ HTTPS
- ✓ ☒ SSL (Secure Sockets Layer)

Question 11**2 / 2 points**

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

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

Question 12**1 / 1 point**

[1 Point] In REST Web Services, it is best practice to use the slash "/" to represent a parent-child relationship.

- ✓ ☒ A) True
- ☐ B) False

Question 13

1 / 1 point

[1 Point] In REST Web Services, plain text and CSV format may be used in formatting the responses.

- ✓ ☒ A) True
☐ B) False

Question 14

0 / 1 point

[1 Point] In newer REST Web Services, JSON must be used in the response.

- ✗ ☒ A) True
➡ ☐ B) False

Question 15

1 / 1 point

[1 Point] In REST Web Services, except in very specific cases, HTML is not acceptable as a response format.

- ✓ ☒ A) True
☐ B) False

High-Performance Websites Questions

Question 16

2 / 2 points

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

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

Question 17

1.667 / 2 points

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

- ➡ ✓ ☒ XML files
➡ ✗ ☐ Text files
➡ ✓ ☒ JSONP files
✓ ☐ JPG files
➡ ✓ ☒ Minified JavaScript files



jQuery Questions

Question 18

0 / 2 points

[2 Points] jQuery is not needed when DOM manipulation is not used.

- ➡ ☐ a) True
- ✖ ☒ b) False

Question 19

2 / 2 points

[2 points] What is the JavaScript object added by jQuery? Select all that apply.

- ✓ ☒ \$
- ✓ ☒ jQuery

Question 20

2 / 2 points

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

```
$( "div" ).css( "border", "9px solid red" );
```

- ✓ ☒ Basic selector
- ☐ Basic Filter selector
- ☐ Basic Border selector

Question 21

2 / 2 points

[2 points] What is the jQuery code that corresponds to the following DOM code?

```
var kids = n.childNodes;
```

- ☐ kids = \$("body").childNodes();
- ✓ ☒ kids = \$("body").children();

Question 22

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 Contains category
- ☐ Child Filter category

Question 23

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
- ☐ Basic Filter selector
- ☒ Content Filter selector

Question 24

1.333 / 2 points

[2 points] Select capabilities included in HTML5. Select all that apply.

- ☒ Storage
- ☒ Drag and Drop API
- ☒ Editable content
- ☒ Interactive canvas gradient
- ☒ Drag files from Desktop into HTML5 window
- ☒ SQL Lite

Question 25

2 / 2 points

[2 points] Which of these are the 2 most popular HTML5 video codecs? Select only 2.

- ☒ H.264
- ☒ Ogg
- ☒ Theora
- ☒ Audio Video Interleave (AVI)
- ☒ VP9

Web Security Questions

Question 26

1.25 / 2 points

[2 Points] Select all techniques used to bypass the same-origin policy. Select all that apply.

- ☒ The Dynamic Script Tag
- ☒ JSONP
- ☒ CORS
- ☒ VIDEO tag
- Browser extensions



✓ ☐ XMLHttpRequest

✓ ☐ FRAME tag

➡ ✗ ☐ Browser plugins

Question 27**0 / 2 points**

[2 Points] At which point a TOR path is "unencrypted"?

☐ At the "entry node" of the TOR network

✗ ☒ On any TOR relay node that is not using HTTPS

➡ ☐ At the "exit node" to the destination website

Question 28**2 / 2 points**

[2 points] Which of the following are client-side attacks? Select all that apply.

✓ ☒ Cross-site scripting (XSS)

✓ ☐ Insufficient Authentication

✓ ☒ Browser and Plugin vulnerability

✓ ☐ Cross-Site Request Forgery (CSRF)

✓ ☒ Clickjacking

Question 29**2 / 2 points**

[2 Points] Select what is a JSON array vulnerable to? Select only one correct answer

☐ Bypassing same origin policy

✓ ☒ JavaScript Hijacking

☐ SQL Injection

☐ Search worm

Question 30**2 / 2 points**

[2 Points] A DDoS attack occurs when a system is overwhelmed with malicious electronic traffic.

