

Assignment 4

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Grading: Score out of 100 (Question 1: 25 points, 2: 50 points, 3: 20 points, 4: 5 points)

Due date: Wednesday, November 16 at 11:59 pm on Brightspace

Lectures covered: 11, 12, 14

Format: Please use Times New Roman size 12 font and normal margins

Submission: Submit *two PDFs* with the following naming conventions:

“Lastname_Firstname_A4” and “Lastname_Firstname_Wireframe”

Plagiarism warning: this assignment is to be done individually (although you may recruit other students in class for feedback)

Preface

In this assignment, you will be able to take everything you have learned from the previous assignments to suggest improved designs for your interface. If, for whatever reason, you want to work on a different interface for this assignment, that is fine, but you will have to fill in any gaps you need from previous assignments (although there is no need to report here on any new work that you did).

Note that for gathering feedback, you have the option of doing it in person or online. While the latter can be tricky with sketches, go for whatever option you are most comfortable with for this assignment. You can always send any storyboard sketches as images and then discuss them online, or do a video call where you show your storyboards while you discuss. Remember to always get the user’s informed consent before you get started.

Software needed

We have been issued a license from Balsamiq for the purposes of this course. *Please note that you cannot share this license with anyone outside of this class.* The Balsamiq website also has some great resources and tutorials to get you started. Take a look [here](#) as a first step, and you can always refer to [their full documentation](#) and check out some [samples](#).

License Key:

COMP30082022|67egeJxzCncxiQ+pcfb3DVAwNjCwUDAyMDKqMTQzs7Q0MrEwAAEAo0gIWg==

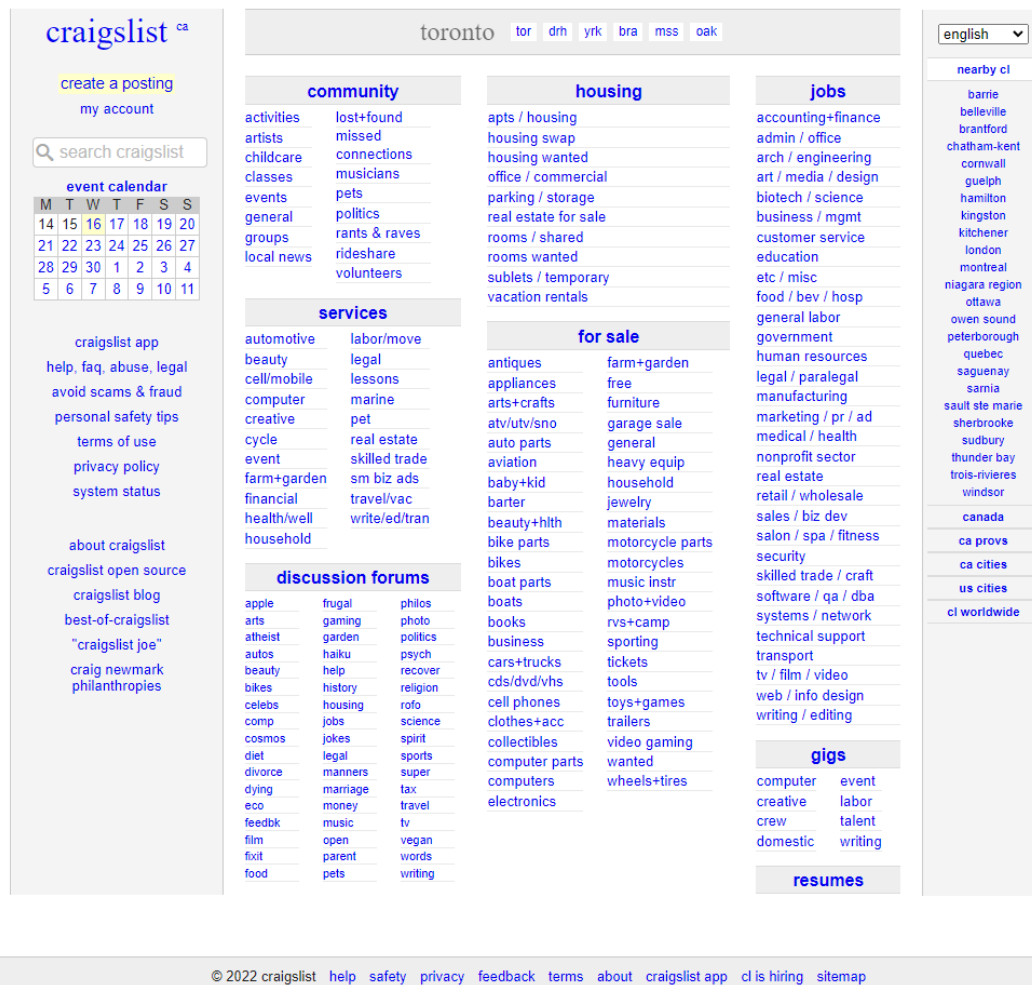
Download link: <https://balsamiq.com/wireframes/desktop/>

