Homework 1: Usability Heuristics and Information Design

Warm up: due Friday 1/21 @ 11:59pm on Courseworks

Main: due Tuesday 1/25 @ 11:59pm on Courseworks.

We will accept the Main assignment without late penalty until Wednesday 1/26 @ 11:59pm

Warm-up:

What to submit:

2 separate files with the following titles:

- 1_positive_example.pdf
- 2_negative_example.pdf
- Submit them separately to Courseworks, do **not** zip them up.

Problems:

1. Positive example of the 10 Usability Heuristics.

- a. What is a web or mobile application that you like?
- b. Show us a screenshot
- c. Name 3 of the 10 usability heuristics that this application uses to make it good. For each heuristic, please say
 - i. Which heuristic?
 - ii. Tell us 1-3 sentences about how the application employs the heuristic and why it's important to this application.

2. Negative example of the 10 Usability Heuristics.

- a. What is a web or mobile application that you dislike (or an aspect of an application you dislike)?
- b. Show us a screenshot
- c. What is the main usability heuristic it violates?
- d. Tell us 1-3 sentences about how the application violates the heuristic and why you hate it so much in this application.

Main:

What to submit:

- 5 separate files with the following titles:
 - o 1_Invitation_writeup.pdf
 - 1_Invitation.html
 - 2_Tinder_writeup.pdf
 - o 2_Tinder.html
 - o 3_ info_design_easy.pdf
 - o 4_info_design_hard.pdf
- Submit them separately to Courseworks, do **not** zip them up.

Problems:

1. Recreate the invitation example from class using HTML and CSS.

You are only allowed to use the following HTML elements: <div>, ,
. All styles must be in a <style> header in CSS. You may not use the style attribute of HTML elements.

- a. Show a screenshot of your recreation
- b. Submit your code as directed in "What to submit"

2. Recreate the Tinder information display below in HTML and CSS.



Use only basic HTML elements, <div>, ,
, etc. (there are two more elements you will need, but we aren't going to tell you what they are). Don't use <tables>. You will get zero points if you use a table element.

All styles must be added in the CSS header. No inline style tags.

Use only the following images from this location (do not copy the images to your local machine)

- http://coms4170.cs.columbia.edu/2019spring/assignments/hw2/tinder_images/tinder_logo.png
- http://coms4170.cs.columbia.edu/2019spring/assignments/hw2/tinder_images/tinder_person.png
- http://coms4170.cs.columbia.edu/2019spring/assignments/hw2/tinder_images/tinder_verified.png

- http://coms4170.cs.columbia.edu/2019spring/assignments/hw2/tinder_images/heart.png
 - a. Show a screenshot of your recreation
 - b. How did you implement the thin grey line under the logo:
 - i. What is the HTML element?
 - ii. How did you style it?
 - c. How did you implement the border the rounded corners:
 - i. What is the HTML element?
 - ii. How did you style it?
 - d. How did you get the white heart to show up on the solid grey background:
 - i. What was the HTML element?
 - ii. Why did it work?
 - e. How did you get the heart to be next to the "Like me on Tinder" text:
 - i. What is the HTML element?
 - ii. how did you style it?
 - f. How did you get the **verified image** to be next to the "Sean Rad, 29" text:
 - i. What is the HTML element?
 - ii. How did you style it?
 - g. How did you center the element containing the Tinder logo:
 - i. What is the HTML element?
 - ii. How did you style it?
 - h. How did you center the element containing the text "Like me on Tinder":
 - i. What is the HTML element?
 - ii. How did you style it?
 - i. Submit your code as directed in "What to submit"

3. Information Design (Easy)

Below is some undifferentiated text. Think about who the person seeing this information and what their primary goal is. Design this information so that the important elements are emphasized according to the information hierarchy principles discussed in class. Do not use color.

You may re-order or re-phrase the information however you like as long as the meaning is preserved.

We recommend using a PowerPoint-like application to make your design.

Undifferentiated text:

Classic Burger. Choice of American, cheddar, swiss or mozzarella cheese. Meatless options available. \$18. Comes with a choice of fries or a side salad. Dinner salad. Add protein: salmon +4, chicken +2, steak +3, shrimp +5. \$15 Soup. Hot! Made fresh daily. Ask your server for Cup \$5, Bowl \$8. Fountain soda !!!free refills!!!, Coke products only. Straws available on request. \$2 An assortment of tea – herbal, green and organic teas available \$2.50 Coffee to stay or to go \$3 French Fries. \$8. For sweet potato fries add \$1 Side salad. \$10. Spring mix, choice of dressing. Jalapeno poppers, just like the lunch lady used to make 'em. \$8. They're spicy. Duh! Central Perk Café Established 1994 Parties of 5 or more have 18% gratuity automatically added. Live music!

- a. Show an image of your design.
- b. Who is the person looking at this information?
- c. When are they looking at it and what goal are they most likely trying to achieve?
- d. What are the conceptual groups in your information design?
 - i. Show a smaller image with the boxes on the groups. Label them in the order in which you intend people to see them.
- e. What is the concept behind each of the conceptual groups?

4. Information Design (Hard)

Below is some undifferentiated text. Think about who the person seeing this information and what their primary goal is. Design this information so that the important elements are emphasized according to the information hierarchy principles discussed in class. Do not use color.

You may re-order or re-phrase the information however you like as long as the meaning is preserved.

We recommend using a PowerPoint-like application to make your design.

Undifferentiated text:

100% Cotton. Cold wash machine. Do not dry clean. Wash dark separately. Do not bleach. Wash inside out. Do not tumble dry. Line dry in shade. Warm iron on reverse. Made in China. RFC# 910911-040

- a. Show an image of your design.
- b. Who is the person looking at this information?
- c. When are they looking at it and what goal are they most likely trying to achieve?
- d. What are the 3 conceptual groups in your information design:
 - i. Show a smaller image with the boxes on the groups. Label them in the order in which you intend people to see them.
- e. In group 1:
 - i. What is the concept behind this group?
 - ii. Why is this the first group they should see?
 - iii. What important information did you emphasize?
 - iv. What did you choose NOT to emphasize?
 - v. What two heuristics did you use together to bring it out?
- f. In group 2 (same questions):
 - i. What is the concept behind this group?
 - ii. Why is this the second group they should see?
 - iii. What important information did you emphasize?
 - iv. What did you choose NOT to emphasize?
 - v. What two heuristics did you use together to bring it out?
- g. In group 3: (same questions)
 - i. What is the concept behind this group?
 - ii. Why is this the third group they should see?
 - iii. What important information did you emphasize?
 - iv. What did you choose NOT to emphasize?
 - v. What two heuristics did you use together to bring it out?
- h. Did you use color?
 - i. If so, what did the slides say about using color?