

The Evaluation and Improvement of PhotoShop

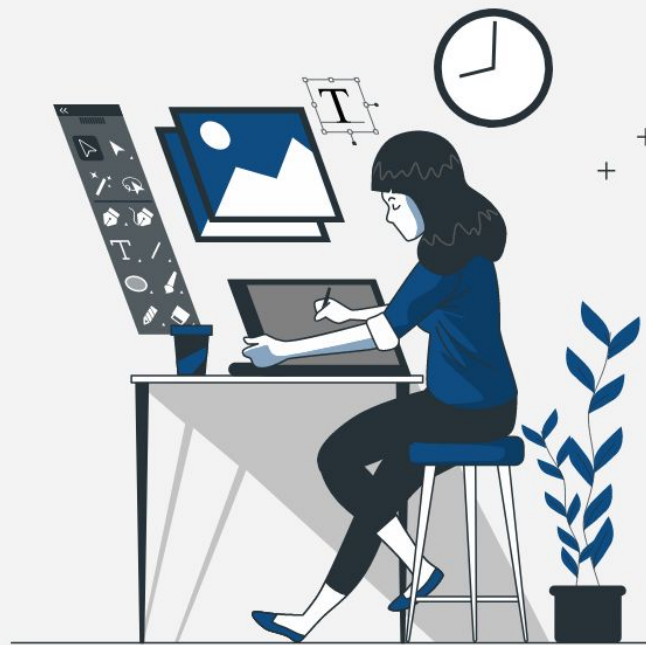
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01. USERS

Who are the Users?
Needs and Requirements
Challenges and pain points

02. SYSTEM EVALUATION

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01

USERS

Who are the users?
What are their needs and requirements?
What are their challenges and pain points?



THE USERS: THEIR TASKS, NEEDS, AND REQUIREMENTS

- **Who are the users?**

- Designers
- Students and teachers
- People who have hobbies like photography, digital art, etc.

- **What are their tasks, needs, and requirements?**

- **Tasks**

- Editing a photo or video
- Designing

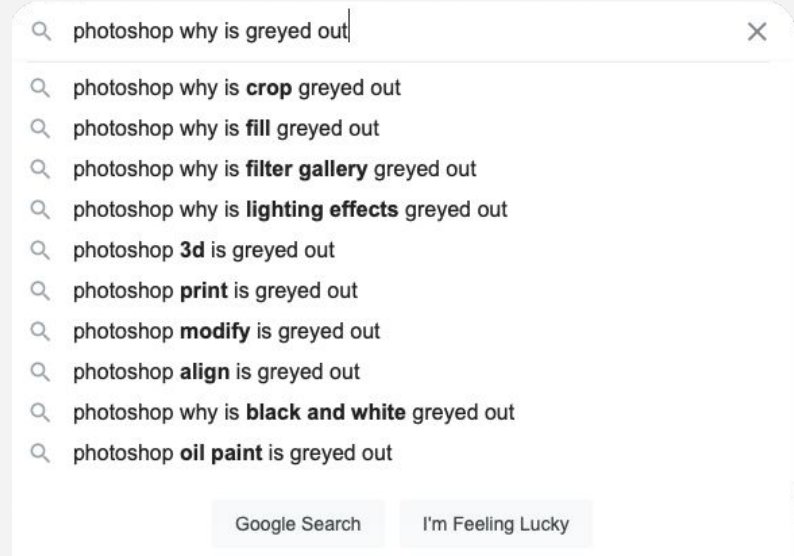
- **Needs/Requirements**

- An effective program to complete their work
- A program that does not glitch or have any issues
- A program that is usable (easy to use, easy to understand)



USER CHALLENGES AND PAIN POINTS

- Users want to complete an action but cannot because the menu is 'greyed out' ... along with the function they need
- There is no explanation as to why this 'greying out' exists, so users often have to Google the solution.
- Some challenges real users face:



”

