# CS549 ASSIGNMENT 2

Hasan Barış Aygen 00036386

1. Introduction:

On the website called "Temu" I added several products in my cart. On the right side of the screen (which is very narrow, far from the center) I can see my products. From there I can either go to the cart with those products or take some of them out by clicking on a toggle button. I want to take the t-shirt out from my cart. The issue is those toggle buttons are placed on the image of the product without having a certain outline, they are too small. That is why it is hard to see, click on them. Furthermore, accidently clicking on the image instead of the toggle button leads to going that product's selling screen. Miss-clicking results waste of time. According to the U.S. Department of Health and Human Services, the designers should reduce the workload on users including people who have difficulties at seeing and making precise movements. This part of the website does not quite meet the conditions. That is why this is a HIC problem.
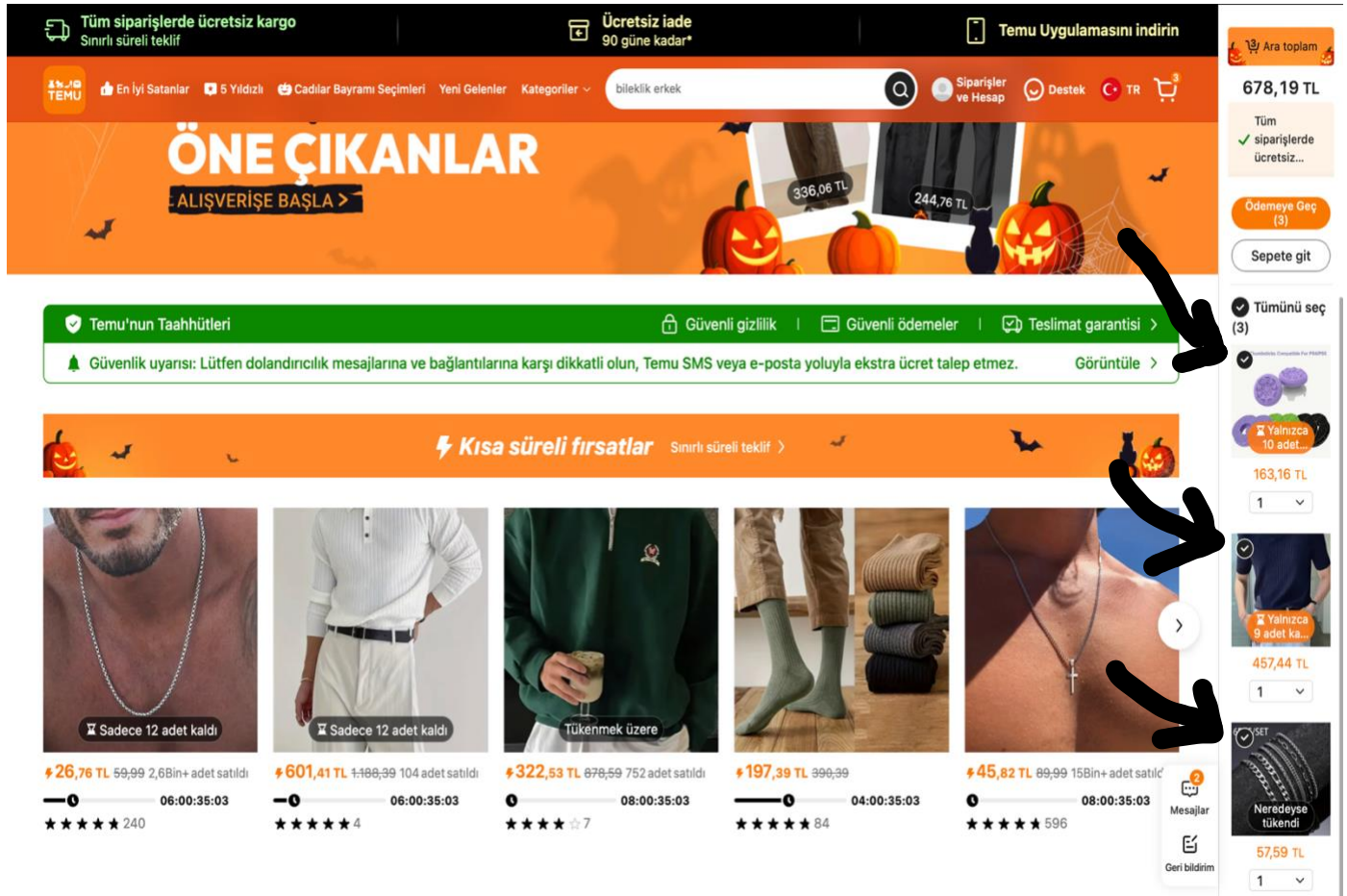
2. Analyses with Fitts' Law:

$DI = \log_2 \left(\frac{2D}{W}\right)$ I used pixels to measure the distance and width (found them using inspect property). First, I put cursor at the center of the screen since in average, users would decide to modify their cart while still surfing on the web. And at that moment in average the cursor would be placed around the center. The current Difficulty Index is $\log_2 \left(\frac{2*715}{26}\right) = 55{,}38$. Last but not least, sometimes users modify after they check the what was the product. So they put cursor on the top of the image. From there the distance is 34. So the new $DI = \log_2 \left(\frac{2*48}{26}\right) = 3{,}69$. Now with my new design I will reduce it for the users.

3. Proposed Solution:

I made a new design using Figma. In the new design, there is a button on the next to the dropdown menu to completely put that product out. Using new button, users will not be clicking on the product accidently. It is bigger and it has a correlated symbol with its task (label). Plus, since it is close to the dropdown menu, users can see it easily since both dropdown and new button are about editing that product. Their job is related, and they are placed closely. The left menu's whole width is also increased by 20 pixels. It's difficulty index is lower now due to the closeness to center and higher width. New $DI = \log_2 \left(\frac{2*672}{34}\right) = 39{,}53$. The ID for the second condition mentioned above is $\log_2 \left(\frac{2*54}{34}\right) = 3{,}18$.

https://www.figma.com/proto/9onICPeSRyr9r9uiAfunq8/CS549_Assignment_2?node-id=8-4&node-type=canvas&t=5zOdEtQaZBpqJVqj-1&scaling=min-zoom&content-scaling=fixed&page-id=0%3A1

4. References:

U.S. Department of Health and Human Services. (n.d.). *Research-Based Web Design & Usability Guidelines* (Rev. ed.). U.S. Government Printing Office. https://www.usability.gov