## CIS 228 (Fall 2011) <br> Exam 2, 11/3/11

Name (sign)
Name (print) email

| Question | Score |
| :---: | :---: |
| 1 | 14 |
| 2 | 12 |
| 3 | 14 |
| 4 | 10 |
| 5 | 10 |
| 6 | 10 |
| 7 | 10 |
| 8 | 20 |
| TOTAL | 100 |

## Question 1

## True or false:

_T_ In CSS, property declarations in the same rule are separated by semicolons.
_F_ Unlike XHTML (and HTML) files, CSS files cannot be validated.
_T_ CSS uses a box model to control how elements are displayed.
_T_rgb(50\%,50\%,50\%) is a shade of grey.
_F_ Table heading, <th>, elements can only be used in the first column of a table.
_T_ If specified, the <caption> element must be the first child of a <table> element.
_F_ A <p> element cannot appear in a <form> element.
_F_ Multiple radio values can be selected for the same name if the "multiple" attribute is set.
_T_ Every font belongs to exactly one font family.
_F_ In CSS, URL's are specified using the "href" attribute.
_T_ The $<$ div> element is used to group block elements.
_T_ The <th> element can be used to designate either row or column headings in a table.
_F_ Serif fonts are considered easier to read in a browser window than sans-serif fonts.
_T_ A selector consisting of exactly one id selector is more specific that a selector with three type selectors and five (non-id) context selectors.

## Question 2

For each of the following, identify whether is would be done in HTML or CSS.

CSS Set the background color for a paragraph.
HTML Make headings in a table.
HTML Create a link to another file.
CSS Cause an element to "float" to the right edge of a browser window.
CSS Cause $<\mathrm{h} 2>$ elements to be centered.
CSS Specify the font to be used for the text inside a <blockquote> element.
HTML Group consecutive inline elements so that they can be styled as a unit.
HTML Give a title to the "Submit" button on a form.
CSS Specify that the list elements of an $<\mathrm{ol}>$ element should be numbered using the letters of the Greek alphabet.

HTML Specify a label for an <input> element of a form.
HTML Allow multiple values to be selected from a pull down menu.
CSS Specify that the borders around consecutive cells in a table be fused together.

## Question 3

Briefly explain each of the following (two sentences or less). Give an example using each.

The span element
A grouping of contiguous inline elements: <span id="a">some text</span>
A font family
A collection of related fonts: sans-serif
Padding
Optional space surrounding the content of an element inside the element's optional border: padding: 10px

A checkbox
A type of input element used in a form enabling a user to specify multiple values for a name: <input type="checkbox" name="priority" value="world peace" $/>$

A hex color code
A specification of a color using hexadecimal digits: \#E51482
A serif


A table summary
An attribute of a <table> element that describes the table but is not displayed by a browser: <table summary="I made this stuff up">

## Question 4

For each of the following color names, choose the letter of the hex code below that corresponds most closely to it.

> _c_ white
_g_ bright red
_b_ blue green
_a_dark blue
_d_ purple
_h_ dark gray?
_i_ light green
_f_ black
_e_ brown
j_ light gray
a) $\# 040149$
b) $\# 00 \mathrm{E} 3 \mathrm{DE}$
c) \#FFFFFF
d) \#800080
e) \#7F4000
f) $\# 000000$
g) \#F9100F
h) \#A1A5A4
i) \#02E900
j) \#CFD0D0

## Question 5

Briefly, describe the XHTML elements that would be matched by the following selectors:
a) li
any list element
b) div h3
a level 3 heading inside a div element
c) strong.author
a strong element with a class attribute with "author" as its value
d) h2\#cats + p
a paragraph following a level 2 heading with an id attribute with value "cats"
e) em em
an em element inside another em element
f) : link
any unvisited hypertext link ( $\langle a\rangle$ element with an "href" attribute)
g) blockquote div +p a:hover
an $\langle a\rangle$ element (hyperlink) inside a paragraph following a div element inside a $<$ blockquote $\rangle$, when the mouse is over the $\langle a\rangle$ element
h) div.pets > p\#cats strong
any strong element inside a paragraph with id attribute valued "cats" that is the immediate child of a <div> element with class attribute valued "pets"

## Question 6

Write the XHTML elements to create the following table. (Don't worry about styling it.)
2010 Census Data

|  | Population | Congressional Districts | Net Gain |
| :--- | :---: | :---: | :---: |
| California | $37,253,956$ | 53 | 0 |
| Texas | $25,145,561$ | 38 | 4 |
| New York | $19,378,102$ | 27 | -2 |
| Florida | $18,801,310$ | 27 | 2 |

```
<table>
    <caption>2010 Census Data</caption>
    <tr>
            <td></td>
            <th>Population</th>
            <th>Congressional Districts</th>
            <th>Net Gain</th>
    </tr>
    <tr>
            <th>California</th>
            <td>37,253,956</td>
            <td>53</td>
            <td>0</td>
    </tr>
    <tr>
            <th>Texas</th>
            <td>25,145,561</td>
            <td>38</td>
            <td>4</td>
    </tr>
    <tr>
            <th>New York</th>
            <td>19,378,102</td>
            <td>27</td>
            <td>-2</td>
    </tr>
    <tr>
            <th>Florida</th>
            <td>18,801,310</td>
            <td>27</td>
            <td>2</td>
    </tr>
</table>
```


