CS 4640 Quiz 2

Name _____ **Computing ID** _____

For each question, write your answers in the box labeled "Answer" when provided. For multiple choice questions, **fill in the circle completely** for credit; checkmarks, circles, lines, or other marks will be graded as an empty circle. This quiz is CLOSED text book, closed-notes, closed-cell phone, closed-smart watch, closed-computer, closed-neighbor, etc. You may **not** discuss this exam with anyone until after the grades have been released. Please sign the honor pledge.

1. [2 points] Consider the following HTML. Is the HTML valid or invalid?

```
 1  <!doctype html>
 2  <html lang="en">
 3    <head>
 4      <title>Quiz Question</title>
 5    </head>
 6    <body>
 7      <p>This is my first paragraph
 8      <p>This is my second paragraph
 9    </body>
10  </html>
```

   ◯ Valid HTML, but the paragraph tags should be closed for consistency

   ◯ Invalid HTML, but the browser will still display two separate paragraphs

   ◯ Invalid HTML, which cannot be displayed in the browser

2. [3 points] Why is it helpful to include Open Graph metadata in our document?

   ◯ It provides the browser more information about how to display the page

   ◯ It provides context when the user adds a bookmark to this page

   ◯ It helps add supplementary content when our page is shared on social media

   ◯ It is not helpful to include Open Graph (it takes additional bandwidth)

3. [2 points] When asking a user to submit information on an HTML form, such as emails and passwords for login attempts, we should always be sure to use the GET method.

   ◯ True

   ◯ False

Use the following HTML and CSS to answer the next 4 questions.

```
1   <!doctype html>
2   <html lang="en">
3     <head>
4       <title>Quiz Section</title>
5       <style>
6           #third ~ li {
7               color: blue;
8           }
9
10          #second {
11              color: orange
12          }
13
14          ul.primary li {
15              color: purple;
16          }
17
18          li {
19              color: red;
20          }
21
22          ul > li {
23              color: green;
24          }
25
26          _____ {
27                  _____
28          }
29      </style>
30    </head>
31    <body>
32      <div class="container">
33        <p class="paragraph">What's on TV today? Most likely:</p>
34        <ul class="navlist primary" id="thelist">
35          <li id="first">Bluey</li>
36          <li id="second">Mickey Mouse's Clubhouse</li>
37          <li id="third" class="middle">Donkey Hodie</li>
38          <li id="fourth">Daniel Tiger's Neighborhood</li>
39          <li id="fifth">Alma's Way</li>
40        </ul>
41        <p class="last">Especially "The Creek" episode of Bluey!</p>
42      </div>
43    </body>
44  </html>
```

4. [10 points] For each of the list items (given by `id` below), write the line number of the CSS selector with highest specificity that applies to that element and the color of the element displayed in the browser.

List Item id	CSS Selector Line No.	Displayed Color
first		
second		
third		
fourth		
fifth		

5. [4 points] What CSS selector and rule(s) should be used in lines 26 and 27 (respectively) so that the browser displays the second paragraph (line 41) in bold, Tahoma font (or sans-serif if the browser does not have Tahoma)?

CSS selector	CSS rule(s)

6. [3 points] Which of the following CSS rules could be added after line 19 to instruct the browser to display the list elements left-to-right on the same line? *Select all that apply.*

- ○ `display: inline;`
- ○ `display: block;`
- ○ `float: left;`
- ○ `text-align: left;`
- ○ `margin: auto;`

7. [3 points] Which of the following CSS rules would cause the browser to hide (and **not** display) the third list item as if it were not in the DOM?

