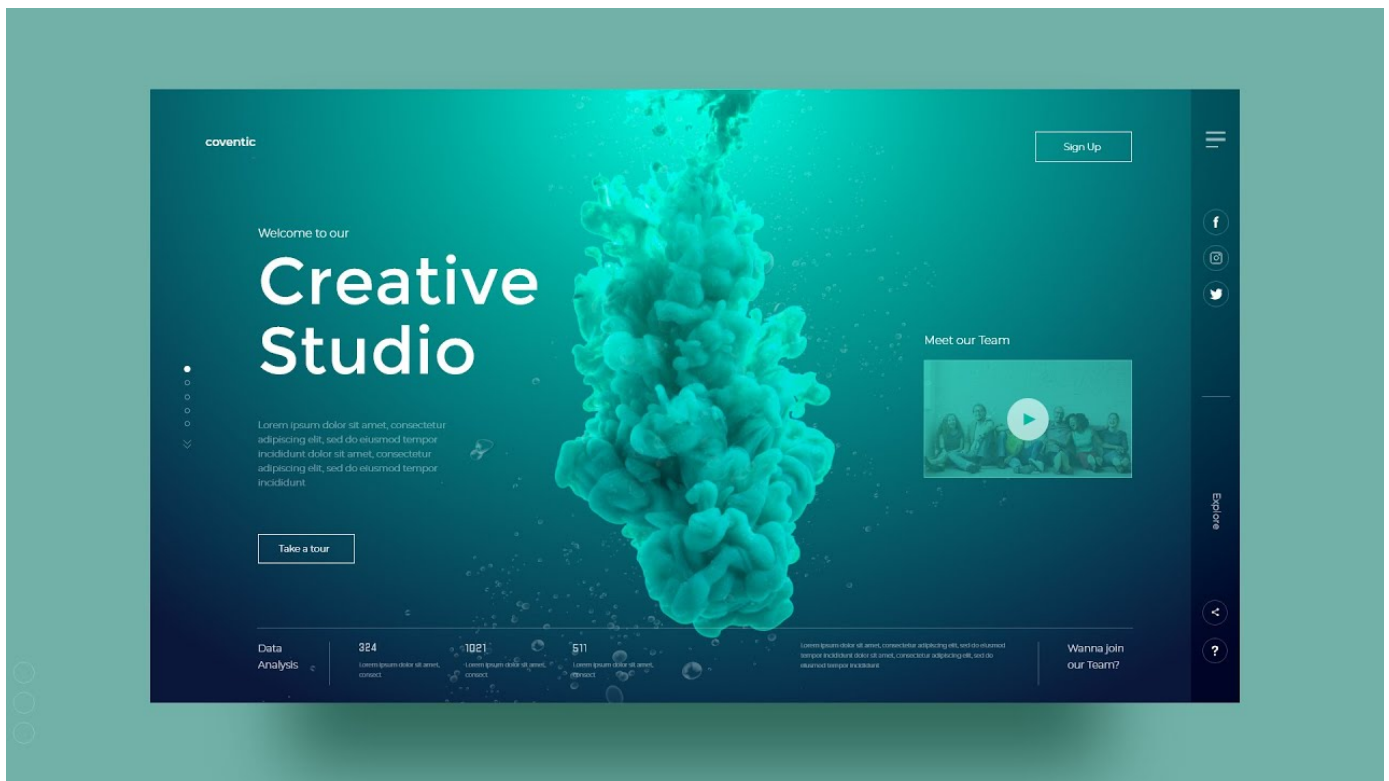


Introduction to User Experience Principles & Process Research Report: Heuristic Evaluation Part 2

Created by Yousif Korkis



Findings and Recommendations:

Summary

This report will assess heuristics for users as it pertains to interface design by examining errors discovered and analyzed through our course website, Coursera. As defined by Jakob Nielsen, there are 10 general principles to adhere to when considering interaction design (Nielsen, 1994). These are deemed as “heuristics” due to being generally perceived as general recommendations rather than strict and specific guidelines (Nielsen, 1994). The Coursera website was assessed on these heuristics. Through this assessment over 10 heuristic violations had been identified. Each one of these heuristic violations was then judged on the severity using a 4-point scale provided by the course instructor (Newman, 2020). The Coursera webpage did quite well accommodating the heuristics. In fact, the majority of the heuristic violations that were found on the Coursera webpage scored a 1 on the scale used. In this report the findings have been explained in detail with recommendations provided to Coursera. This was done in hopes to assist Coursera consistently updating and providing users with a superior user interface.

Severity Assessment Scale

<i>Rating</i>	<i>Severity</i>	<i>Priority</i>
1	Cosmetic Problem	No real usability impact
2	Minor Usability Problem	Fix if there is time
3	Major Usability Problem	Important to fix
4	Usability Catastrophe	Imperative to fix

Note. Table 1 titled ‘Severity Assessment Scale’ had been provided by the course instructor, Mark Newman (Newman, 2020).

Key Findings

Finding 1: Not able to follow the video script in the class lectures.

Severity: 3

Heuristic Violated: *Recognition rather than recall*

Located in the script associated with all class videos, the ‘recognition rather than recall’ heuristic was violated by the following: when users are viewing the class lecture a script is provided to students to be able to read along and maybe identify words that some may not be able to pick up by only listening.

The issue here is that the script tends to be long in the videos therefore users can only follow along with the first 30 seconds of the video. Later in the video, users are required to scroll away from the video with having to pick and choose to follow either the video or the script. This is requiring students to recall what was said in the script.



