Redesign Option B

do the worksheet below with attention to a subgroup of the users with accessibility limitations - such as visual, physical, or hearing impairments. Replace the heuristics with accessibility guidelines and base your redesign on making sure that the site or app can adhere to guidelines it may be violating.

Pick a system, draft a design brief that you believe captures the designer's intentions for the system. Then you will explore the existing implementation and ultimately redesign of a system that meets the goal stated in the design brief better than the current implementation.

Worksheet Part 1: The Design Brief.

Simply state what you believe to be the goal of the system's original designers. For example, if you choose Kayak.com, you might make a brief around "the site's design should enable users to purchase travel on airlines, book hotels, rent cars with a clear understanding of several options and an easy way to complete bookings."

> **Instacart** is an internet based grocery delivery service in which users can order items from the store of their choice, with a clear understanding of the different options, coupons and departments and a small delivery charge.

Worksheet Part 2: Users and Values.

Before considering the working system, you should think about prospective users. In each of the next three boxes, describe a potential user of this system. Although your answers are presumably not informed by background research, you should treat these as mini-persona-scenario combinations. There are many potential users and scenarios; choose three that are interestingly different and would be informative for your design. You may wish to avoid situations that have strong personal emotional resonance for you; and bear in mind that it is easier to design objectively for others than for oneself.

In each of the following boxes, describe a potential user and usage scenario. In each case, your description should include information about the person using the system, about the thing they are doing. Each response should be about three sentences long.

> a. **Busy Bob**: Bob is a student at BU and the quarterback for his school's football team. Every Saturday, Bob goes on Instacart to purchase the necessary ingredients for the week. Since he has practice everyday, Bob uses his weekend to catch up with homework and lets Instacart bring his food to his place.

b. **Independent Isabel**: Isabel is a product designer at edX and passionate dancer. During the week, she leaves the office around 5pm and works as an independent delivery contractor for Instacart. The company's app iPhone application notifies her of a delivery request and Isabel is instantly on the road. She loves meeting and helping out new people everyday, greeting them with a smile at their doorstep.

c. **Injured Ian**: Ian is a journalist at the Boston Globe leaving in Newton, MA. He was part of a car accident that resulted in his left foot getting severely impaired. Ian is unable to drive and cannot go to the closest Whole Foods. He uses Instacart to order his weekly supplies and spends time in bed healing to go back to work soon.

Given what you understand from the design brief above and what you have described about the prospective users and context of use for this system, list key values that you believe any implementation must embody or communicate. In other words, "A system that effectively addresses user needs must be..." or "…must make the reporting party feel...

d. **Key values are**: Responsive, Matching its design to the real world, Giving the user control, Consistent, Aesthetically minimal, Helpful when user needs guidance

Worksheet Part 3: Heuristic Evaluation.

Conduct a heuristic evaluation of the site or app, focusing on the most significant issues. While you should avail yourself of the Nielsen heuristics as appropriate, you may also take into account the user needs/values that you listed above or other criteria you believe would be important to a successful design. Select the three most egregious (or serious) issues to describe below.

For each issue, list the heuristic or principle violated or the need that is unmet. Make it clear why the site does not satisfy the specified heuristic, principle, or need. Also list the severity of this violation using the same scale as for the in-class heuristic evaluation:

