CS571 Spring 2023: Web Technologies Exam 1 ×

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Attempt 1

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Submission View

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CSS Questions

Question 1 1 / 2 points

```
<!DOCTYPE html>
<html>
<head>
<style>
p i:first-child {
  color: blue;
}
</style>
</head>
<body>
I am a <i>strong</i> person. I am a <i>good</i>
person.
I am a <i>handsome</i> person. I am a <i>happy</i>
person.
</body>
</html>
Select all the actual behaviors of this code. Select all that apply.
```

- → ✓ strong is colored blue
- - happy is colored blue
 - good is colored blue

Question 2 2/2 points

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

```
<head>
<style>
a.highlight:hover {
  color: #ff0000;
  font-size: 22px;
}
</style>
</head>
<body>
<h2>Pseudo-classes and HTML Classes</h2>
<a class="highlight" href="css_syntax.asp">CSS Syntax</a>
<a href="default.asp">CSS Tutorial</a>
</body>
Select the actual behavior of this code.
     A) When you hover over the CSS Syntax link, it will change color and font
        size
     B) When you hover over the CSS Tutorial link, it will change color and font
        size
     C) When you hover over the CSS Syntax link, it will change color
     D) When you hover over the CSS Syntax link, it will change font size
```

Question 3 0.5 / 2 points

```
<!DOCTYPE html>
<html>
<head>
<style>
p.intro::first-letter {
 color: #ff0000;
 font-size: 200%;
}
</style>
</head>
<body>
This is a header.
This is a paragraph with some text. A bit more text
even.
This is an introduction.
This is a paragraph with some text. A bit more text
even.
This is a section.
This is a paragraph with some text. A bit more text
even.
This is a footer.
This is a paragraph with some text. A bit more text
even.
</body>
</html>
```

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

T in <i>This is a header</i> is colored red with larger font	
T in <i>This is a footer</i> is colored red with larger font	
T in <i>This is a section</i> is colored red with larger font	
T in <i>This is an introduction</i> is colored red with larger font	
Question 4	2 / 2 points
[2 Points] Consider the following CSS.	
<pre>.showNav ul li a:hover{color:#202022;}</pre>	
And the following HTML snippet.	
<div class="showNav"></div>	
<1i>>	
<some html=""> </some>	
Which of these examples to replace <some html=""> will trigger the CSS?</some>	
○ A) some navigation 	
<pre>B) </pre>	
✓ C) Some navigation	
Question 5	1 / 1 point
[1 Point] A CSS rule consists of a selector and a declaration block.	
A) True	

B) False	
Question 6	1 / 1 point
[1 Point] How do you add CSS to HTML?	
A) Inline in an HTML element through the style attribute.	
B) In the <style> tag, contained in the <head> of an HTML docu</td><td>ument.</td></tr><tr><td> C) In an external file that is included in an HTML document in t tag. </td><td>he <link></td></tr><tr><td>✓ ✓ D) All of the above.</td><td></td></tr><tr><td>View question 6 feedback</td><td></td></tr><tr><td>JavaScript / RegEx Questions</td><td></td></tr><tr><td>Question 7</td><td>2 / 2 points</td></tr><tr><td>[2 Points] Using document.write() after an HTML document is loaded, all existing HTML.</td><td>will delete</td></tr><tr><td>✓ a) True</td><td></td></tr><tr><td>b) False</td><td></td></tr><tr><td>Question 8</td><td>2 / 2 points</td></tr><tr><td>[2 Points] Consider the following example from w3schools.com.</td><td></td></tr></tbody></table></style>	

```
<!DOCTYPE html>
<html>
<body>
<script>
// x is a string
let x = "John";
// y is an object
let y = new String("John");
document.getElementById("demo").innerHTML
typeof x + "<br>" + typeof y;
</script>
</body>
</html>
```

What output will be displayed on the page?

- A) string string
- B) object object
- C) string object
 - O) object

View question 8 feedback

Question 9 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?

11

✓ Nothing

Question 10 2 / 2 points

What output will be displayed on the page?