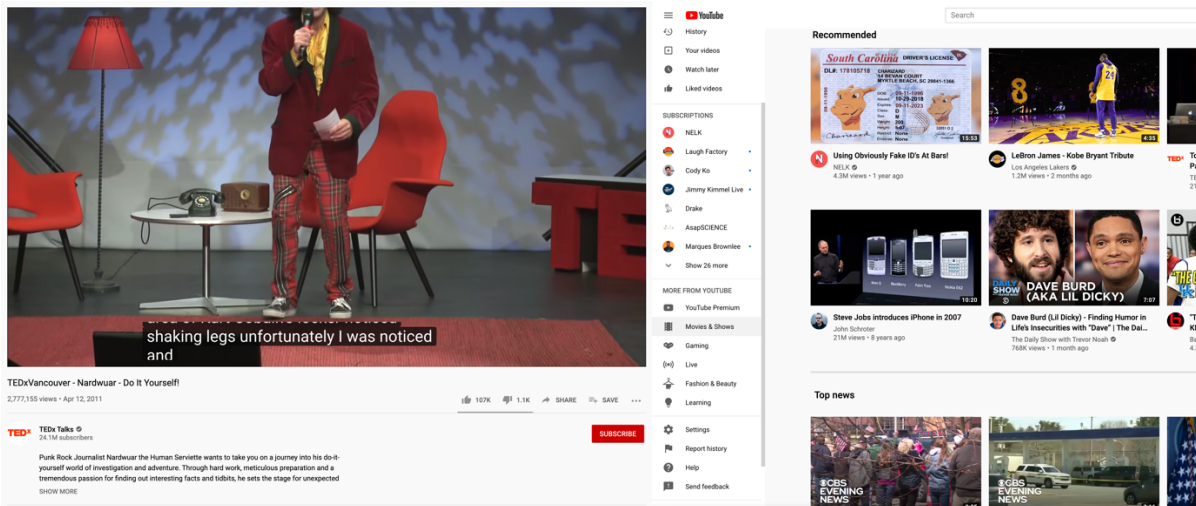
Save Note Discuss Download

English

Help Us Translate

0:07 In previous lectures, we've talked about Nielsen's 10 heuristics for good user interface design. In this lecture, I'm going to introduce a way to use these heuristics right now that you could employ to improve a user interface that you're working on. So, technique called heuristic evaluation. This is a discount user experience research method, so-called because it's cheaper and faster than usability testing, which is usually considered the gold standard for finding problems in a user interface design. It's cheaper and faster because you don't need users. Instead, it's an inspection method, which means that you perform a systematic close read of a user interface and apply the heuristics that we've just been talking about to find and explain problems with the interface. The way it works is, you choose a set of screens or interactions that you're going to focus on. This could be an entire system or it could be a subset of a system that is one that you really want to pay attention to. You then step through those screens and that interaction, applying the heuristics to find potential problems. You need to remember to test error cases because there are some heuristics that look specifically at errors and preventing them or helping users recover from them. You also need to be sure to look at the help system and how that's accessed, if there is a help system. You're going to write down all the violations of the heuristics that you come across, no matter how big or small they are. You're not going to worry too much about that in the first pass. You're going to write down the heuristics that they violate. You're also going to assess the severity of each problem. Is this a problem that's going to prevent users from completing their tasks? Or is this something that's just going to annoy them? Finally, you're going to create a prioritized list of

Recommendation: There can be two fixes to this issue. One is providing the script as the video plays this way people follow right along with the subtitles. The second recommendation which I think would be best for students and the Coursera interface; giving the script a separate tiny scroll bar. As the second picture shows YouTube doing this with their subscription menu on the left side of the screen.



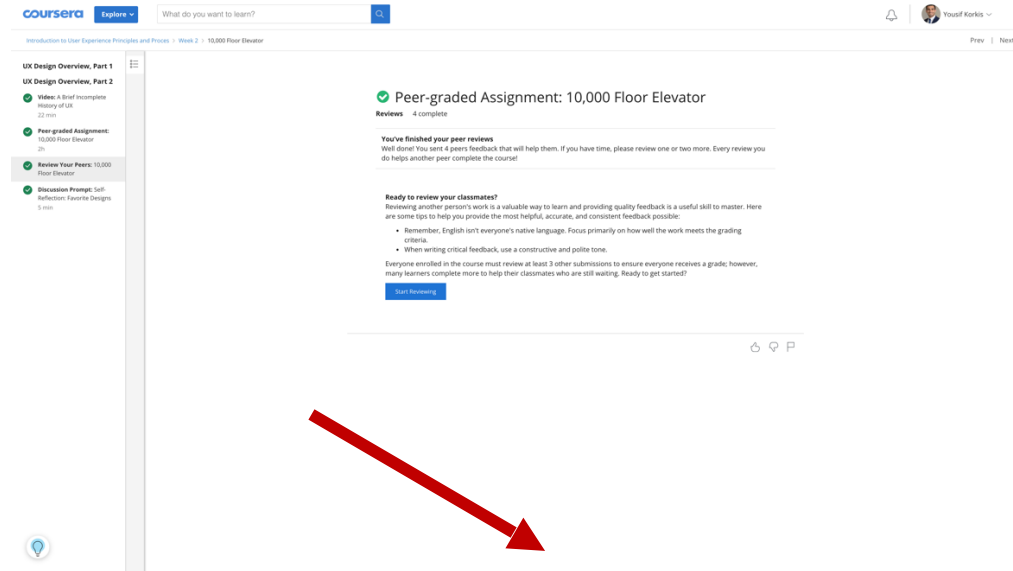
Finding 2: Difficulty navigating to the “help” button.

Severity: 2

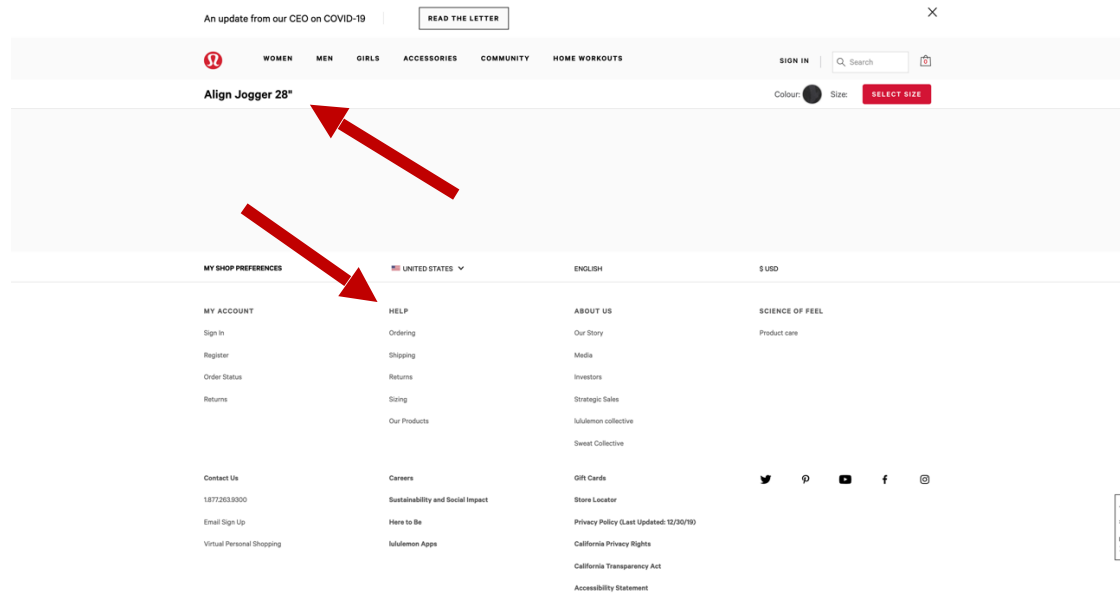
Heuristic Violated: *Help & Documentation, Consistency & Standards*

Located towards the bottom of the homepage, the Help & Documentation heuristic was violated due to the following: difficult to find “help” button within a course. The standard location of the

help button on websites always tends to be on the bottom of the page. The Coursera website tends to offer the help button on the bottom of the page when exploring for other courses. As soon as one enters the course the system does not display the help button on the bottom of the page. The picture below shows that nothing is displayed at the bottom of the page when a user is within the course.



