



(420-718-AB) CLIENT-SIDE WEB PROGRAMMING WINTER 2024

MIDTERM TEST # [Worth 30%]

Due: 24th January 2024 from 9.00AM to 12.00PM

Question 1: BOX MODEL

Understand the box model, know what is where and how to set every property: margin, borders (width, style, size), padding, height, width; Understand short-hand for margin, borders and padding as well as measuring element height and width (hint: margin isn't counted by default)

1. Which of the following will place a 5 pixel border on the left, a 10 pixel border on the top, a 5 pixel border on the right, and a 10 pixel border on the bottom?

- a) `border-width: 5px 10px 5px 10px;`
- b) `border-height: 5px 10px 5px 10px;`
- c) `border-size: 10px 5px 10px 5px;`
- d) `border-weight: 5px 10px 5px 10px;`
- e) `border-width: 10px 5px 10px 5px;`

2. Given the following style sheet, calculate the width that is displayed in yellow.

```
body { background-color: white; margin: 0; padding: 0;
}
```

```
header {
background-color: yellow;
margin: 20px;
padding: 10px;
border: 5px solid yellow;
width: 200px; height: 100px;
}
```

a) 200px b) 370px c) 240px d) 230px e) 270px

3. Choose the item that creates an image link to the school.html page when the school.gif graphic is clicked.

- a. ``
- b. ``
- c. ``
- d. ``

4. Select the code below that will configure a background image called parchment.gif for a web page using CSS.

- a. `body {background-image:url(parchment.gif); }`
- b. `document {background:parchment.gif; }`
- c. `body {background:parchment.gif' }`
- d. `body {background-color:parchment.gif;}`

5. Select the code below that configures a class called “offer” with blue text, 1.2em, and Arial or sans-serif font using CSS.

- a. `.offer { color:blue; font-size:1.2em; font-family:sans-serif;}`
- b. `.offer { color:blue; font-size:1.2em; font-family:Arial,sans-serif;}`

c. `.#offer { text:blue; font-size:1.2em; font-family:Arial,sans-serif;}`

d. `#offer { text:blue; font-size:20px; font-family:Arial,sans-serif;}`

Question 2: SEMANTICS

1. In the code below, who is the parent of the `<a>` element?

```
<nav>
  <ul>
    <li><a href="#">Home</a></li>
    <li><a href="#">About</a></li>
    <li><a href="#">Contact</a></li>
  </ul>
</nav>
```

2. What is the relationship between the div element with `id = "selected"` and the `<html>` root element?

```
<html lang="en">
<head></head>
<body>
  <h1>Title</h1>
  <div id = "selected">
    <h2>Welcome to our site!</h2>
  </div>
</body>
</html>
```

- A. The `<div>` element is the child of the root `<html>` element
- B. The `<div>` element is the grandparent of the root `<html>` element
- C. The `<div>` element is the grandchild of the root `<html>` element
- D. The `<div>` element is the sibling of the root `<html>` element

3. What will be the font size in pixels of the `<h1>` and `<p>` elements below ? Please explain why that is.

```
<!-- Assume that the browser's default font-size is 16px -->
<head>
  <style>
    h1 {
      font-family: 'Rubik', sans-serif;
    }
    main {
      font-size: 18px;
    }
    p{
      font-size: 1rem;
    }
  </style>
  <title>Document</title>
</head>
<body>
  <main>
    <h1>Heading 1</h1>
    <p>Lorem ipsum dolor sit amet consectetur.</p>
  </main>
</body>
```

Question 3: SYNTAX & HTML ELEMENTS

1. Which line of HTML code demonstrates an element having an attribute named `title`?

- A. `<p id="title"> The Earth is round.</p>`
- B. `<p>title</p>`
- C. `<p title="each fact"> The Earth is round.</p>`
- D. `<p name="title">The Earth is round.</p>`

2. The following code is supposed to display an image, but fails to do so. Why?

```
<img href="./assets/smiley.gif" alt="Smiley face">
```

- A. The relative path to the image has a syntax mistake.
- B. The `` tag can only display .png, .jpeg and .svg image formats.
- C. The `src` attribute is missing and must be set equal to the image URL.
- D. The image URL should be set in single quotation marks.

3. Markup languages use special symbols in human readable text in order to create a hierarchy of information which serves several purposes. Which statement below is not a purpose of html markup:

- A. it allows users scanning a site to quickly pick out the most important ideas.
- B. it helps visually impaired users navigate the content of a page using special software.
- C. it helps search engines pick out important keywords that might otherwise get lost in a sea of text.
- D. it helps developers style the document in a dynamic way.