- A) Banana, Orange, Apple, Mango
- B) Orange, Apple, Mango
- ✓ C) Banana,Orange,Apple
 - O) Banana,Orange
- ▶ View question 10 feedback

Question 11 2 / 2 points

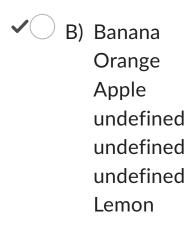
[2 Points] Consider the following example from w3schools.com.

```
<!DOCTYPE html>
<html>
<body>
<script>
const fruits = ["Banana", "Orange",
"Apple"];
fruits[6] = "Lemon";
let fLen = fruits.length;
let text = "";
for (i = 0; i < fLen; i++) {
 text += fruits[i] + "<br>";
}
document.getElementById("demo").innerHTML
= text;
</script>
</body>
</html>
```

What output will be displayed on the page?

A) Banana Orange Apple

Lemon



- C) Banana
 Orange
 Apple
 null
 null
 null
 Lemon
- D) Banana Orange Apple Lemon
- View question 11 feedback

Question 12 2 / 2 points

[2 Points] Consider the following regular expression in JavaScript:

var pattern = $/^{0-9}{3}[-]?[0-9]{2}[-]?[0-9]{4}$/;$

Select the correct description from the various options below.

Anchored at the beginning and at the end the pattern matches: 3 digits, an hyphen,

✓ two digits, an hyphen, followed by 4 digits
Anchored at the beginning and at the end the pattern matches: 3 digits, an optional hyphen, two digits, an optional hyphen, followed by 4 digits
Anchored at the beginning and at the end the pattern matches: 3 digits, an optional hyphen, two digits, an optional hyphen, followed by 4 digits, followed by a dollar sign
Question 13 2 / 2 points
[2 Points] Consider the following program:
<pre>var re = /\w+\s/g;</pre>
<pre>var str = "fee fi fo fum";</pre>
var myArray =
<pre>str.match(re); console.log(myArray);</pre>
Console.log(myAllay),
What output is displayed on the console?
✓ Array(3) ["fee ", "fi ", "fo "]
Array(4) ["fee ", "fi ", "fo ", "fum"]
Python Questions
Question 14 1 / 1 point
[1 Point] Which of the following is TRUE for Python "sets"? Select all that apply.
A) A set is a collection which is <i>unchangeable</i> , where set items are unchangeable, but you can remove items and add new items
B) Sets are used to store multiple items in a single variable.

C) A set is a collection which is <i>indexed</i>
D) A set is a collection which is <i>ordered</i>
View question 14 feedback
Question 15 1 / 1 point
[1 Point] In Python, you can get the data type of any object by using the type() function.
✓ A) True
B) False
Question 16 1 / 1 point
[1 Point] Python is used for:
 web development (server-side), software development, mathematics, system scripting.
✓ A) True
B) False
Question 17 0.75 / 1 point
[1 Point] Which of the following is TRUE in Python? Select all that apply.
✓ A) Variable names are case-insensitive
B) A variable name must start with a letter, a number or the underscore

character
C) A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
D) A variable name cannot start with a number
▶ View question 17 feedback
Question 18 1 / 1 point
[1 Point] Which of the following is TRUE in Python? Select all that apply.
✓ A) Variables are containers for storing data values.
B) A variable is created the moment you first assign a value to it.
✓ C) Python has the 'var' command for declaring a variable.
View question 18 feedback
Question 19 1 / 1 point
[1 Point] There are a number of collection (Arrays) data types in the Python programming language. Select all that apply. [NO PARTIAL CREDIT]
✓ A) Tuple is a collection which is ordered and unchangeable. Allows duplicate members.
B) List is a collection which is ordered and changeable. Allows duplicate

members.	
C) Set is a collection whice No duplicate members.	h is unordered, unchangeable*, and unindexed.
D) Dictionary is a collection duplicate members.	on which is ordered** and changeable. No
View question 19 feedback	
Question 20	2 / 2 points
[2 Points] Consider the following P	ython code:
>>> x = ("apple", "bana	ana", "cherry")
>>> print(x)	
>>> print(type(x))	
What gets printed?	
A) ('apple', 'banana', 'cherr' <class 'set'=""></class>	y')
B) ('apple', 'banana', 'cherry <class 'list'=""></class>	y')
C) ('apple', 'banana', 'cherr' <class 'tuple'=""></class>	y')

Question 21 2 / 2 points

```
>>> thisset = {"apple", "banana", "cherry", "apple"}
>>> print(thisset)
```

What gets printed?