Recommendation: Displaying the help button at the bottom of the website at all times and not only on the “explore courses” page. The Lululemon website has the standard bottom portion of the page even when navigating to purchasing pants. As you can see “Align Jogger 28” has been selected when taking this picture.



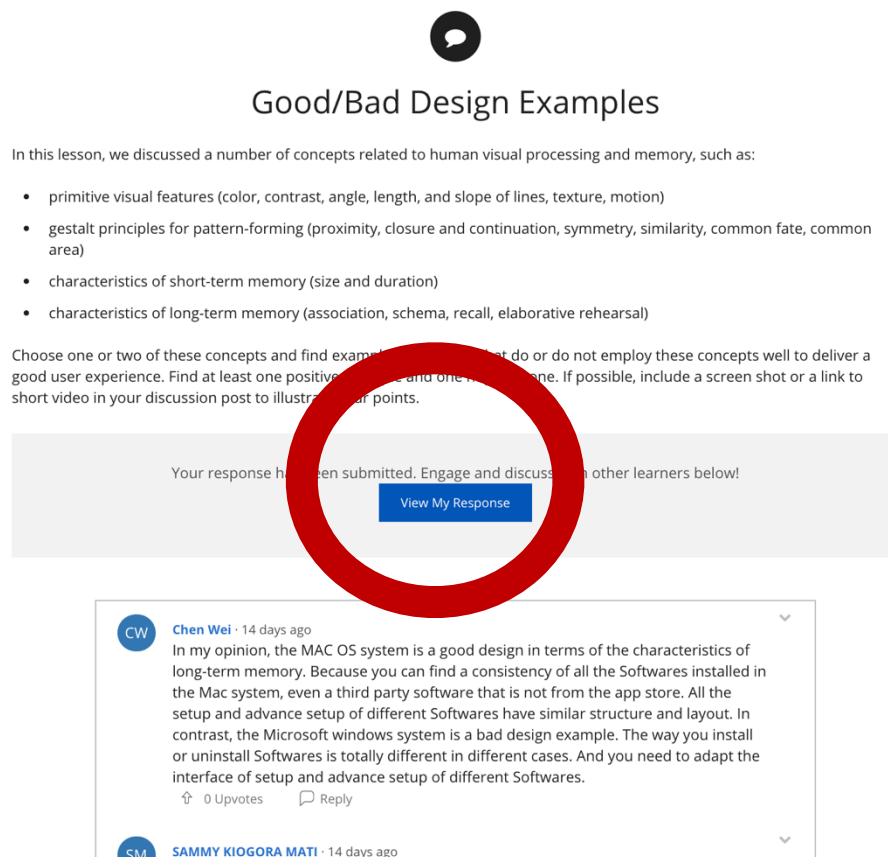
Finding 3: Issues navigating to a discussion post user has posted.


Severity: 3/4

Heuristic Violated: *Recognition rather than Recall*

Located in the discussion board, the Recognition Rather than Recall heuristic was violated due to it being difficult to locate your own post. This creates a big issue for the user that is looking for what they had added to the discussion board.

Coursera clearly has thought of this issue and therefore added a button that says, “View My Response”. This button is actually ineffective and causes the majority of this issue for the user. This gives the user a very bad interactive impression of the webpage.




Good/Bad Design Examples


In this lesson, we discussed a number of concepts related to human visual processing and memory, such as:

- primitive visual features (color, contrast, angle, length, and slope of lines, texture, motion)
- gestalt principles for pattern-forming (proximity, closure and continuation, symmetry, similarity, common fate, common area)
- characteristics of short-term memory (size and duration)
- characteristics of long-term memory (association, schema, recall, elaborative rehearsal)


Choose one or two of these concepts and find examples that do or do not employ these concepts well to deliver a good user experience. Find at least one positive example and one that is not. If possible, include a screen shot or a link to short video in your discussion post to illustrate your points.


Your response has been submitted. Engage and discuss with other learners below!

[View My Response](#)

 **Chen Wei** · 14 days ago

In my opinion, the MAC OS system is a good design in terms of the characteristics of long-term memory. Because you can find a consistency of all the Softwares installed in the Mac system, even a third party software that is not from the app store. All the setup and advance setup of different Softwares have similar structure and layout. In contrast, the Microsoft windows system is a bad design example. The way you install or uninstall Softwares is totally different in different cases. And you need to adapt the interface of setup and advance setup of different Softwares.

↑ 0 Upvotes  Reply

 **SAMMY KIOGORA MATI** · 14 days ago

Recommendation: There are several ways to solve this issue. The easiest would likely be fixing the button they already had provided. Another way to fix this issue is to put the user’s listings in the beginning of the page. The user will then scroll to look at their responses and can scroll further to view all other posts.

Family Guy - Tough Meg
31,182,299 views · Jun 23, 2017

14,005 Comments

Yousif Korkis · 4 months ago
This is hilarious

Name S · 4 months ago
...but let's not even pretend we weren't all totally rooting for Meg. You go, girl. You deserve better.

Verte · 6 months ago
This was the most satisfying episode of family guy.

rapid · 4 months ago

Finding 4:

Severity: 2

Heuristic Violated: *Flexibility & Efficiency of use, Aesthetic & Minimalist Design*

Located in the discussion forums, the following heuristics were violated: Flexibility & Efficiency of use and Aesthetic & Minimalistic design. These were both violated due to the discussion forum tending to be long and disorganized.

UX Design Overview, Part 2

Video: A Brief
Incomplete History of UX
23 min

Peer-graded Assignment: 10000 Floor Elevator
20%

Review Your Peers:
10000 Floor Elevator
5 min

Discussion Prompt:
Self-Reflection: Favorite Design
5 min

Yousif Korkis · 4 months ago
Liked the process from worst to the best. Thinking first what are the drawbacks and what needs to be corrected and then working towards it.
9 responses · 27 likes

SABIRY KODORA MARI · 4 months ago
My idea of a good UX for an elevator control interface would be:

- Add a touchscreen selection input device located at the elevator lobbies
- All building an elevator app with the same interface where the user can select the floor while logged in to the building Wi-Fi network.

