

Sample Final
CIS 228: The Internet
Prof. St. John
Lehman College
City University of New York
12 December 2007

Exam Rules

- Show all your work. Your grade will be based on the work shown.
- The exam is closed book and closed notes.
- When taking the exam, you may have with you pens or pencils, and an 8 1/2" x 11" piece of paper filled with notes, programs, etc.
- You may not use a computer or calculator.
- All books and bags must be left at the front of the classroom during this exam.
- Do not open this exams until instructed to do so.

Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Question 6	
Question 7	
Question 8	
Question 9	
Question 10	
TOTAL	

1. True or False:
 - (a) ___ All elements have an opening and closing tag.
 - (b) ___ You can only use words, not images, as the label for a link.
 - (c) ___ You can nest lists within lists.
 - (d) ___ To pop up a new window, you must have the target attribute set to "newWindow"
 - (e) ___ Only URLs (not relative paths) can be used for "href" attribute in the `a` element.
 - (f) ___ GIF is the preferred format for color photographs.
 - (g) ___ In strict HTML 4.01, all inline elements must be in a block element.
 - (h) ___ In CSS, all properties and values go between `{ }` braces.
 - (i) ___ The fonts the user sees depends on what fonts are loaded on their computer.
 - (j) ___ In JavaScript, only one array can be used in any functions.

2. Answer in two sentences or less the following:

- (a) What is HTML? What is it used for?

- (b) What is XHTML? What is it used for?

- (c) What is the difference between them?

3. Fill in the following table with the corresponding decimal or hexcode representation of the number. For partial credit, show your work.

Decimal	Hexcode
13	
	#13
39	
	#a3
	#ee

4. What does the following JavaScript code do? Write the **ending** value for each variable in the box below. (Show your work for partial credit.)

```
var groucho, harpo="honk", chico, zeppo=5;
```

```
groucho = 2*zeppo;  
chico = zeppo- groucho;  
harpo = harpo + " " + harpo + "!";  
groucho++;
```

groucho	harpo	chico	zeppo

5. Write Javascript **functions** that will do the following:

(a) Say ‘‘It’s nice to meet you!’’

(b) Take as input, **digit**, and return true if it’s a number, and otherwise return false.

(c) Prompt the user for their grades on the last 10 assignments and tell them the average of their grades.

6. Be the browser with the following HTML and CSS files. On the following page of the exam, draw the page and indicate any style (color, borders, etc) on your page:

HTML:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />
  <title>Starbuzz Coffee</title>
  <link rel="stylesheet" type="text/css" href="starbuzz.css" />
</head>

<body>
<div id="allcontent">
  <div id="header">

    
  </div>

  <div id="main">
    <h1>QUALITY COFFEE, QUALITY CAFFEINE</h1>
    <p>
      At Starbuzz Coffee, we are dedicated to filling all your caffeine needs
      through our quality coffees and teas.
    </p>
    <h1>OUR STORY</h1>
    <p>
      "A man, a plan, a coffee bean". Okay, that doesn't make a palindrome,
      but it resulted in a damn good cup of coffee.
    </p>
    <h1>STARBUZZ COFFEE BEVERAGES</h1>
    <p>
      We've got a variety of caffeinated beverages to choose
      from at Starbuzz, including our
      <a href="beverages.html#house" title="House Blend">House Blend</a>,
      <a href="beverages.html#mocha" title="Mocha Cafe Latte">Mocha Cafe Latte</a>,
      <a href="beverages.html#cappuccino" title="Cappuccino">Cappuccino</a>,
      and a favorite of our customers,
      <a href="beverages.html#chai" title="Chai Tea">Chai Tea</a>.
    </p>
  </div>

  <div id="sidebar">
    <p class="beanheading">
      
      <br />
      ORDER ONLINE
      with the
      <a href="form.html">BEAN MACHINE</a>
      <br />
      <span class="slogan">
        FAST <br />
        FRESH <br />
        TO YOUR DOOR <br />
      </span>
    </p>
    <p>
      Why wait? You can order all our fine coffees right from the Internet
      with our new, automated Bean Machine.
    </div>

  <div id="footer">
    &copy; 2005, Starbuzz Coffee
    <br />
    All trademarks and registered trademarks appearing on
    this site are the property of their respective owners.
  </div>

</div>
</body>
</html>
```

CSS:

```
body {
  background-color: #b5a789;
  font-family: Georgia, Times, serif;
  font-size: small;
  margin: 0px;
}