✓ ☒ a) True

☐ b) False

Cookies and Privacy Questions**Question 31****0.8 / 2 points**

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

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

Question 32

2 / 2 points

[2 points] What are the parties involved in Web advertising? Select all that apply.

- ✓ ☐ Third-parties
- ✓ ☒ Website owners
- ✓ ☒ Website visitors
- ✓ ☒ Advertisers
- ✓ ☒ Ad network

Question 33

1.6 / 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
- ✓ ☐ Secure flag
- ✓ ☒ Name / value pair
- ✓ ☐ HttpOnly flag
- ✗ ☒ Expiration date

1St Half Course Questions

Question 34

2 / 2 points

[2 Points] Consider the following Python code:

```
x = {"apple", "banana", "cherry"}

#display x:
print(x)
```



```
#display the data type of x:  
print (type(x))
```

What gets printed?

- ☐ {'apple', 'banana', 'cherry'}
<class 'list'>
- ☐ {'apple', 'banana', 'cherry'}
<class 'tuple'>
- ☒ {'apple', 'banana', 'cherry'}
<class 'set'>

Question 35**2 / 2 points**

[2 Points] What is the purpose of the HSTS header?

- ☒ A security feature that lets a web site tell browsers that it should only be communicated with using HTTPS
- ☐ A feature used to indicate whether or not a browser should be allowed to render a page in a <frame> or <iframe>.
- ☐ A performance feature that improves caching of web pages

Question 36**1.333 / 2 points**

[2 Points] Select all statements that are TRUE regarding JSON vs. XML. Select all that apply.

- ☒ XML has to be parsed with an XML parser
- ☒ JSON is shorter than XML
- ☐ JSON is quicker to read and write than XML
- ☒ JSON is parsed into a ready-to-use JavaScript object
- ☒ JSON can be parsed by a standard JavaScript function
- ☐ XML cannot be used to receive data from a web server

Question 37**1.5 / 2 points**

[2 Points] Select all true properties of the DOM. Select all that apply.

- ☒ The DOM is language independent
- ☒ The DOM represents an HTML file as a tree
- ☒ The DOM is a programming interface
- ☐ The DOM is OS independent

Question 38**2 / 2 points**

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

```
<!DOCTYPE html>
<html>
<head>
<style>
* {
  text-align: center;
  color: blue;
}
</style>
</head>
<body>

<h1>Hello world!</h1>

<p>It's happening</p>
<p id="para1">Me too!</p>
<p>Not me!</p>

</body>
</html>
```

Select all the actual behaviors of this code. Select all that apply.

- ✓ ☐ "Not me!" is black
- ✓ ☒ "Hello World!" is blue
- ✓ ☒ "It's happening" is centered
- ✓ ☐ "Me too!" is flush left

Question 39**2 / 2 points**

[2 Points] HTML describes the structure of a Web page.

- ✓ ☒ a) True
- ☐ b) False

Question 40**2 / 2 points**

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

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

```
<h2>Hello World</h2>
```

```
<script>  
console.log(5 + 6);  
</script>
```

```
</body>
```

```
</html>
```

What value is displayed below *Hello World*?

✓ ☒ Nothing

☐ 11

Ajax Questions

Question 41

1 / 1 point

[1 Point] What are solutions to the cross-domain issue for resources such as JavaScript or JSON?

☐ A) Use a server "proxy"

☐ B) Use CORS, if available from the server side

☐ C) Access exclusively resources in the same domain

✓ ☒ D) All of the above

▶ View question 41 feedback

Question 42

0 / 1 point

[1 Point] Ajax is used to...

✗ ☒ a) Speed up display of the page

☐ b) Reload all of the page

☐ c) Direct the user to a new page

➡ ☐ d) Reload part of the page

Question 43**1 / 1 point**

[1 Point] Which of the following are true about AJAX?