Step 1: USER ENTERS ELEVATOR LOBBY/BUILDING APP INTERFACE
On the lobby, user is prompted to input their floor number on the touchscreen control panel.

ENTER FLOOR NUMBER

1	2	3
4	5	6
7	8	9
	0	

SELECTED FLOOR: []

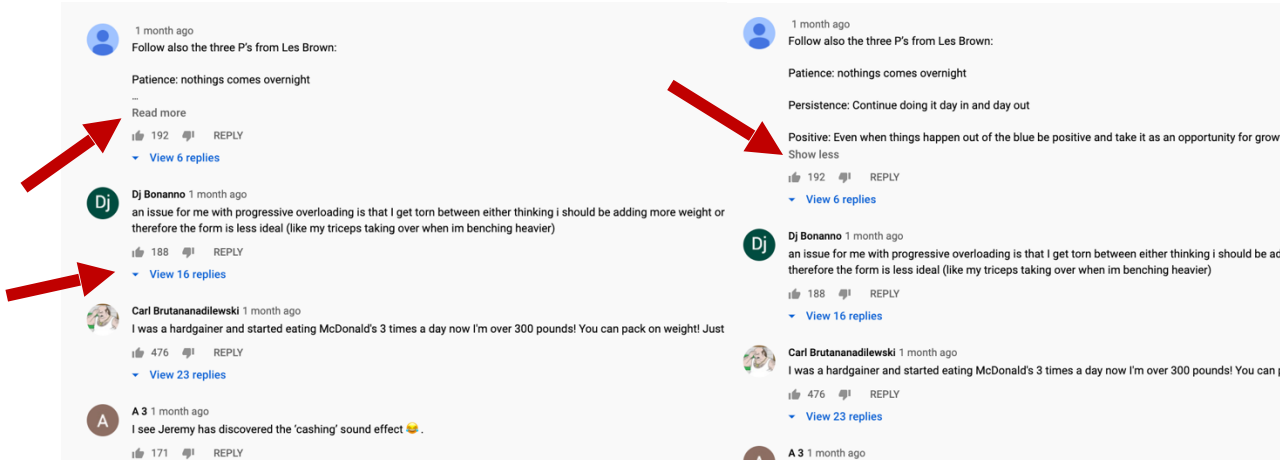
[CONFIRM] [CANCEL]

Step 2: The Control Panel assigns the user to a specific elevator
On selecting user is directed to the next page. On this page, the user is able to view their assigned elevator indicating the Elevator Number & Approximate time.

ASSIGNED ELEVATOR

[]

Recommendation: The forum should include a function to reduce the post lengths. Many webpages have a “view more” and then “view less” buttons on each post. This will limit the unnecessary length of the forum. This will also reduce users from spam and intentionally using the system’s errors to its advantage. Screen on the left shows

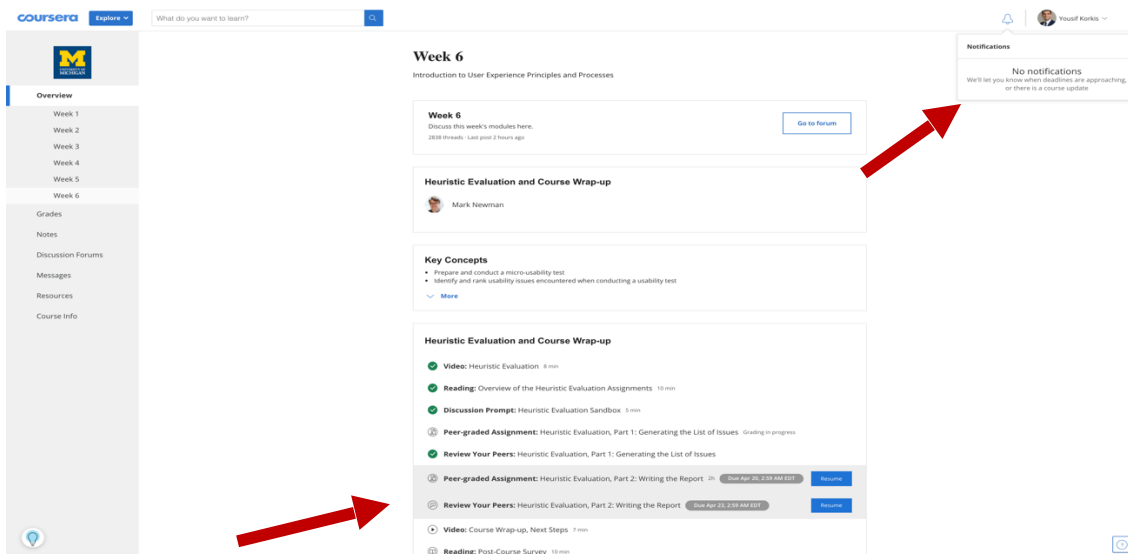


Finding 5: Notification center does not provide critical notifications.

