MIS 3690 Web Technologies - Babson College
Midterm Exam – Fall 2015 Section 2

This is an open-book, open-notes, open-Web examination. However, you may not use email or IM, and you may not communicate in any way with other people during the course of this exam.

The exam is worth 100 points. You have 95 minutes to complete this examination. Please make sure that you use a few minutes towards the end to upload the exam to the server and test the pages to make sure that they work the right way. **Please test all files using Mozilla Firefox with a FULL SCREEN WEB PAGE**– that is the browser and format that will be used to evaluate your pages for formatting and look/feel.

Please create a folder called **"Midterm"** in your laptop and save ALL FILES associated with the midterm exam here. You can upload the entire folder to the server when you are done.

You can test your exam ON THE SERVER using the following URL which will bring you to your index page:

http://mis3690-02.babson.edu/<your-id>/<secret-folder>/Midterm

The exam has a total of 4 questions. The questions are all worth about the same number of points (there may be a few points this way or that). Two of the questions require you to create a web page using HTML and CSS. The other two require you to create the specified functionality using JavaScript. The template for each question is provided to you with the names **index.htm**, **Q2Mid.htm, Q3Mid.htm, and Q4Mid.htm. Please do not change the names.** Once you have uploaded the files and tested it, please write down the time-stamp on the folder (Midterm) below your signature. Do not do anything that might change/modify the time-stamp of this folder on the server.
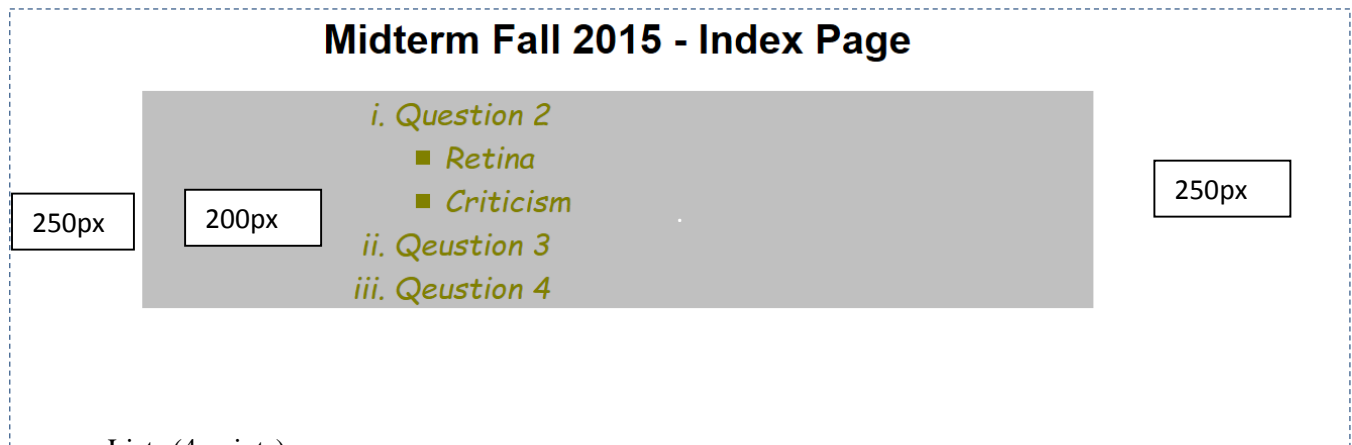
Honor Code:

I pledge my honor that I have neither received nor provided unauthorized assistance during the completion of this work.

Your Name: _____ Signature: _____

Time: _____

Question 1 – index.htm (23 points)

Use the file "index.htm" to create the following (see figure below – the border shown is for reference only to show how the entire page looks like. It does not exist on the web page.)