- ✓ ✓ A) {'banana', 'cherry', 'apple'}
 - B) {'apple', 'banana', 'cherry', 'apple'}
 - View question 21 feedback

Question 22 2 / 2 points

[2 Points] Consider the following Python code:

```
>>> word = 'Python'
>>> word[-2]
```

What gets printed?

- **✓**() '0'

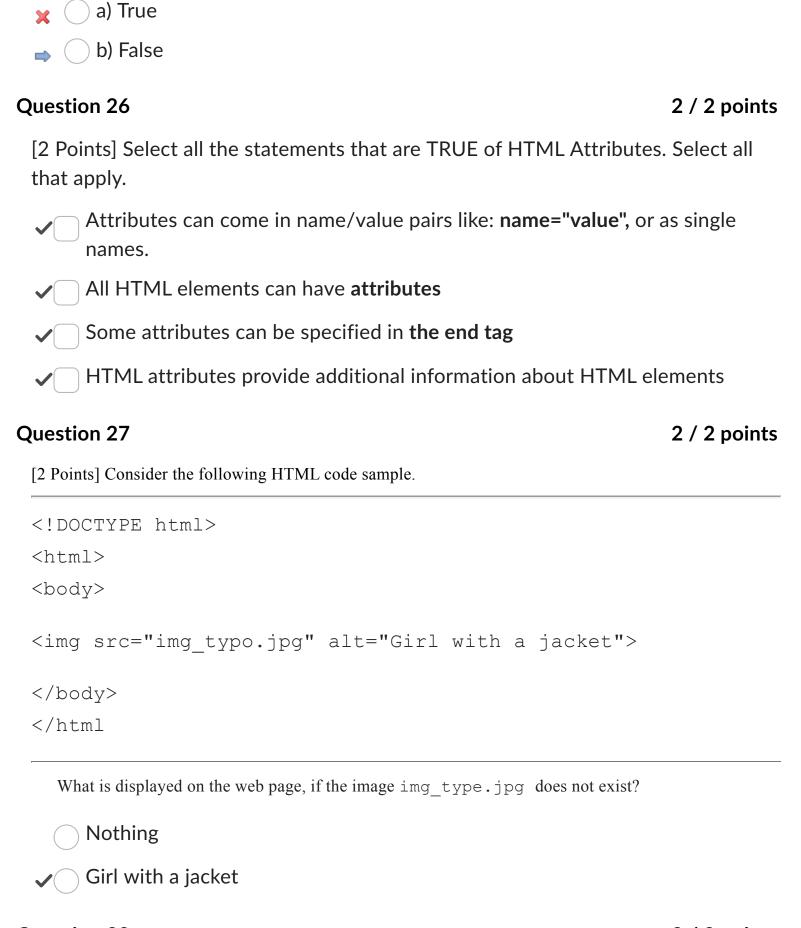
Question 23 2 / 2 points

[2 Points] Which of the following is true in Python?

Variable names can contain spaces	
Function names are not case sensitive	
Python includes strings, arrays, sets, dictionaries and lists	
Question 24	2 / 2 points
[2 Points] Consider the following Python code:	
>>> x = ["apple", "banana", "cherry"]	
>>> print(x)	
>>> print(type(x))	
What gets printed?	
A) ['apple', 'banana', 'cherry'] <class 'list'=""></class>	
B) ['apple', 'banana', 'cherry'] <class 'tuple'=""></class>	
C) ['apple', 'banana', 'cherry'] <class 'set'=""></class>	
ITML Questions	
Juostian 25	0 / 2 points

HTML parsers are very forgiving and throw errors only in extreme conditions.