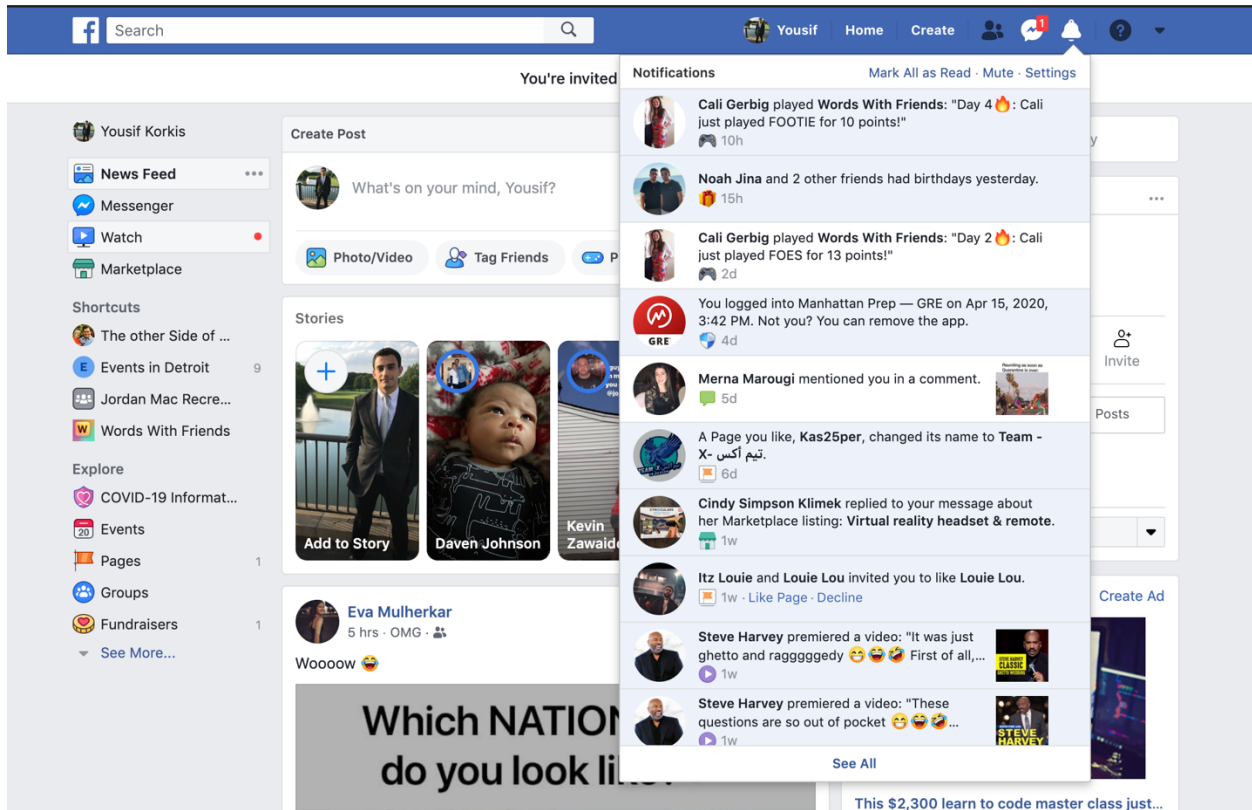
Severity: 3

Heuristic Violated: Visibility of System Status, *Recognition rather than recall*

Located in the notification center, the following heuristics were violated: Recognition Rather than Recall and Visibility of System Status. These were both violated due to the system failing to keep users informed with notifications regarding class updates- very inconsistent. The picture below shows that even though as a user I have had comments on my posts, and I have assignments due the notification center does not have any notifications displayed.



Recommendation: Ensure the notification center is working. Add critical items to the notification center by informing the user of tasks due soon. Facebook has a very useful notification center with settings to reduce clutter when need be.

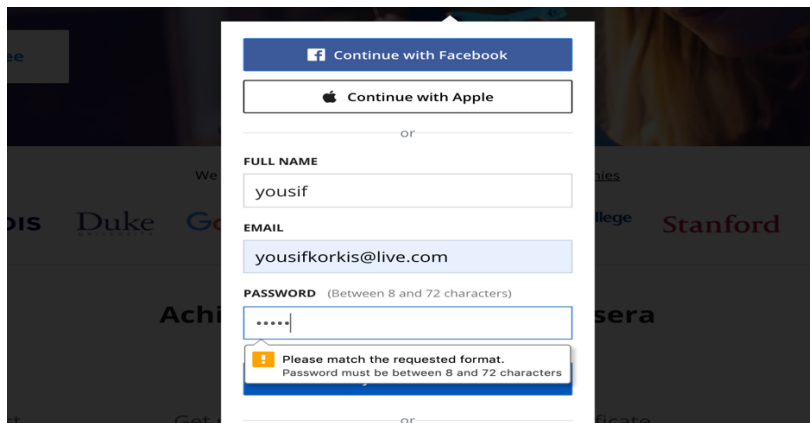


Finding 6: New user sign up screen errors.

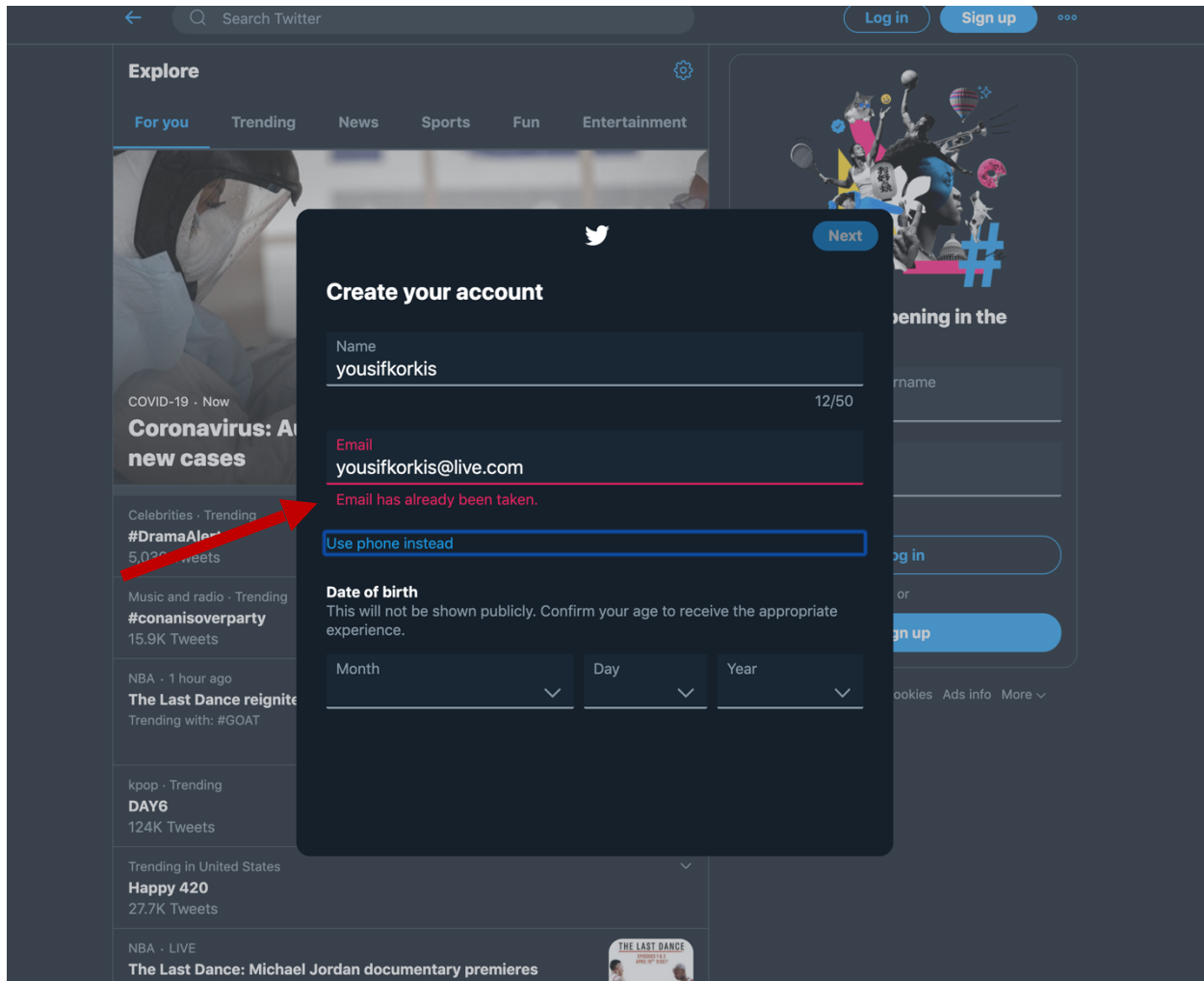
Severity: 1

Heuristic Violated: *Help users recognize, diagnose, & recover from errors*

Located on the sign-up screen, the Help Users Recognize, Diagnose, & Recover from Errors heuristic was violated due to the following: the sign-up screen does not correct the user when attempting to sign up with the default email until a user attempts to click sign up.