0. Don't think this is a usability problem.

1. Cosmetic problem

2. Minor usability problem

3. Major usability problem; important to fix

4. Usability catastrophe; imperative to fix

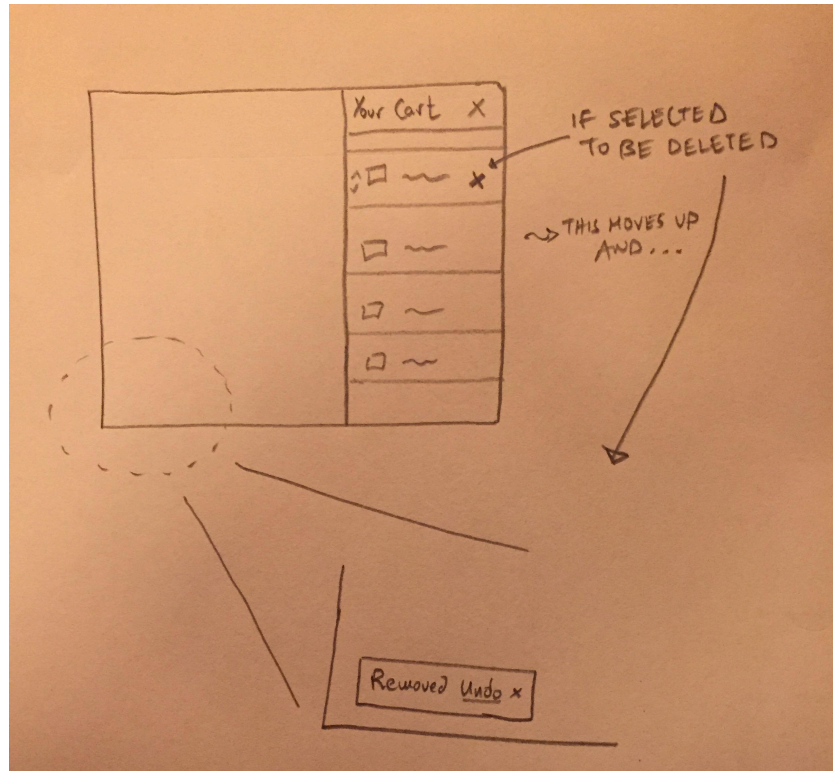|	
Severity: 2	It would be very helpful to ask for help, while the user is browsing through the table of contents. Having to access the "Help" listener that gets the user to a different page is not ideal. The design could be improved by adding a flowing affordance on the screen's bottom right corner.
Help and Documentation	

Severity: 3	When the user deletes an item from the cart, there is no way of letting the user bring that item back to the cart. Having an undo element appear on the left side of the screen after the item is removed would be an interesting approach to the problem (similar to what Inbox does after you delete an email). This undo element would disappear soon after the item deletion, to allow the user decide what they want.
Error Prevention	

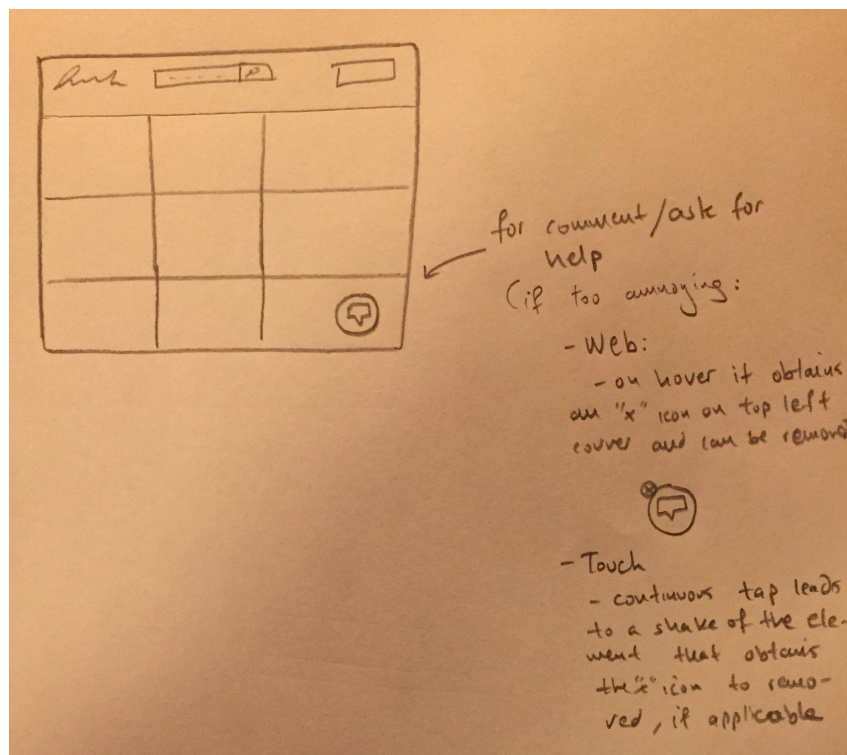|	
Severity: 4	The site does not have an accessible voice control mechanism for the visually impaired to allow them to complete their order verbally and faster. An idea would be to incorporate a subtle voice control affordance on the home page instantly encouraging such users to use the feature.
Universal Accessibility	

Worksheet Part 4: Redesign

Finally, pick two of the problems that you have identified with the site or app as implemented and provide redesigns that address them. You may find a sketch helpful in explaining. Attach files as you see necessary.

Undo Functionality on Removal

Your Cart   X

IF SELECTED
TO BE DELETED

↝ THIS MOVES UP
AND...

Removed Undo ✕

Real Time Assistance while Shopping

for comment/ask for
help
(if too annoying:

- Web:
  - on hover it obtains
  an "x" icon on top left
  corner and can be removed

- Touch
  - continuous tap leads
  to a shake of the ele-
  ment that obtains
  the "x" icon to remo-
  ved, if applicable

<u>Note:</u> The design proposed for the chat interface can be used to address the problem identified around voice control.