Question 1

25 points / 5 points unless indicated / Lecture 11

- a) Indicate what **interface** and **task** you have selected, provide a picture/screenshot, and indicate whether they are the same as the ones you picked in Assignment 3. If one or both are not the same, explain why you made that change.

The interface that I selected is going to be different than the one I picked in Assignment 3 which is now going to be the craigslist website. The task that I selected is to create a listing for selling a used phone which is going to be different than the task in Assignment 3. I made this change because my previous interface pretty much didn't have any flaws to the interface so it was hard to decide on how I would update it so I decided to go for some other interface that I thought had more flaws to it.



- b) Are there any **Gestalt principles** that are violated in your interface? Go through *each of the four* that we covered and explain whether you think it was met or not using an example and a screenshot. If a principle is not applicable, explain why (10 points).

Similarity – Things related if they are similar to each other

Similarity is shown here in the picture below where the words are all blue, this shows that they are similar as to how they are all links that you can click on.

community	
activities	lost+found
artists	missed
childcare	connections
classes	musicians
events	pets
general	politics
groups	rants & raves
local news	rideshare
	volunteers

Continuity – Continuous things

Continuity is not really shown in this interface because the interface is pretty simple with no line or directions that would indicate it to be broken.

Proximity – Things that are closer are related

You can see in the picture below where all the things in the same category are closer together to show that they are within the same category.

services	
automotive	labor/move
beauty	legal
cell/mobile	lessons
computer	marine
creative	pet
cycle	real estate
event	skilled trade
farm+garden	sm biz ads
financial	travel/vac
health/well	write/ed/tran
household	

Symmetry – Things that are symmetric are part of same group

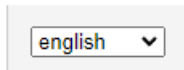
In the picture below you can see that the community and the housing both show symmetry where the items below the category are within their sides which shows that the items below are apart of the same group.

community		housing
activities	lost+found	apts / housing
artists	missed	housing swap
childcare	connections	housing wanted
classes	musicians	office / commercial
events	pets	parking / storage
general	politics	real estate for sale
groups	rants & raves	rooms / shared
local news	rideshare	rooms wanted
	volunteers	sublets / temporary
		vacation rentals
services		

- c) Give a clear example of an **adaptable** function in your interface and another of an **adaptive** function, and for each one explain whether you think that selection works well in your context. If there are no adaptable or adaptive aspects, come up with possible examples for your interface that you think might help usability.

Adaptable – Things that you can set or change

An example of an adaptable function in the interface is the ability to change the language in the top right of the interface.



Adaptive – Things that are changed for you

An example of an adaptive function in the interface is the ability for the website to fit to specific screen dimensions. If you were on mobile the layout would fit the screen itself a lot better than to just load the computer webpage onto a mobile device.

- d) Based on everything you have done so far across assignments, including this question, identify 2-4 **design problems** that you think are the most significant barriers to usability in your interface (focusing mainly on your selected task); use design concepts/principles and cognition concepts, as appropriate.

A significant design problem that barriers the usability in the interface is memorability. The interface throughout is very one dimensional and everything looks the same with same colour scheme. It is very hard to tell what is what and separate one thing from another. Another big design problem is salience. When trying to find a specific category, it is very hard to identify where it could be. This is due to crowding where everything is too close together and also set size where there are many distractors.