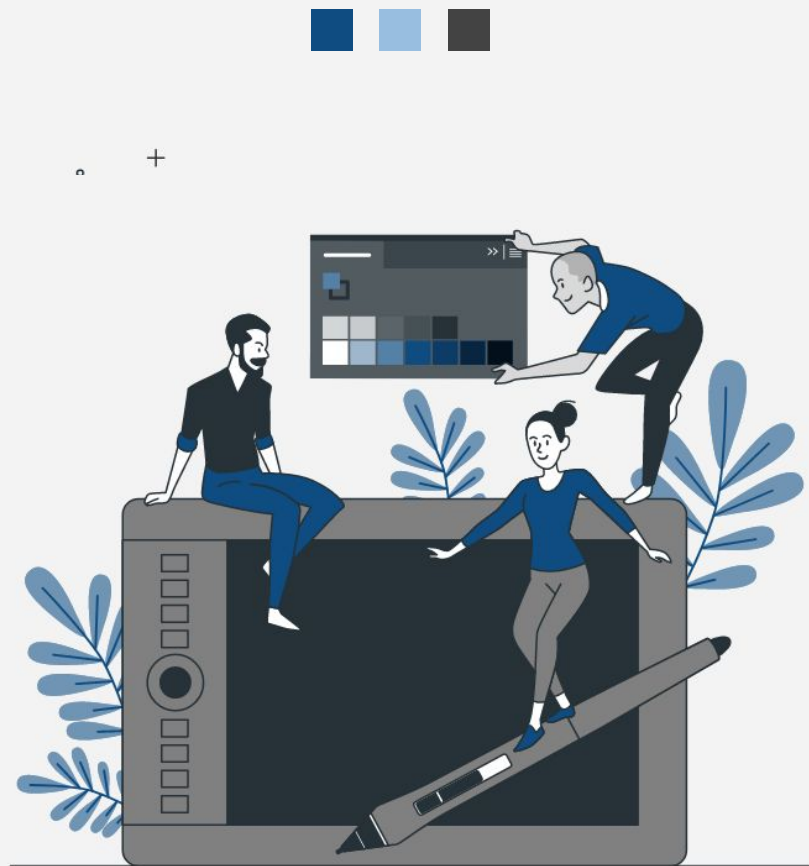
“After about every photo I edit, the menu items become grayed out. I then have to close and reopen photoshop. Please assist as this is very frustrating.”

– **A USER**

02

SYSTEM EVALUATION

What Needs to be Changed
According to Specific Concepts?



LECTURE 8: CONSTRAINTS

LIMITING USER ACTIONS ON A SYSTEM

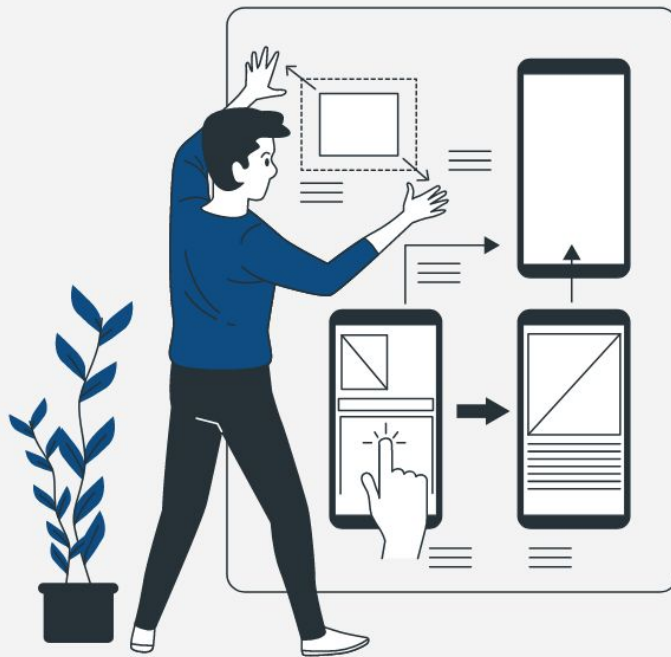
- **Physical constraints:** Physical limitations that constrain possible operations
 - Instead of black text, photoshop turns the menu text grey when an action cannot be done
 - The physical constraint makes it easy for the user to understand that something needs to be changed
 - However, it does not make it easy to understand **why** the action cannot be completed and what needs to change
 - This results in users needing to use other resources to solve the problem (e.g. Google search, forums)



03

IMPROVING THE SYSTEM

How Will Certain Concepts Help Improve the Design?