[2 Points] Consider the following statement:



Question 28 2 / 2 points

[2 Points] In HTML, what character sets support multi-lingual environments? Select all that apply.
✓ A) UTF-16
✓ B) UTF-8
✓ C) ISO-8859
Question 29 2 / 2 points
[2 Points] Consider the following example from w3schools.com.
html <html> <body></body></html>
<pre><iframe height="300px" name="iframe_a" src="demo_iframe.htm" title="Iframe Example" width="100%"> </iframe></pre>
<a <br="" href="https://www.w3schools.com">target="iframe_a">W3Schools.com
What happens when one clicks the "W3Schools.com" hyperlink?
✓ A) The IFRAME is filled with the content of the W3Schools.com home file
B) Nothing, since the click causes an error and browsers do not display errors.

C) The IFRAME is filled with the content of the demo_iframe.ht	m file
Networking Questions	
Question 30	2 / 2 points
[2 Points] Is 172.21.101.211 a public IP Address or a private IP Address	ss?
A) Both	
B) Neither	
✓ C) Private	
O) Public	
▶ View question 30 feedback	
Question 31	2 / 2 points
[2 Points] TCP is	
✓ A connection-oriented protocol	
good for scenarios where you don't need every packet to arrive destination	at the
a connectionless protocol	
the best communication protocol for all modern applications	
View question 31 feedback	

Question 32 0.5 / 2 points

[2 Points] What is TRUE of the following terminal snapshot? Select all that apply.

```
marcopapa — -zsh — 92×11

1 192.168.7.1 (192.168.7.1) 5.077 ms 2.879 ms 2.026 ms
2 142-254-186-181.inf.spectrum.com (142.254.186.181) 9.374 ms 12.567 ms 12.720 ms
3 76.167.30.154 (76.167.30.154) 14.682 ms 11.227 ms 11.781 ms
4 72.129.9.94 (72.129.9.94) 18.287 ms 18.533 ms 19.412 ms
5 agg28.tustcaft01r.socal.rr.com (72.129.9.2) 14.603 ms 12.636 ms 12.111 ms
6 bu-ether16.tustca4200w-bcr00.tbone.rr.com (66.109.6.64) 17.775 ms 14.819 ms
bu-ether26.tustca4200w-bcr00.tbone.rr.com (66.109.3.232) 15.948 ms
7 66.109.3.19 (66.109.3.19) 13.810 ms 14.671 ms 20.647 ms
8 24.27.236.19 (24.27.236.19) 20.137 ms 14.005 ms
24.30.200.51 (24.30.200.51) 15.367 ms
9 * * *
```

- It is visible only to system administrators
- '*' means request timed out after 5 seconds
- It displays running tracert on Windows or traceroute on macOS
- \Rightarrow \times It can be used to find the IP routing between source and destination

Question 33 2 / 2 points

[2 Points] What type of address is 79.125.0.0?

- Class B, Private
- Class A, Private
- Class A, Public
 - Class B, Public
 - View guestion 33 feedback

Question 34 2 / 2 points

✔ Provides Internet service	
✓ A constellation	
✓ It is implemented using satellites at various orbits	
HTML DOM Questions	
Question 35	0 / 2 points
[2 Points] Consider the following example from w3schools.com.	

[2 Points] What is TRUE of SpaceX Starlink? Select all that apply.

```
<!DOCTYPE html>
<html>
<body>
<div class="example">First div
element with class="example".</div>
<div class="example">Second div
element with class="example".</div>
<span class="example">Span element
with class="example"</span>
<button onclick="myFunction()">Try
it</button>
<script>
function myFunction() {
         var x =
document.getElementsByClassName("example");
         x[0].innerHTML = "Hello"
World!";
</script>
</body>
</html>
```

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

- Changes the text of the first and second div elements with class="example"
- → Changes the text of the first div element with class="example"
- Changes the text of the first div element with class="example", and changes the text of the span element with class "example"