- ○ `#third {display: none;}`
- ○ `#third {visibility: hidden;}`
- ○ `#third {visibility: none;}`
- ○ `#third {display: hidden;}`

8. [3 points] Given the following CSS, which rules would be applied to a `div` element with class `example` if viewed on a mobile phone with screen width 700px?

```css
.example {
  width: 50%;
  background-color: orange;
}

@media only screen and (max-width: 768px) {
  .example {
    background-color: yellow;
  }
}

@media only screen and (min-width: 650px) {
  .example {
    width: 100%;
    border: 1px solid black;
  }
}
```

```html
1  <!-- example html -->
2  <div class="example"> ... </div>
```

○   The width is 50%, background color is orange, and it has no border

○   The width is 50%, background color is yellow, and it has no border

○   The width is 100%, background color is orange, and it has a 1px solid black border

○   The width is 100%, background color is yellow, and it has a 1px solid black border

9. [3 points] Given the following CSS selector, calculate its specificity.

```css
div#container ul.navbar li.selected > a:hover { ... }
```

Answer

10. [4 points] Assume we are creating a website about cats. Write HTML below to include the image `cats.jpg`, which depicts a group of cats playing with a ball of yarn.

Answer

11. [2 points] Consider the following XML. Is it well formed XML?

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>
<pizza>
    <toppings>cheese</toppings>
</pizza>
<pizza>
    <toppings>pepperoni</toppings>
</pizza>
```

○   Yes, it is well formed

○   No, it is not well formed

12. [2 points] Consider the following JSON. What best describes this code?

```
[
  {
    "id":1234,
    "name":"John Smith"
  },
  {
    "id":5678,
    "name":"Rose Tyler"
  }
]
```

○   It contains one object consisting of two objects with fields `id` and `name`

○   It contains an array of two objects each with fields `id` and `name`

○   It is not valid JSON since `id` values are not quoted

○   It is not valid JSON since it starts with `[` instead of `{`

13. [3 points] What features are provided to us in the Web Developer Tools within most browsers, such as Firefox, Chrome, Safari, and Edge? *Select all that apply.*

○   Debugging CSS by viewing and modifying the currently applied and overridden styles

○   Debugging our HTML by viewing and editing the DOM

○   Displaying DOM errors, such as missing a closing `</a>` element

○   Viewing how the page will respond to various screen sizes (responsive design)

14. [3 points] Given the LESS mixin `quizgeneric`, how do we include those properties in the `quiztwo` rule-set?

```
1  .quizgeneric {
2    font-size: 12px;
3    color: blue;
4  }
5
6  .quiztwo {
7    background-color: orange;
8    /* ... ? ... */
9  }
```

  ◯   On line 8, add `.quizgeneric();`

  ◯   On line 8, add `quizgeneric;`

  ◯   Rewrite line 6 to `.quiztwo extends .quizgeneric {`

  ◯   Rewrite line 6 to `.quiztwo(.quizgeneric) {`

15. [3 points] When designing our Bootstrap example in class, we noted that Bootstrap provides a grid system similar to the one we discussed. What classes must we apply to the following `div` elements so that Bootstrap will adapt to a mobile display for screen sizes less than 768px? *Write your class for each blank in the table to the right.*

```
1  <div class="_1_">
2    <div class="_2_">...</div>
3    <div class="_3_">...</div>
4  </div>
```

Blank	class
1	
2	
3	

Common HTML elements: a, address, article, aside, audio, b, blockquote, body, br, button, cite, code, div, em, footer, h1, h2, h3, h4, h5, h6, head, header, hr, html, i, img, input, label, li, main, meta, nav, ol, p, q, section, small, span, strong, style, sub, sup, table, td, textarea, th, tr, u, ul, video

Common CSS properties: background-color, border, border-color, border-style, border-width, color, display, float, font, font-family, font-size, font-style, font-weight, height, left, margin, margin-bottom, margin-left, margin-right, margin-top, padding, padding-bottom, padding-left, padding-right, padding-top, position, right, text-align, text-decoration, text-indent, top, visibility, width

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Honor Pledge: On my honor as a student, I have neither given nor received aid on this quiz. I will not discuss the content of this quiz, even in vague terms, with *anyone* other than current course staff, until *after* grades have been released.