HOW MIGHT WE...

Assist the user in understanding *why* some actions within the Photoshop menu are unavailable or cannot be completed.

LECTURE 8: AFFORDANCES

ACTION POSSIBILITIES

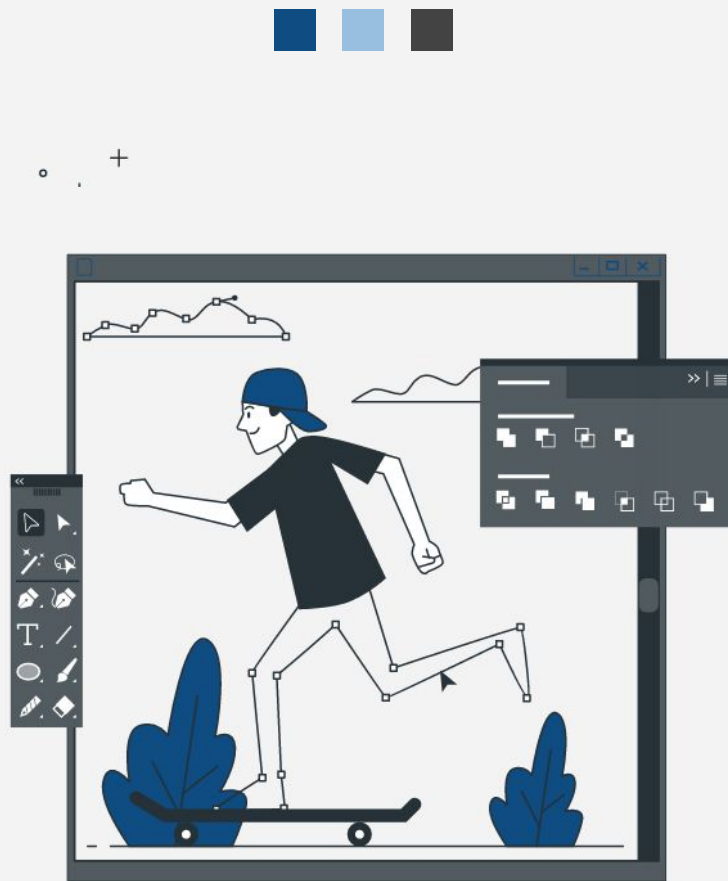
- With the implementation of **affordances**, a user can identify possible issues, actions, and functions that **signal** to them why the selected option is greyed out
- **User Questions**
 - *Can this issue be fixed?*
 - *Why is this action not available?*
 - *What should I do to be able to complete this action?*



