Web Programming and Design

Midterm Study Guide

October 25, 2016

The test consists of

1. Multiple choice questions - 20 x 2 = 40 points
2. Given code, render the output = 10 points
3. Code writing questions - 2 x 20 = 40 points
4. Internals/ DOM related questions - 10 points
5. Short answer questions - 3 x 5 = 15 points

• You will have an opportunity to earn 15 extra credit points.
• Please try and attempt all questions. You get points for trying.
• The multiple choice questions are the hardest questions on the test.
• Anything from the slides/ homeworks / quizzes is fair game.
• For indicating color / text effects, you can just add labels to your “drawing” of the page.
• Making me laugh might gain you points (depends on the quality of the joke).

Topics to study

• This is just a list of the more important topics. Studying just the basics here will get you a passing grade. To get a 100, you need to know pretty much everything discussed in class and used in the homeworks.
• You won’t be tested on topics that were not introduced in class.
• HTML
  – Basic HTML tags.
  – HTML page and tree structure.
  – Text formatting tags.
  – Links, images, lists, tables and iframes.
  – Block and inline elements.
  – HTML5 layouts.
  – HTML media tags. Canvas and SVG graphics elements.
  – HTML forms, various input types.
• CSS
  – Separating styles from content. 3 ways of adding CSS.
  – Selectors and 3 kinds of selectors.
  – CSS Box model.
  – Backgrounds, borders, margins and padding.
  – CSS for lists, tables, and text.
• JavaScript
  – Separating behavior from content and presentation.
  – Capabilities and syntax of JavaScript.
  – Adding JavaScript to an HTML document.
  – Output functions.
  – Keywords, data types and variables.
  – Operators, operator precedence and evaluating expressions.
  – Control Structures: if statements, switch statements, loops.
  – Functions - definition, invocation, parameter passing and return.
  – Numbers, strings and objects.
  – Form validation using JavaScript.
• Browser layout and rendering.

Some Sample Questions

1. Which of the following tag starts a numbered list?
   (a) list
   (b) ul
   (c) ol
   (d) li

2. Which of the following properties aligns text to the center?
   (a) align : “center”
   (b) text-direction: “center”
   (c) text-align : “center”
   (d) font-align: “center”

3. Which of the following is NOT a valid JavaScript assignment operator?
   (a) =
   (b) +=
   (c) **=
   (d) ==

4. Write a JavaScript function that returns the count of all the numbers between 1 and 1000 (inclusive) that are multiples of both 6 and 14.
5. Render the page created by the following HTML code

```html
<html>
  <head>
    <title>Chich Fil A</title>
    <style>
      body{
        background-color: "lightblue";
      }
      img{
        width:500px;
      }
    </style>
  </head>
  <body>
    <h1>Eat More Chickin</h1>
    <img src="cow.jpg">
    <hr style="color: red;">
    <ol>
      <li>Delicious delicious chicken</li>
      <li>Best milkshakes ever. Kinda</li>
    </ol>
  </body>
</html>
```

6. Write HTML code that would give you the following page. Use CSS when necessary.

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**Main Title of Web Page**

<table>
<thead>
<tr>
<th>Menu</th>
<th>Content goes here</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td></td>
</tr>
<tr>
<td>CSS</td>
<td></td>
</tr>
<tr>
<td>JavaScript</td>
<td></td>
</tr>
</tbody>
</table>

CGS 3066 Examples