Question 2

50 points / Lecture 12

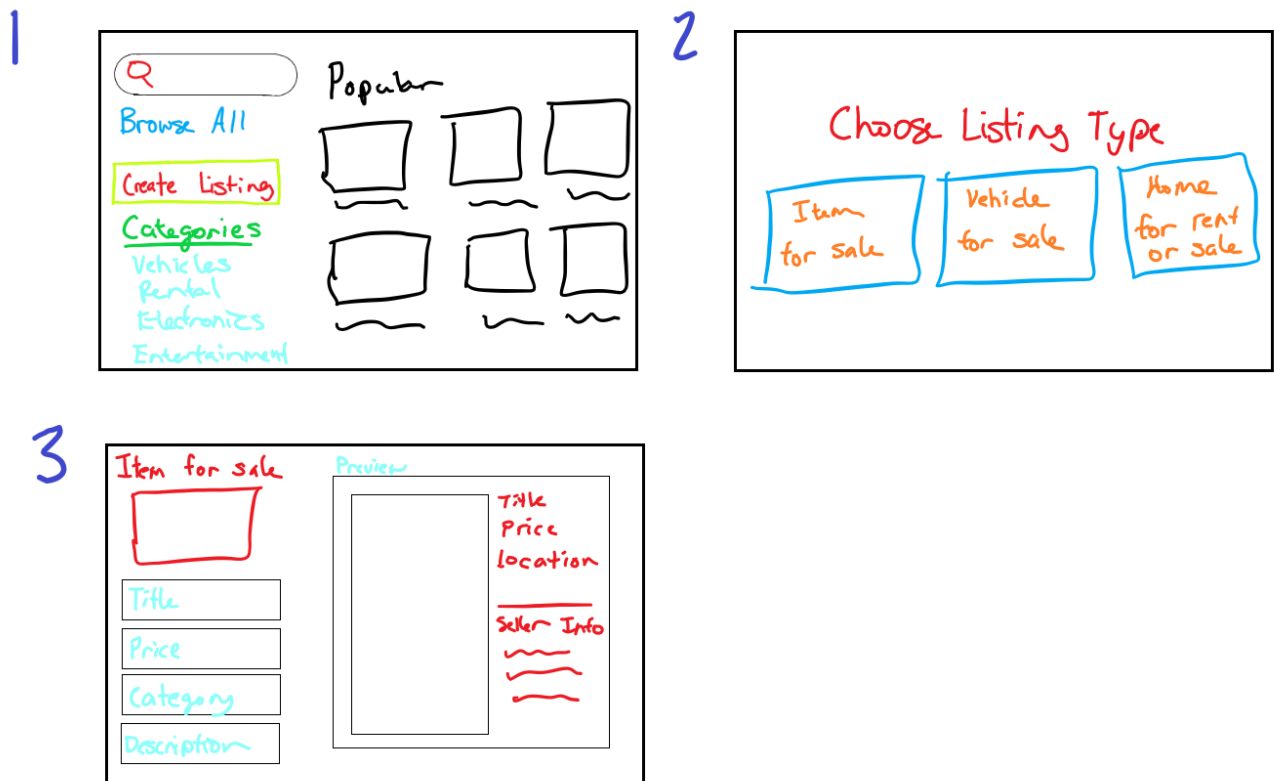
- a) Focusing on your selected task and guided by your primary persona from Assignment 3:
- Create *two* different **storyboard sketches** (with annotations) for how your updated interface could be like. Include clear pictures of your storyboards in the submission and indicate your starting assumptions (10 points).

Starting assumptions: The user knows how to navigate a general website and know how it works. The user should also have an account

Storyboard 1:



Storyboard 2:



- ii. Explain how each of the design problems you highlighted in Question 1d have been addressed in one or both of your updated designs (5 points).

In terms of memorability, the design itself is more organized. A header that separates each section and a list of categories that can be picked from instead of it all scattered around the page. In terms of salience, it is way more clear

where everything is. Crowding is not apparent anymore in both of the designs as you can see icon and headings are more separated to show that they are not grouped together. There's not as many distractors as everything is more organized.

- iii. Gather informal feedback on your two designs from any friend or family member. Report on what their main feedback was, which version they preferred, and which design you selected (no need to provide any questions or transcript; 10 points).