Recommendation: Many websites have an interactive signup screen in which corrects users once the error has been identified. By doing this it helps users understand where they had gone wrong. Instead this forces users to continuously work to fix all other errors on the screen until finding out that the email they are using has already been used.

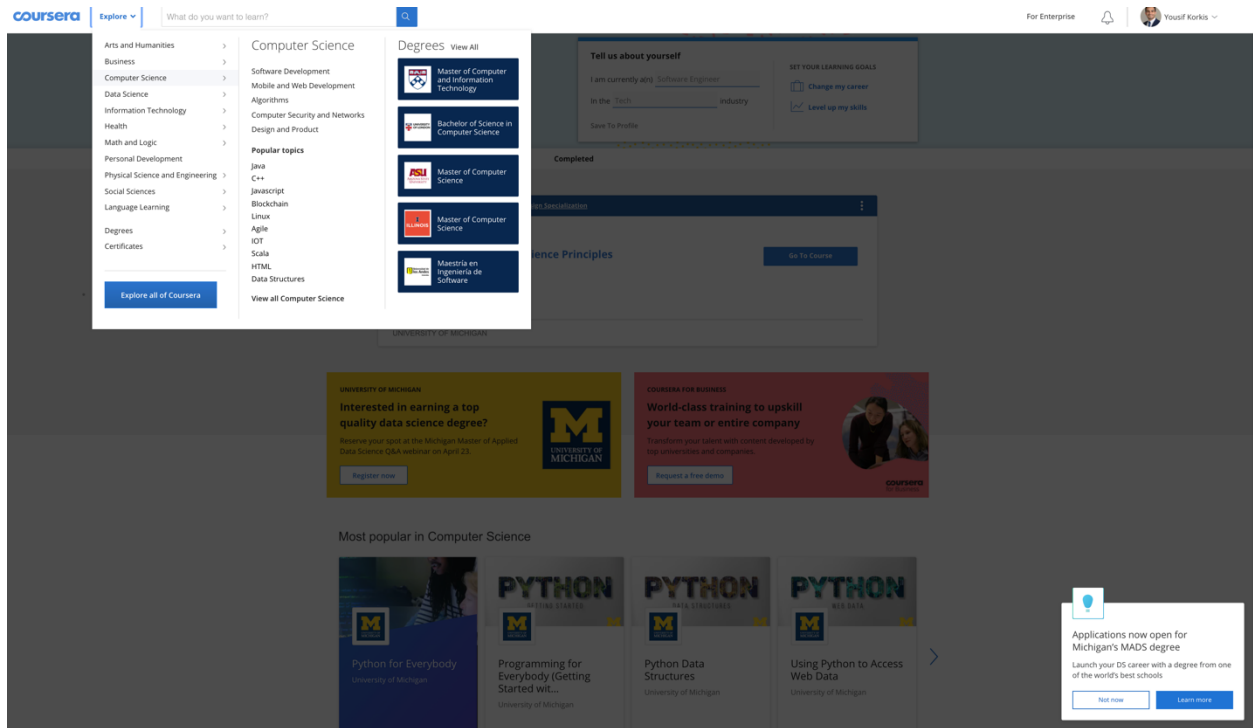


Finding 7: Major amounts of clutter on the home page.

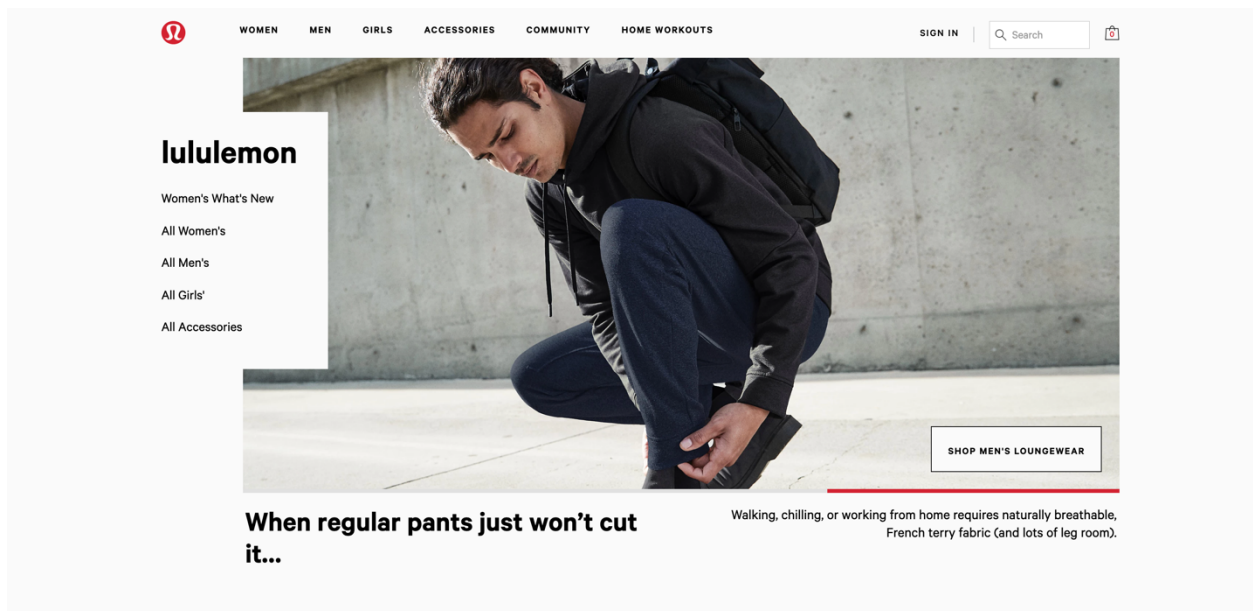
Severity: 1/2

Heuristic Violated: *Aesthetics & Minimalist Design*

Located on the homepage, the Aesthetics & Minimalist Design is violated due to the home page being too busy and chaotic. Specifically, the 'look and explore courses' section contains a ton of information that would not be commonly used.