Question 36 1.333 / 2 points

```
<!DOCTYPE html>
<html>
<body>
<style>
div {
padding:50px;
background-color: Tomato;
color: white;
</style>
<script>
function myFunction(event) {
var x =
document.createEvent("MouseEvent");
x.initMouseEvent("mouseover", true, true,
window, 0, 0, 0, 0, 0, false, false,
false, false, 0, null);
document.getElementById("myDiv").dispatchEvent(x);
}
</script>
<div onmouseover="this.innerHTML += '*';"
id="myDiv">*</div>
<br>
<button onclick="myFunction(event)">Try
It</button>
</body>
</html>
```

What happens when one clicks the "Try It" button? Select all that apply.
the red div will get a new star every time you click
\Rightarrow \times a new white star is printed when mouse overs the red area
a new white star is printed when clicking on "Try it!" button

Question 37 0 / 2 points

```
<!DOCTYPE html>
<html>
<body>
This is a p element
This is also a p element.
This is also a p element.
<button onclick="myFunction()">Try
it</button>
<script>
function myFunction() {
 var x =
document.getElementsByTagName("P");
 var i;
 for (i = 0; i < x.length-1; i++)
   x[i].style.backgroundColor =
"red";
  }
</script>
</body>
</html>
```

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

- changes the background color of the first 2 P elements in this document
- changes the background color of all 3 P elements in this document

changes the background color of the last 2 P elements in this document

Question 38 2 / 2 points

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

```
<!DOCTYPE html>
<html>
<body>
First Name: <input name="fname"
type="text" value="Michael"><br>
First Name: <input name="fname"
type="text" value="Doug">
<button onclick="myFunction()">Try
it</button>
<script>
function myFunction() {
 var x =
document.getElementsByName("fname")
[0].tagName;
document.getElementById("demo").innerHTML
= x;
</script>
</body>
</html>
```

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

TYPE in printed below the Try It button
NAME in printed below the Try It button
INPUT in printed below the Try It button

Question 39 0 / 2 points

```
<!DOCTYPE html>
<html>
<body>
<button
onclick="removeHandler()">Try
it</button>
<script>
document.addEventListener("mousemove",
myFunction);
function myFunction() {
document.getElementById("demo").innerHTML
= Math.random();
}
function removeHandler() {
document.removeEventListener("mousemove",
myFunction);
</script>
</body>
</html>
```

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

- A random number is displayed immediately
- A random number is displayed every time you move your mouse in this document.

→ Nothing	
Question 40	1 / 1 point
[1 Point] What does HTML stand for?	
✓ Hyper Text Markup Language	
Hyper Text Modeling Language	
Hypertext Transfer Markup Language	
None of the above	
▶ View question 40 feedback	
Question 41	1 / 1 point
[1 Point] What is the required attribute of the IMG tag?	
✓ A) src	
B) source	
C) href	
O) no attribute is required	
▶ View question 41 feedback	
Question 42	1 / 1 point

[1 Point] What is the "novel" idea that Tim Berners-Lee invented?

HTML and CSS	
Oeep Linking	
Hypercard	
✓ Hyperlinking	
View question 42 feedback	
Question 43	1 / 1 point
[1 Point] How many heading tags are there in HTML?	
<u>3</u>	
<u> </u>	
8	
√ ○ 6	
View question 43 feedback	
JSON Questions	
Question 44	1 / 1 point
[1 Point] A drawback of the eval() function is its vulnerability.	
✓ True	
False	
Question 45	0.5 / 1 point
[1 Point] JSON is like XML because Select all that apply.	
⇒ ✓ A) Both JSON and XML can be fetched with an XMLHttpRe	equest