## Question 7

Create an order form for the " 228 Pizzeria". The order form will be processed by an application with the relative url of "order.php". Remember that the browser will transform a completed form into a sequence of name-value pairs and submit them to the application. The names for this form are listed in boldface and described below. You don't need to specify a complete web-page, just the form. You also shouldn't worry about styling the form. But, do make sure that the user has enough information to fill out the form. (If you need to, use the back of the preceding page for your answer.)
size: either 8,10 , or 12 inch.
toppings[]: zero or more of: extra cheese, pepperoni, olives, pineapple, and anchovies.
address: space for 4 lines of text.
card: either "Visa" or "MasterCard" (use a pull-down menu for this).
name: one line of text.
number: one line of text (this is sensitive data, so protect it).

```
<form action="order.php" method="post">
    size:
    <input name="size" type="radio" value="8 in"/>8 in
    <input name="size" type="radio" value="10 in"/>12 in
    <input name="size" type="radio" value="12 in"/>12 in <br/>
    toppings:
        <input name="toppings[]" type="checkbox" value="extra cheese" />extra cheese
        <input name="toppings[]" type="checkbox" value="pepperoni" />pepperoni
    <input name="toppings[]" type="checkbox" value="olives" />olives
    <input name="toppings[]" type="checkbox" value="pineapple" />pineapple
    <input name="toppings[]" type="checkbox" value="anchovies" />anchovies<br/>
    address: <textarea name= "address" rows="4">your address here</textarea><br/>
    card:
    <select name="card">
            <option value="Visa">Visa</option>
        <option value="MasterCard">MasterCard</option>
    </select> <br/>
    name: <input name="name" type="text"/> <br/>
    number: <input name= "number" type="password"/>
</form>
```


## Question 8

The next page contains a dialectics.html document. On the back of the preceding page create a complete style sheet (dialectics.css file) to achieve the following:
a) Set the default font size to medium, the default font to be sans-serif, and the background color to be yellow.
b) Center the h1 element, the "title", the "subtitle", and the "footer".
c) Float the "poem" on the right with $40 \%$ of the viewport width. Set the font color to a dark green. Use the "Times New Roman" for the "poem".
d) Align the text of the "signature" element to the right.
e) Have "Hegel" display in the normal font style.
f) Set the font color of the "text" element to red and set its alignment to "justify".
g) Surround the "text" element by a thick solid border with 4 pixels of padding on all four side and a 10 pixel margin on the right and left (with no margin on the top or bottom).
h) Set the style of the numbers for the list items to be in uppercase Roman numerals.
i) Make sure the "poem" cannot overlap the "footer".
j) Set the size of the text in the "footer" to be half the size of the normal text.
<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.O Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en"> <head>
<meta http-equiv="content-type" content="text/html; charset=UTF-8" /> <link type="text/css" rel="stylesheet" href="dialectics.css" /> <title>Dialectics</title>
</head>
<body>
<div id="header">
<h1>Negation of a Negation</h1>
</div>
<blockquote id="poem">
<p class="title"><strong>ROAMING IN THOUGHT</strong></p>
<p class="subtitle">(<em>After reading <em>Hegel</em>.</em>)</p>
<p class="stanza">
Roaming in thought over the Universe, I saw the little the is <br> \&nbsp; \&nbsp; Good steadily hastening towards immortality, <br>
And the vast all that is call'd Evil I saw hastening to merge itself <br> \&nbsp;\&nbsp; and become lost and dead.
</p>
<p class="signature">-- Walt Whitman</p>
</blockquote>
<div class="text">
<h2>Manifesto of the Communist Party</h1>
<p>A spectre is haunting Europe \(\& \# 8212\); the spectre of communism. All the powers of old Europe have entered into a holy alliance to exorcise this spectre: Pope and Tsar, Metternich and Guizot, French Radicals and German police-spies.</p>
<p>Where is the party in opposition that has not been decried as communistic by its opponents in power? Where is the opposition that has not hurled back the branding reproach of communism, against the more advanced opposition parties, as well as against its reactionary adversaries?</p>
<p>Two things result from this fact:</p>
<ol>
<li>Communism is already acknowledged by all European powers to be itself a power.</li>
<li>It is high time that Communists should openly, in the face of the whole world, publish their views, their aims, their tendencies, and meet this nursery tale of the Spectre of Communism with a manifesto of the party itself.</li>
</ol>
<p>To this end, Communists of various nationalities have assembled in London and sketched the following manifesto, to be published in the English, French, German, Italian, Flemish and Danish languages.</p>
<p><strong>...</strong></p>
</div>
<div id="footer">
<p>\&COpy;COPYLEFT ALL WRONGS RESERVED 1848, 2011.</p>
</div>
</body>
</html>
```
body {
    font-size: medium;
    font-family: sans-serif;
    background-color: yellow
}
h1, .title, .subtitle, #footer {
        text-align: center
}
#poem {
        width: 40%;
        float: right;
        color: #040;
        font-family: "Times New Roman"
}
.signature {
    text-align: right
}
em em {
        font-style: normal
}
.text {
        color: red;
        text-align: justify;
        padding: 4px;
        margin: 0px 10px;
        border: solid thick;
}
li {
        list-style-type: upper-roman
}
#footer {
    clear: right;
    font-size: 50%
}
```