04

OUR PROTOTYPE

Our Updated and Improved Design

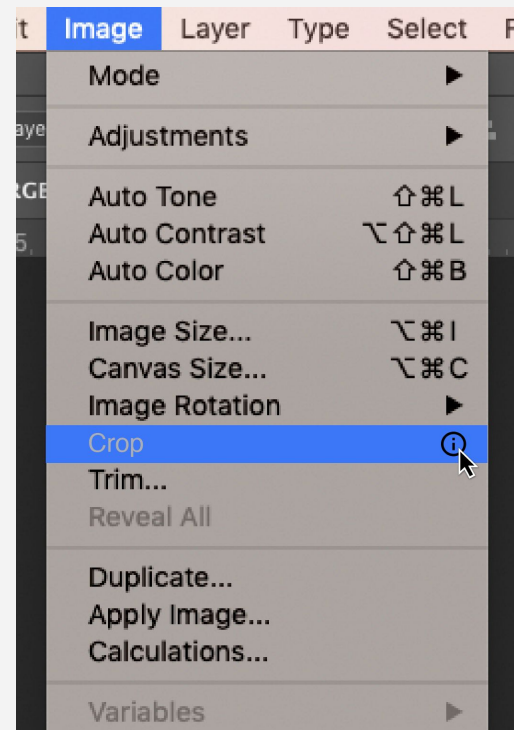
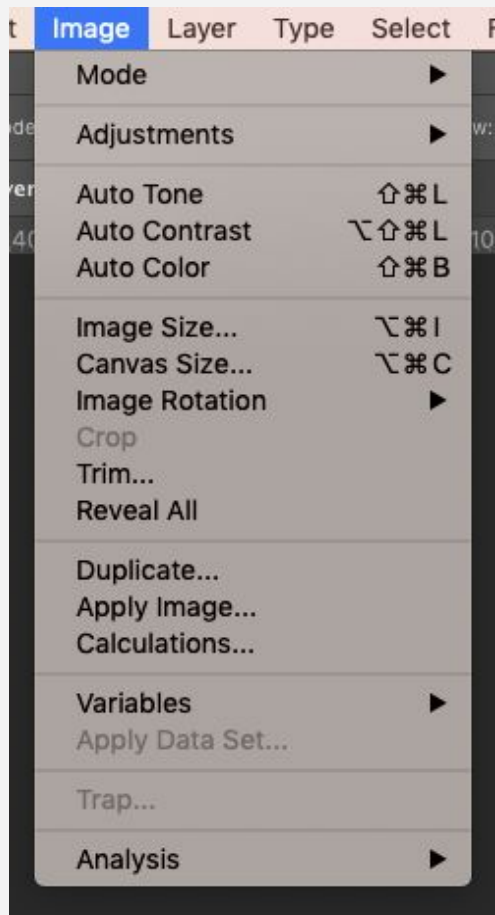


CURRENT DESIGN

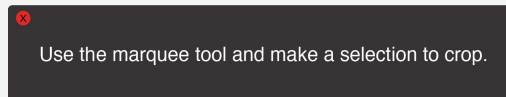
- “Crop” is one of the options that is greyed out in the menu
- It does not highlight when hovered over and nothing happens when you click on it

NEW DESIGN (A)

- Only when hovered over, an information icon appears and the greyed out option is highlighted
- The highlight guides the user to the information icon which tells them why they cannot access the feature
- When the icon is clicked, an explanation will appear

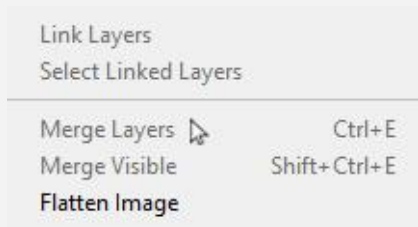


Pop-up with information




CURRENT DESIGN

- “Merge Layers” is the option that is greyed out
- There is no indication as to what the user should do or why it is greyed out



NEW DESIGN (B)

Link Layers
Select Linked Layers

Merge Layers  Ctrl+E
Merge Visible Shift+Ctrl+E
Flatten Image

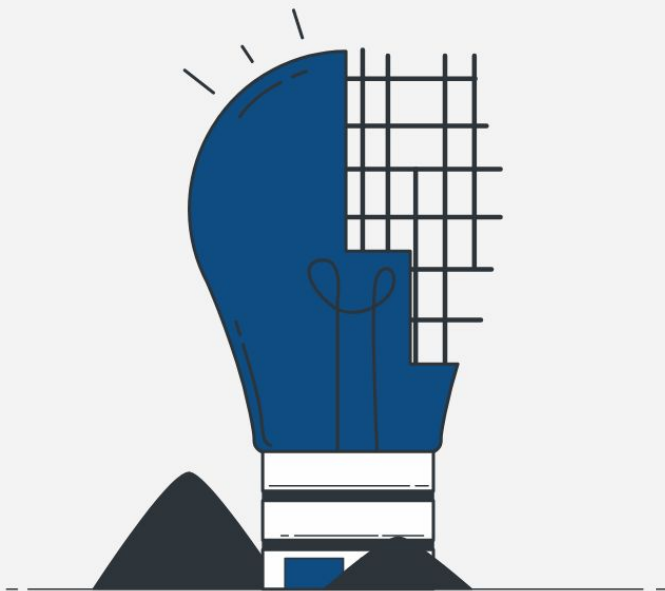
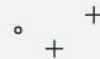
Action cannot be completed:
One of the selected layers
are locked.