4. Given the following directory structure, how would one create a link to `second_page.html` from the page `index.html` ?

```
Simple_Page/
├── contact.html
├── css
│   ├── contact.css
│   └── style.css
├── img
│   ├── leaf.png
│   ├── logo.jpeg
│   └── second_page.png
├── index.html
└── secondary
    └── second_page.html
```

- A. `.. / img / second_page.html`
- B. `.. / secondary / second_page.html`
- C. `.. / Simple_Page / second_page.html`
- D. `.. / img / second_page.png`

5. Given the code below, why is the color of the `<a>` element not red like it's parent?

HTML

- A. `<div id="red-section">`
- B. `<h3>This container is red</h3>`
- C. `Click here for more`
- D. `</div>`

CSS

- A. `#red-section {`
- B. `color: red;`

```
C. }
```

RESULT

This container is red

[Click here for more](#)

Question 4: PRACTICAL

Please read the instructions carefully:

- Download **test1.zip** and extract the content.
- You will recreate the website illustrated by **website-example.png** in **test1** folder.
- This test is divided into **five** parts.
- Every part will add a section to the website. For example, part two adds a navigation bar and part 5 adds a footer.
- Your files for this question should be in a .zip file named **[student id]-test1.zip** containing the html files and assets needed to have a functional website.



Part 2

Part 3

Part 4

Part 5

Code structure:

- Create an **index.html** file in the **[student id]-test1** folder.
- Create a **style sheet** and link it to your html file.

Part 1: General CSS properties

- Add the proper CSS resets to set margins and paddings of all elements to zero.
- Add the proper CSS property such that all elements have box-sizing property set to border-box.
- Set the font of the webpage to Segoe UI [1] [2] [MAB3]. It is a sans-serif font.
- Font size unit should be relative to the root html element for all elements.
- Only use external style sheets.

[Color palette for reference](#)



Part 2: Navbar

For this part, refer to the *navbar* folder in the given folder.

Recreate the navbar illustrated in *navbar-example.png* using the starter code in *nav_starter.txt* file .

Requirements:

- The navbar has width 450px.
- The navbar must always be centered horizontally on the page.
- The hyperlinks are slightly bolder than the default values.
- Paddings should be relative to the font size of the element it is applied on.
- History will take you to this <https://www.forbes.com/advisor/investing/what-is-cryptocurrency/> page. Pay special attention to the target attribute.
- The background color is #8C8056 and font color is #002046.

Part 3: Hero

For this part, refer to the *hero* folder in the given folder.

Recreate the hero section illustrated in *hero-example.png* using the starter code in *hero_starter.txt* file.

Requirements:

- The background image *Cryptocurrency.jpg* is in the *hero* folder.
- The image covers the whole width of the browser.
- The image has a height of 600px.
- The image should always be centered when the browser width is decreased.
- The text colors are #af996a and #F1A023.
- Font sizes should be relative to the root html element.
- The colors needed for the **Buy Now** button: #4C3410 & #F1A023.
- The width of **Buy Now** is 150px .

- Margins and paddings should use a unit relative to a font-size .

Part 4: Features (30 points)

For this part, refer to the *features* folder in the given file.

Recreate the features section illustrated in *features-example.png*. No starter code is given in this part, you must write the html markup. Images are provided.

Requirements:

- Use semantic elements.
- Both sections take an equal part of the parent container.
- The images take width 80% of the parent container.
- The colors needed: #4C3410 & # 8C8056.
- Font sizes should be relative to the root html element.
- Margins and paddings should use a unit relative to a font size.

Part 5: Footer (10 points)

For this part, refer to the *footer* folder in the given folder.

Recreate the footer section illustrated in *footer-example.png*. No starter code is given.

Requirements:

- Use semantic elements.
- Colors needed: #8C8056 & #002046

IMPORTANT: Submission guidelines

1. Submit a single zip folder of a pdf document (answers for questions 1, 2 and 3), with your folder for question 4 (containing test1 folder) as well as screenshots of your obtained view from question 4.
2. Only the last submission will be evaluated.
3. **Failure to follow these guidelines will result in losing points**
4. **Plagiarism and cheating will be strongly penalized as per college policies.**
5. Do not submit any work via MIO or TEAMS.