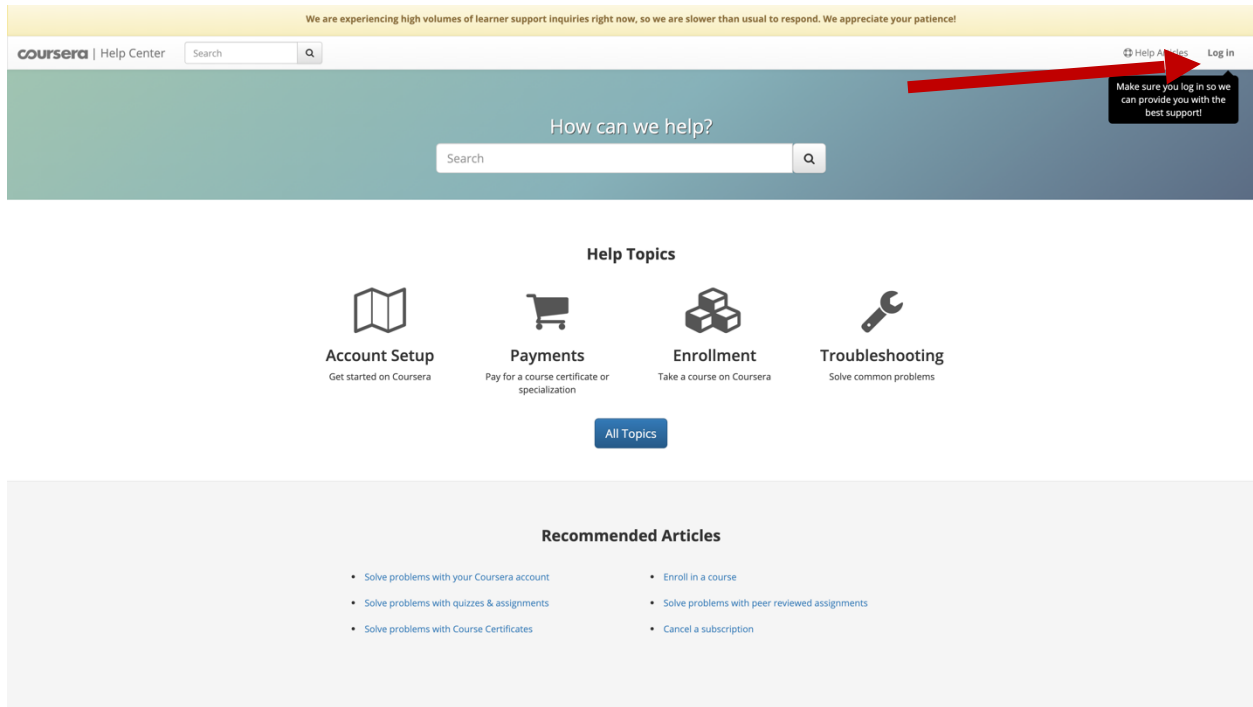
Recommendation: Remove much of the information that is not quite needed on the screen and let the user freely navigate to it when necessary. The picture shown below of the Lululemon website shows how the design is simple and users can find the commonly used links easily.



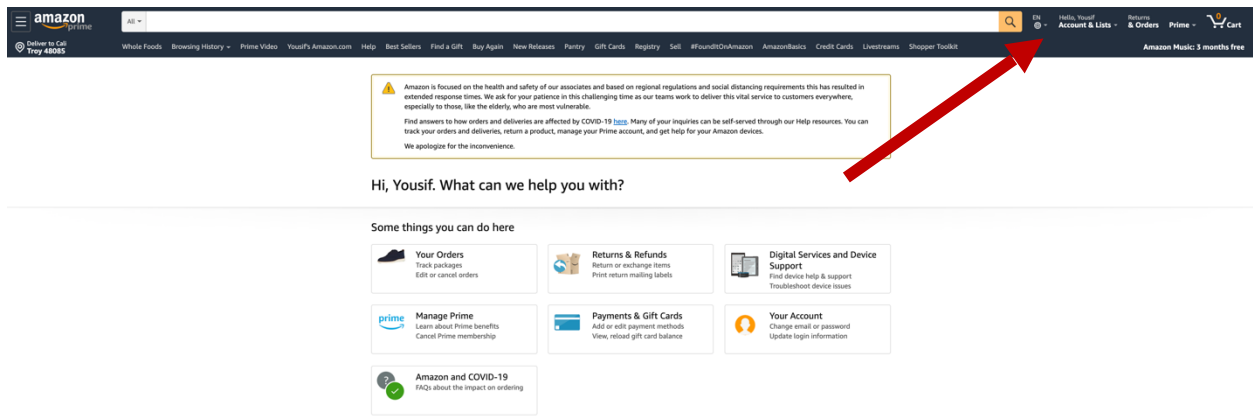
Finding 8: System does not recognize user is already logged in.
Severity: 2

Heuristic Violated: *Error Prevention*

Located in the help center, the Error Prevention heuristic was violated due to the system not recognizing that a user is already logged in. More specifically, when navigating to the help center from an already logged on account the system requires the student to log in again.



Recommendation: Ensure when navigating to other pages on the website that the user maintains logged in throughout. As the picture below shows how Amazon does not log the user out when navigating to the help center.



Finding 9: Differentiating links from businesses and business students.

Severity: 1

Heuristic Violated: *Flexibility & Efficiency of use*

Located on the homepage, the Flexibility & Efficiency of Use heuristic is violated due to the following: The home page offers a link to Coursera for business. A non- expert/common user may present difficulty differentiating that this page is specifically for businesses and not business students.