B) Both can be parsed by a standard JavaScript function	
✓ C) Both can be parsed by an XML parser	
D) Both JSON and XML can be parsed and used by lots of planguages	orogramming
Question 46	0 / 1 point
[1 Point] The <script> tag "src" attribute, referring to a JSON or Jav program, has cross-domain restrictions of the JavaScript sandbox.</td><td>aScript</td></tr><tr><td>X A) True</td><td></td></tr><tr><td>→ B) False</td><td></td></tr><tr><td>View question 46 feedback</td><td></td></tr><tr><td>Question 47</td><td>0.75 / 1 point</td></tr><tr><td>[1 Point] JSON is better than XML because Select all that apply.</td><td></td></tr><tr><td>→ ✓ A) JSON is shorter</td><td></td></tr><tr><td>\Rightarrow XML is much more difficult to parse than JSON.</td><td></td></tr><tr><td>C) JSON doesn't use end tag</td><td></td></tr><tr><td>D) JSON is parsed into a ready-to-use JavaScript object.</td><td></td></tr></tbody></table></script>	

Question 48	0 / 1 point
[1 Point] The first index in a JSON array is zero (0).	
★ True	
→ False	
Question 49	1 / 1 point
[1 Point] JSON names require double quotes.	
✓ A) True	
B) False	
Question 50	2 / 2 points
[2 Points] Select all characteristics that make JSON an ideal format for specification. Select all that apply.	r data
✓ K:V pairs make it possible to turn column names (in tabular data) to keys
plaintext, uncluttered format makes it human readable	
the simple format makes it ideal for any data generator to output JSON (e.g., REST API calls)	ıt its data as
arbitrary nesting of arrays and objects makes it possible to desc arbitrary/unlimited nesting	ribe data of
Question 51	2 / 2 points
[2 Points] Which of the following are true statements for JSON? Seleapply.	ect all that
✓ Subset of ECMA-232 Third Edition	
JSON is a lightweight data-interchange format	

- ✓ JSON is plain text written in JavaScript object notation
- ✓ Language independent

Question 52 0 / 2 points

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

```
<!DOCTYPE html>
<html>
<body>
<script>
const text = '{"name": "John",
"age":"function() {return 30;}",
"city": "New York" }';
const obj = JSON.parse(text);
obj.age = eval("(" + obj.age +
")");
document.getElementById("demo").innerHTML
= obj.name + ", " + obj.age();
</script>
</body>
</html>
```

What string is displayed in the browser window?

- A) John, function() {return 30;}
- ⇒ B) John, 30

C)	<a< th=""><th>syntax</th><th>error></th></a<>	syntax	error>
-,		,	

View question 52 feedback

Question 53 0 / 2 points

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

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

<script>
const myJSON = '"Ford", "BMW",
"Fiat"';
const myArray = JSON.parse(myJSON);
document.getElementById("demo").innerHTML
= myArray;
</script>
</body>
</html>
```

What string is displayed in the browser window?

- X A) "Ford","BMW","Fiat"
 - B) Ford,BMW,Fiat
 - C) Ford

⇒ D) <nothing></nothing>	
View question 53 feedback	
HTTP Questions	
Question 54	1 / 1 point
[1 Point] The client (browser) sends the "Accept-Encoding" header.	
✓ A) True	
B) False	
Question 55	1 / 1 point
[1 Point] The "keep-alive" feature / HTTP header is the same as "pers connections."	istent
✓ A) True	
B) False	
Question 56	2 / 2 points
[2 Points] What is the major difference between HTTP/1.1 and HTTP	//2?
✓ Header Compression	
URL compression	
Content compression	
Question 57	2 / 2 points
[2 Points] What header is sent in a Response to indicate the host is rule. Apache 2.0?	ınning
Host: Apache 2.0	

Server: Apache 2.0	
Question 58	2 / 2 points
[2 Points] What headers are used in Basic authentication? Select all that apply.	
✓ Accept-Encoding	
✓ Authorization	
✓ WWW-Authenticate	
Question 59	2 / 2 points
[2 Points] What are the main mechanisms by which a client makes a reserver?	equest to a
✓ GET and POST	
GET	
O POST	
Question 60	0 / 2 points
[2 Points] Where are proxy servers utilized?	
■ Both, at the client and server sides.	
At the server side only	
X At the client side only	

Attempt Score: 78.33 / 100 - 78.33 %

Overall Grade (highest attempt): 78.33 / 100 - 78.33 %

Done