- ☐ a) AJAX stands for Asynchronous JavaScript and XML.
- ☐ b) AJAX allows for just part of a page to be reloaded with direct access to the server.
- ☐ c) AJAX uses JavaScript and HTML DOM to display the data.
- ☒ d) All of the above

Question 44**1 / 1 point**

[1 Point] During AJAX open(), what does it mean to pass in <false> to the third parameter and why is it poor practice?

- ☒ A) False means the request will be executed synchronously. It is bad because a time-consuming synchronous request on the main thread will degrade UX.
- ☐ B) False means the request will be executed asynchronously. It is bad because the flow of the application gets disrupted and the order of code execution becomes ambiguous
- ☐ C) False means the request will be executed asynchronously. It is bad because it breaks form validation
- ☐ D) False means the request will be executed synchronously. It is bad because a time-consuming synchronous request on the main thread will crash the browser.

▶ View question 44 feedback

Question 45**1 / 1 point**

[1 Point] Which of the following is not true about AJAX?

- ☒ A) AJAX must be performed in your remote script
- ☐ B) AJAX uses XMLHttpRequest to communicate with the server

- ☐ C) JQuery includes the same functionality as AJAX
- ☐ D) AJAX can be performed on submission of a form by adding the onsubmit parameter in the form tag

Question 46**2 / 2 points**

[2 points] Of the URLs below, select only the ones that have the same origin as `http://www.ajaxbook.com`? Select all that apply.

- ✓ ☐ `http://carsearch.ajaxbook.com`
- ✓ ☐ `https://www.ajaxbook.com`
- ✓ ☒ `http://www.ajaxbook.com/ajax`
- ✓ ☐ `http://www.ajaxbook.com:443`

Question 47**2 / 2 points**

[2 points] Which of the URLs below have the same "origin" as `https://mobile.ibm.com`? Select all that apply.

- ✓ ☐ `https://mobile.ibm.net`
- ✓ ☐ `http://mobile.ibm.com`
- ✓ ☒ `https://mobile.ibm.com/top.html`

Question 48**1 / 1 point**

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

- ☐ True
- ✓ ☒ False

Question 49**1 / 1 point**

[1 Point] Netscape 7 and Mozilla Firefox 1.0 were the first browsers to "clone" XMLHttpRequest functionality from Internet Explorer.

- ✓ ☒ A) True
- ☐ B) False

Question 50**1 / 1 point**

[1 Point] The `fetch()` API includes an option that can be set to any of the REST HTTP Methods.

- ✓ ☒ True
- ☐ False

Question 51

1 / 1 point

[1 Point] The `fetch()` API can receive cross-site cookies.

- ☐ True
- ✓ ☒ False

Question 52

1 / 1 point

[1 Point] To request CORS, with XMLHttpRequest, the client JavaScript must issue an `Origin` header.

- ☐ A) True
- ✓ ☒ B) False

▶ View question 52 feedback

HTML5 Questions

JavaScript Frameworks Questions

Question 53

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?

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

Question 54

2 / 2 points

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

- ✓ ☐ Core modules include networking and a fetch() compatible API
- ✓ ☒ Maintains several connections per server to make HTTP requests
- ✓ ☒ Includes both synchronous and asynchronous file I/O support
- ✓ ☐ Includes built-in CORS support

Question 55

2 / 2 points

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

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

Question 56

2 / 2 points

[2 points] Select which JavaScript Framework(s) provides two-way Service/Component architecture?

- ✓ ☒ Angular
- ☐ React

Question 57

2 / 2 points

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

- ✓ ☒ Can seamlessly consume JavaScript
- ✓ ☒ A syntactical superset of JavaScript
- ✓ ☐ A Semantic superset of JavaScript

Attempt Score: 86.9 / 100 - 86.9 %

Overall Grade (highest attempt): 86.9 / 100 - 86.9 %

Done