The two designs really improved from the original interface which was very bare bones. In terms of the new design, it was a lot more user friendly and things were easier to find and was more appealing to look at. The preferred version was version 2. They thought that the second version was more aesthetically pleasing and user friendly compared to the first version.

- b) Following from your selection, create *one* **wireframe prototype** for the new version of your interface and save it as a PDF. As part of your submission, you need to create at least four pages in Balsamiq, all of which are properly linked through buttons/links in your design (do not use the Go Back option). Your grader needs to be able to navigate through everything and complete your selected task, so test it out yourself before submitting. Provide notes at each step to help guide the grader (make sure to check the "Include wireframe notes" when you export). Provide enough detail on your wireframe so that the interface is clear, recognizable, and visually appealing and so that your design improvements are clear (25 points).

Question 3

20 points / 10 points each / Lecture 14

- a) Carry out a **cognitive walkthrough** by yourself using your completed wireframe. Provide the questions and clear yes/no answers to each question, together with explanation and any notes.

- 1. Will the correct action be sufficiently evident to the user?

Yes: Upon opening the main webpage for the interface, given the task to post a listing, a button with the phrase "Create New Listing" should be very apparent to the user.

- 2. Will the user notice that the correct action is available?

Yes: The buttons are salient and the affordances are clear enough for the user to notice it.

- 3. Will the user associate the correct action with the task they are trying to achieve?

Yes: The button stands out pretty well and the user should know which action to do to correctly do the task.

4. Will the user interpret the response from the action correctly?

Yes: The page will change to the choose listing page which will let the user decide on what type of listing they would want to create.

- b) Compare your updated design to the original design using **KLM-GOMS**. You can use the cognitive task analysis that you did in Assignment 3 to help you with this (if your interface includes a touchscreen or anything else that is not included in KLM-GOMS, substitute the missing action with a mouse click). Which option takes the shortest time, based on this model? Explain whether you think the result is logical.

Keystroke or button press is about the same for both design, this is mainly based on the user and should not change much with different designs.

Pointing to a target with a mouse is slightly slower on the original design, this is due to the small sizes of the links in the original design compared to the new design.

Mouse press or release is about the same for both design, this is mainly based on the user and should not change much with different designs.

Homing the hand to a device is about the same for both design, this is mainly based on the user and should not change much with different designs.

Drawing n straight line segments of length l is about the same for both design, this is mainly based on the user and should not change much with different designs.

Thinking of decision making is a lot slower on the original design, this is due to the salience in the original design compared to the new design making it harder to find what you need.

Question 4

5 points; Lectures 11-14

Reflect on what you have done in this assignment. To help you think, consider the questions provided below. Your answer should be one or two insightful paragraphs and you need to elaborate on at least *two* of these questions.

- What would you have done differently if you were doing a full study in real life and had more time and options?
- Looking across Assignments 2 to 4, which tools, techniques, methods, or design concepts were most useful for you in developing your updated designs? These could be data gathering approaches, design principles, personas, task analysis, etc.
- What can you say about sketching/storyboarding versus wireframing? Was it helpful to go through a storyboard first or would you have gone straight to wireframes?
- Do you think paper prototyping would have helped you here, either as a replacement for storyboards or as a middle step? Explain.
- What other personas would be relevant for your interface, and how would you have included their input?
- Would a pluralistic walkthrough have been more helpful instead of a cognitive walkthrough? Or following from a cognitive walkthrough?

What can you say about sketching/storyboarding versus wireframing? Was it

helpful to go through a storyboard first or would you have gone straight to wireframes?

Sketching/storyboarding and wireframing really helped me with the visualization of the design for the interface. I think that it was really helpful to go through a storyboard first so that I could just lay out my rough ideas. After I finish laying out my rough ideas putting it into wireframe and making it more detailed really showed me what I could've added to make it even better compared to the storyboard.

Do you think paper prototyping would have helped you here, either as a replacement for storyboards or as a middle step? Explain.

I don't think paper prototyping would have helped much. I think that going from storyboard to wireframes is way more effective. Storyboard helped me lay out my initial rough design while wireframes helped me make the implementation more clearer. Paper prototyping would've the same amount of work doing storyboard and wireframes.