Midterm Fall 2015 - Index Page

i. Question 2
- *Retina*
- *Criticism*

ii. Qeustion 3
iii. Qeustion 4

250px   200px   250px

- Lists (4 points)
  - Create an ordered list with three items, Question 2, Question 3, and Question 4.
  - Within the ordered list for Question 2, create an unordered list with 2 items, Retina Display and Criticism.
- Hyperlinks (2 point)
  - Hyperlink "Question 3" to "Q3Mid.htm".
  - Hyperlink "Question 4" to "Q4Mid.htm".
  - *Retina Display must linked to the "Retina Display" section on Q2Mid.htm. Similarly, Criticism must be linked to the "Criticism" section in Q2Mid.htm. Details on Q2Mid.htm come later on. See bullets 5 and 6 in Q2Mid.htm*
- Styles (2 point each unless specified otherwise)
  - Use internal styles to use "square" as the bullet for the un-ordered list.
  - Use internal styles to use "lower-roman" alphabets for the ordered list.
  - Set the background color of this entire section (not including the heading –see figure above) to Silver.
  - Set the font-color for this entire section to Olive (including the hyperlinks).
  - Set the font to Cursive, 1.5em, and italicized.
  - When you mouse-over the hyperlink, its background must change to **orange.** It must have no background when the mouse is removed.
  - Set the white space on the right and left of the silver area to 250px each.
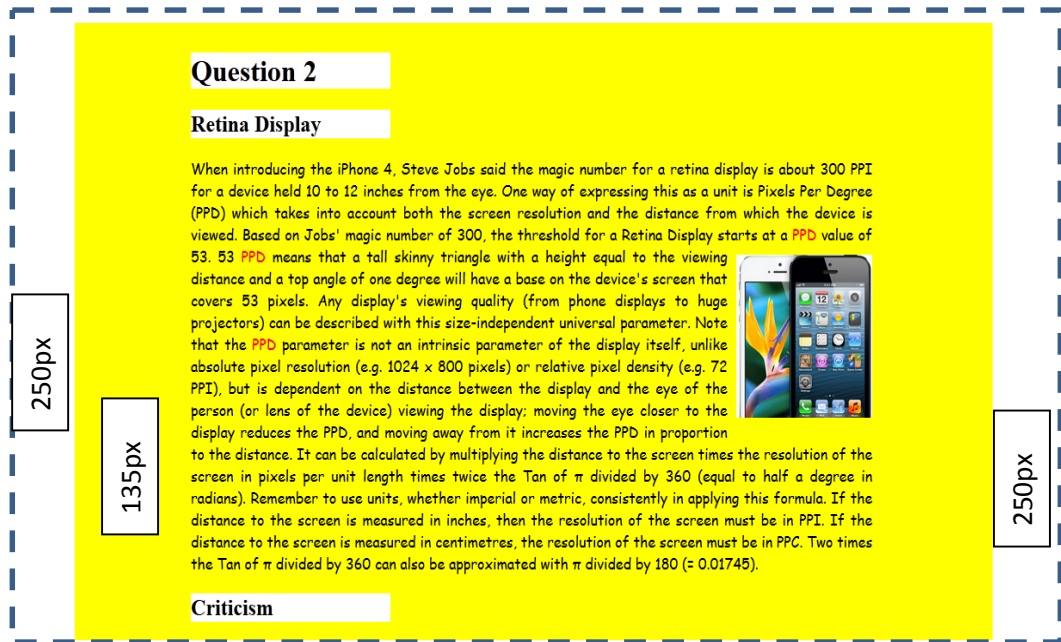 - Set the silver space on the left of the list as 200px; top and bottom as 20px;

Question 2 – Q2Mid.htm - Retina Display (27 points)

Format the content provided together with the image provided (separately) to look like the image shown below. The image does not show ALL of the web page, just as much as you need to see to understand the structure/format. The last paragraph is not shown entirely. Use Q2Mid.htm to complete this question.

- Construction (2 points each)
  1. The main title Question 2 uses <h1>
  2. The secondary titles (the Retina Display and Criticism) use <h2>
  3. The image should be added in the spot indicated by the place holder <add image here>. The image must be positioned to the right (as shown) with the text flowing around it (as

shown). <u>Please note that the image shown below is not the complete Q2Mid.htm – only the top half is shown.</u>

4. The image (as a whole) must be hyperlinked to http://www.apple.com
5. Hyperlink the "Retina Display" in the ordered list created in **index.htm** above to the "Retina Display" section.
6. Hyperlink the "Criticism" in the ordered list created in **index.htm** above to the "Criticism" section.

- Styles – (2 points each unless specified otherwise)
  - o (1 point) The image must have a space of 10px between the image and its surrounding text on the top, left, and bottom.
  - o (1 point) The image width is 25% of its original width.
  - o The entire section including the main title all the way to the end of the second paragraph must have a background color of "yellow".
  - o The paragraph uses a cursive font. The paragraph is 85% of the width of the page. Justify the text when aligning the text in the paragraph.
  - o The white space on either side of the yellow area is 250px each. (If you assume that the borders -on the right and left shown above - are the edges of the web page, the white space is what is between the yellow edge and the border).
  - o The yellow space on the left of the text is 135px. The yellow space to the top of the main title is 10px.
  - o (3 points) All three titles (the main title and the two secondary titles) have a white background. The yellow colored space on the right of these titles is 700px.
  - o Pick any three occurrences of the acronym "PPD" in the first paragraph above and set the font color to red. (this is not shown in the image above)

Please refer to the instructions in the Q3Mid.htm and Q4Mid.htm for answering the next two questions.

Midterm - Question 3 (25 points)

Please create the following functionality using the form given below. The user will enter ONE of two numerical values into the text box in the form given. The user will then click the "Convert" button. Depending on which value is entered, please convert it and show the corresponding converted value in the other text box. For example, if Kilometers is entered and Miles is not, then you should convert KM to Miles. If Miles is entered and Kilometers is not, then, convert Miles to KM. The conversion rule, simplified, is: multiply by (2/3) to convert KM to Miles and by (3/2) to convert Miles to KM. Remember to use ParseFloat. Also, the function may require a "return" to ensure that the form does not get reset. This part is worth 20 points. For the additional 5 points, please alert user if both fields are empty when the "Convert" button is clicked and alert the user if a non-numerical value is entered.

Convert and Smile

Kilometers: [   ] Miles: [   ]

[Convert]

[Clear]

Question 4: Manage the Image (25 points)

This question has two parts: (a) Add appropriate functionality to the two buttons below such that when the first button is clicked, the Celtics image is shown and when the second is clicked, the Patriots image is shown (10 points if written as two separate functions, 15 if written as a single function). (b) When the mouse is moved over the image (note that only one image is shown at a time), add a red, ridge border that is 10px thick. When the mouse is removed, the border should disappear (10 points).

[Celtics]   [Patriots]

Make sure the Midterm folder has the following files:

1. index.htm
2. Q2Mid.htm
3. Q3Mid.htm
4. Q4Mid.htm
5. retinadisplay.jpg
6. celtics.png
7. patriots.jpg