2,000+ Coursera for Business customers

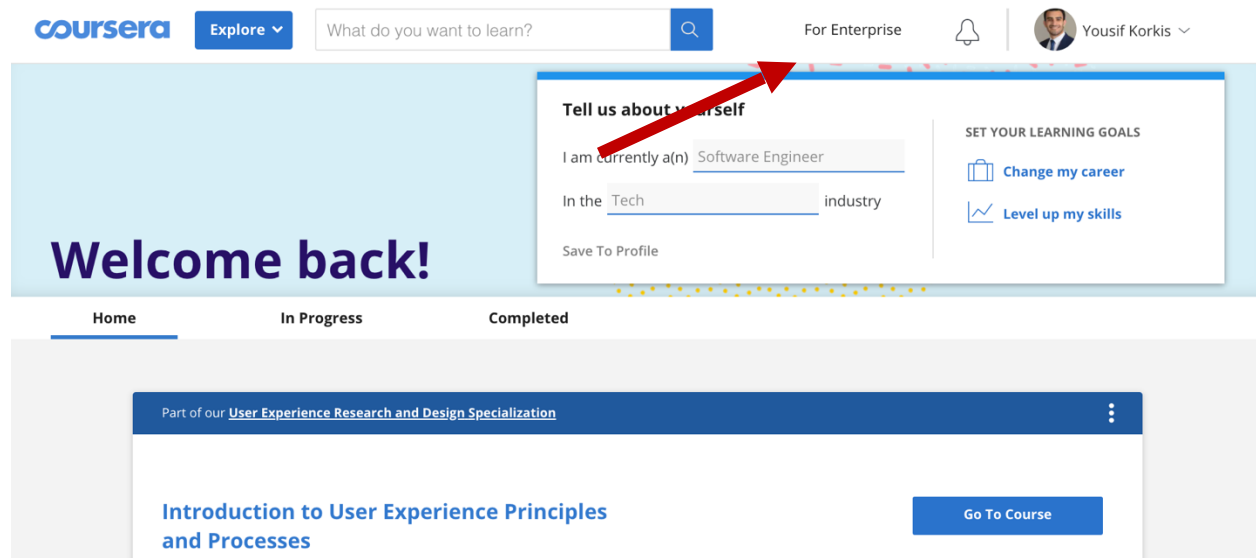


Coursera for Business

We've got the solution: world-class training and development programs developed by top universities and companies. All on Coursera for Business.

[Learn More](#)

Recommendation: Follow consistency by renaming it “Coursera for Businesses” Or “Enterprise” like the home page shows. The “For Enterprise” button takes the user to the same link. It would be best just to name it “Coursera for Enterprise”.

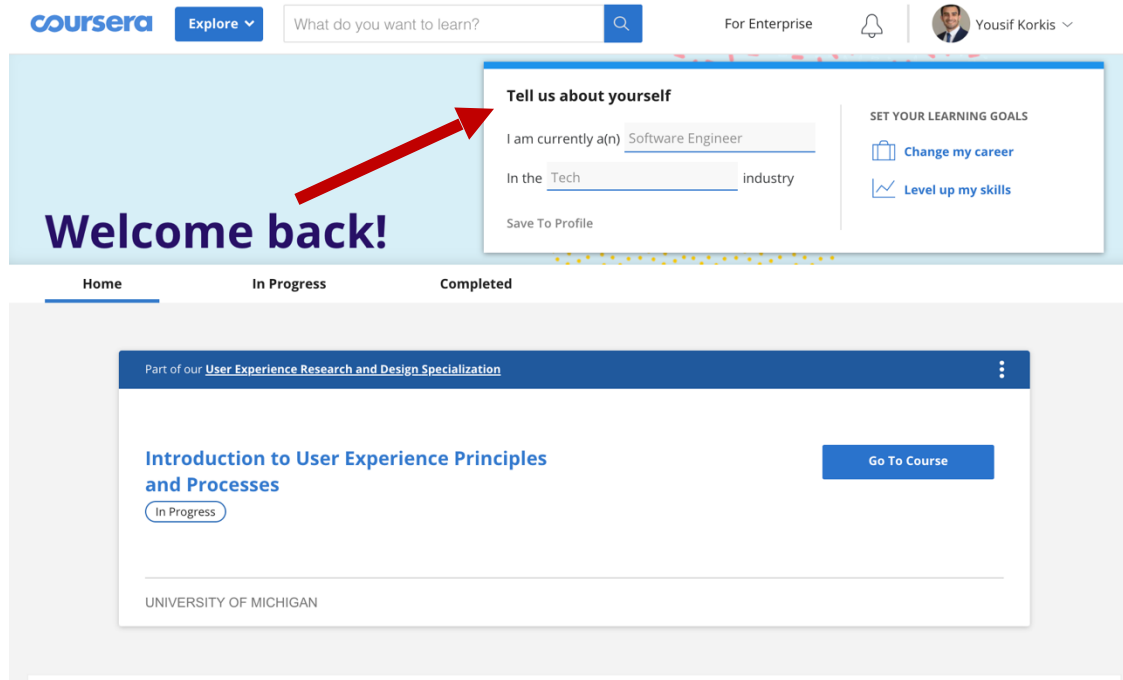


Finding 10:

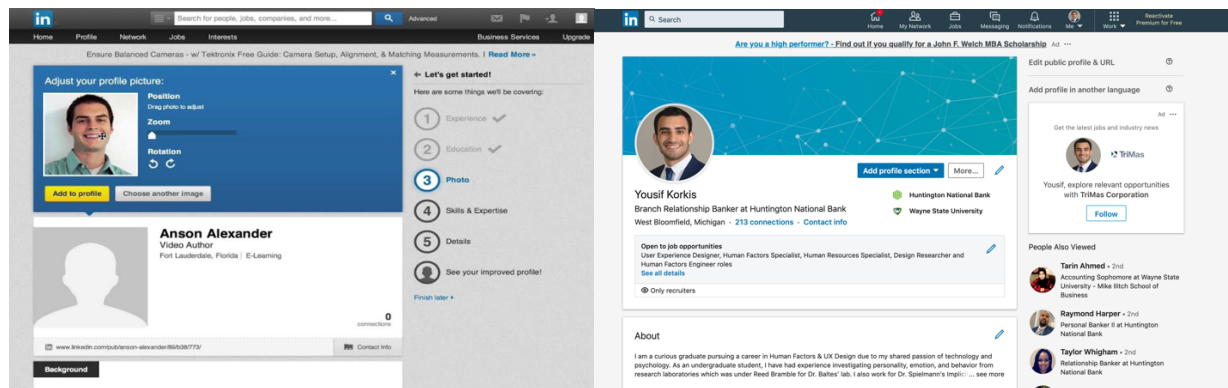
Severity: 1

Heuristic Violated: *Error Prevention, Aesthetics & Minimalist Design*

Located on the homepage, the following heuristics were violated: Error Prevention and Aesthetics & Minimalist Design. These were both violated due to an error in the system that caused the user to be asked “tell us about yourself”, repeatedly. This bubble does not disappear even after the user has filled it out.



Recommendation: The bubble is not necessary or in use anymore. It would be best after the user has already given that information to eliminate it and thus giving the user a simpler platform and user interface. The difference in LinkedIn is shown before filling in the user’s information. The page begins to look extremely different after the user has their profile completed.



References

Nielsen, J. (1994, April 24). 10 Heuristics for User Interface Design: Article by Jakob Nielsen.

Retrieved April 17, 2020, from <http://www.nngroup.com/articles/ten-usability-heuristics/>.

Newman, M. (2020, April 16). *Introduction to User Experience Principles and Processes. Introduction to User Experience Principles and Processes.*