#header {
  background-color: #675c47;
  margin: 10px;
  height: 108px;
}

#main {
  background:
    #efe5d0 url(images/background.gif) top left;
  font-size: 105%;
  padding: 15px;
  margin: 0px 10px 10px 10px;
  width: 420px;
  float: left;
}

#sidebar {
  background:
    #efe5d0 url(images/background.gif) bottom right;
  font-size: 105%;
  padding: 15px;
  margin: 0px 10px 10px 470px;
}

#footer {
  background-color: #675c47;
  color: #efe5d0;
  text-align: center;
  padding: 15px;
  margin: 10px;
  font-size: 90%;
  clear: left;
}

h1 {
  font-size: 120%;
  color: #954b4b;
}

h2 {
  font-size: 110%;
}

.slogan {
  color: #954b4b;
}

.beanheading {
  text-align: center;
  line-height: 1.8em;
}

a:link {
  color: #b76666;
  text-decoration: none;
  border-bottom: thin dotted #b76666;
}

a:visited {
  color: #675c47;
  text-decoration: none;
  border-bottom: thin dotted #675c47;
}

#allcontent {
  width: 800px;
  padding-top: 5px;
  padding-bottom: 5px;
  background-color: #675c47;
  margin-left: auto;
  margin-right: auto;
}
```

(Space for Answer to #6:)

7. Write the HTML **and** CSS to make the following table:

SPRING 2008	
Tue. Nov. 20, 2007 – Tue., Jan. 22	Spring Registration
Mon., Jan. 21	Dr. Martin Luther King, Jr.'s Birthday – College is closed
Thurs., Jan. 24	Last day to drop with 100% refund
Fri., Jan. 25	First day of classes
Fri., Jan. 25 – Fri., Feb. 1	Late Registration/Change of Program
Thurs., Jan. 31	Last day to drop with 75% refund
Thurs., Feb. 7	Last day to drop with 50% refund

8. Write the style sheet that will arrange the following page: fonts should be sans-serif, headings should be silver and centered, the sidebar should float to the left, div's should have blue text on a silver background, images should have borders and 10 pixel padding and margins, picture names should be boldface and artists' names should be in italics. (Hint: Do not change any of the HTML code.)

```
<html>
<head>
  <title>Picture Gallery</title>
  <link type="text/css" rel="stylesheet" href="lounge.css" media="screen" />
</head>
<body>
  <h1>Old Masters </h1>
  <p>
  </p>
  <div id="Sidebar">
    <p> See more images at our sponsor's websites!</p>
  <div id="row1">
    <table>
      <tr>
        <td></td>
        <td></td>
        <td></td>
      </tr>
      <tr>
        <td><span class="title">Mona Lisa</span> <span class="artist">Leonardo Da Vinci</span>
        <td><span class="title">Night Watch</span> <span class="artist">Rembrandt</span>
        <td><span class="title">Sistine Chapel </span> <span class="artist">Michelangelo</span>
      </tr>
    </table>
  </div>
  <h1>American Painters </h1>
  <p>
  </p>
  <div id="row2">
    <table>
      <tr>
        <td></td>
        <td></td>
        <td></td>
      </tr>
      <tr>
        <td><span class="title">The Pig</span> <span class="artist">Andrew Wyeth</span>
        <td><span class="title">Bella Dona</span> <span class="artist">Georgia O'Keefe</span>
        <td><span class="title"></span>Map<span class="artist">Jasper Johns</span>
      </tr>
    </table>
  </div>
</body>
</html>
```

9. Create a form for ordering ice cream from the "228 Pizza Restaurant". Your form should have the following choices (the name used by the web application is included in parenthesis):

- first and last names (fname and lname)
- type of pizza crust (crust)
- kind of sauce (sauce),
- extra toppings (extras[]), and
- a text area for comments and special instructions (comments)

For the first four, you should allow only one answer (ie radio buttons or pull-down menu), while for extras (i.e. sprinkles, whipped cream, etc), multiple answers are expected (i.e. checkboxes).

The web application for processing the form is located at:

<http://comet.lehman.cuny.edu/stjohn/teaching/cis228/order.php>

10. Write a COMPLETE file that does the following:

- Uses cookies to keep track of the number of times the user has visited the page in the last year.
- If this is the first visit, display a count of 1 on the page and store that in a cookie.
- If they have visited before, retrieve the number of previous visits from the stored cookie, update it by one. Display the new count and store it in the cookie.
- You can assume that the following functions have been written for you: `setCookie(name, value, days)`, `getCookie(name)`, and `delCookie(name)`.