- Only when hovering over a greyed out option, a tab appears to the right of it
- The tab will tell the user why the selected option is not available to them
- This is an optional feature that can be enabled and disabled in the settings

05

OUR UNIQUE POV

What our Design Expresses
Compared to the Old Design



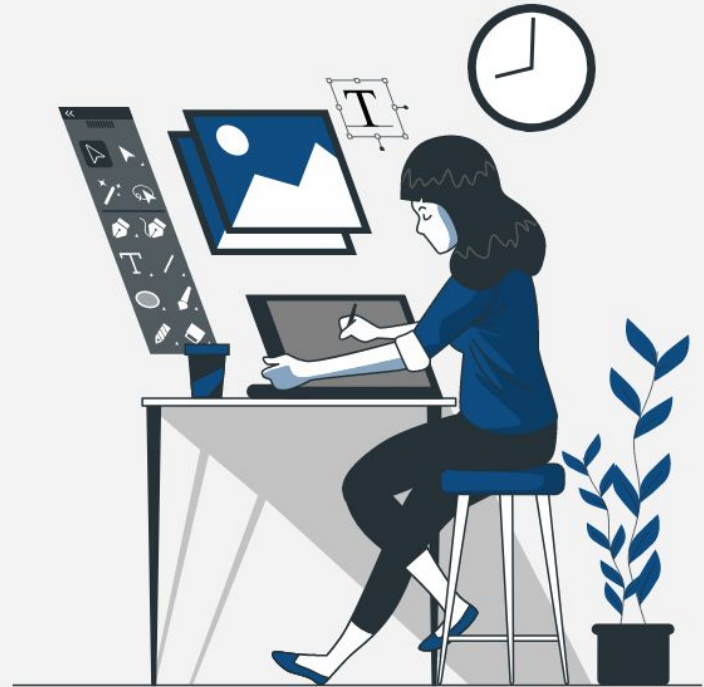
OUR IMPROVED DESIGNS WILL..

Enable users to understand ***why*** specific actions cannot be completed within the Photoshop menu and ***how*** to make those actions available to them.

05

EXPERIMENTS

What our Design Expresses
Compared to the Old Design

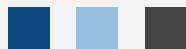




A/B TESTING



1. Using the current design, users will be instructed to do an action in Photoshop, but it will be greyed out in the menu
(Example: “crop an image” - but the crop option will be greyed out)
2. Users will then be given the new design prototypes which have explanations as to why the action is unavailable
 - Users will compare the two versions of prototype designs to see what they find to be more effective
 - New Design A (information icon) vs. New Design B (tab)
 - Whichever prototype gets the best ratings will be the prototype that we choose
 - We will also gather feedback for ways to improve our prototypes



HYPOTHESIS



No matter which prototype is chosen, both would improve the current Photoshop menu.

Overall, the feature would allow the user to easily access an explanation and understand why an action cannot be completed.

SOURCES

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Rehman, Umar. “UX230 Interaction Design I Lecture 8.” *UX230*, 6 Nov. 2020, Wilfrid Laurier University. PowerPoint presentation.

Francois_swart. “Photoshop CS5: Grayed out menu items.” *Adobe Photoshop Family*. 5 Mar. 2012.
<https://feedback.photoshop.com/conversations/photoshop/photoshop-cs5-grayed-out-menu-items/5f5f45154b561a3d42334cc3>.