

Human Computer Interaction

Heuristic Evaluation

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8 Golden Rules of Interface Design

Ben Shneiderman is an American computer scientist and professor at the University of Maryland Human-Computer Interaction Lab.

In his popular book "**Designing the User Interface: Strategies for Effective Human-Computer Interaction**", Shneiderman reveals his eight golden rules of interface design.

Strive for consistency

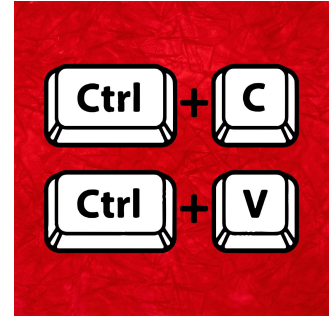
- Standardizing the way information is conveyed ensures users are able to apply knowledge from one click to another; without the need to learn new representations for the same actions.
- Consistency plays an important role by helping users become familiar with the digital landscape of your product so they can achieve their goals more easily.

In this Application

It is implemented by utilizing familiar icons, colors, menu hierarchy, call-to-actions, and user flows when designing similar situations and sequence of actions.

Enable frequent users to use shortcuts.

- With increased use comes the demand for quicker methods of completing tasks.
- For example, both Windows and Mac provide users with keyboard shortcuts



In this Application

Implemented shortcuts for the following:

Opening Mouth - Activating/Deactivating Mouse control

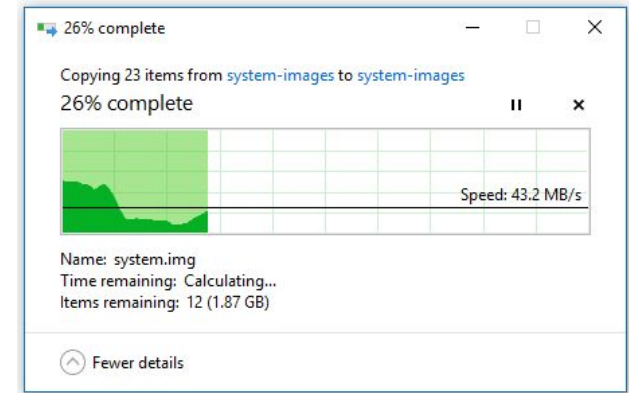
Right Eye Wink - Right Click

Left Eye Wink - Left Click

Squinting eyes - Activate/ Deactivate Scrolling

Offer informative feedback

- The user should know where they are at and what is going on at all times.
- For every action there should be appropriate, human-readable feedback within a reasonable amount of time.
- An example would be windows showing the progress of copy in the dialog



In this Application

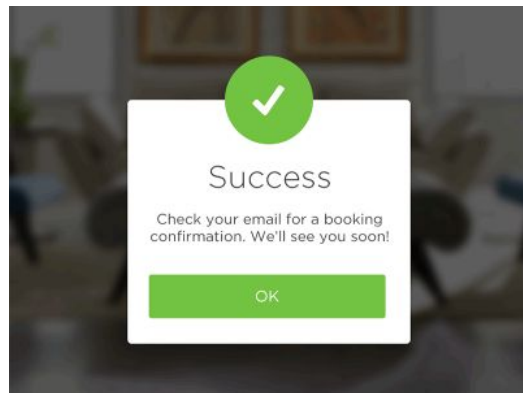
Implemented borders to indicate the current section in User Interface

Design dialogs to yield closure.

- Don't keep your users guessing.
- Tell them what their action has led them to.
- For example, users would appreciate a “Thank You” message and a proof of purchase receipt when they've completed an online purchase.

In this Application

Successful activation of mouse control and scrolling will be shown in the user interface



Offer simple error handling.

- No one likes to be told they're wrong, especially your users. Systems should be designed to be as fool-proof as possible, but when unavoidable errors occur, ensure users are provided with simple, intuitive step-by-step instructions to solve the problem as quickly as possible.

In this Application

If the face of the user is not visible, error message comes indicating user's face is not detected

* Website (required)

http://

This information is required.

Website

google.com

Please enter a valid Website URL (e.g. <http://www.gravityforms.com>).

Website

http://

Website

<http://google.google>

Permit easy reversal of actions.

- Designers should aim to offer users obvious ways to reverse their actions. These reversals should be permitted at various points whether it occurs after a single action, a data entry or a whole sequence of actions.



Reduce short-term memory load.

- Human attention is limited and we are only capable of maintaining around five items in our short-term memory at one time. Therefore, interfaces should be as simple as possible with proper information hierarchy, and choosing recognition over recall.

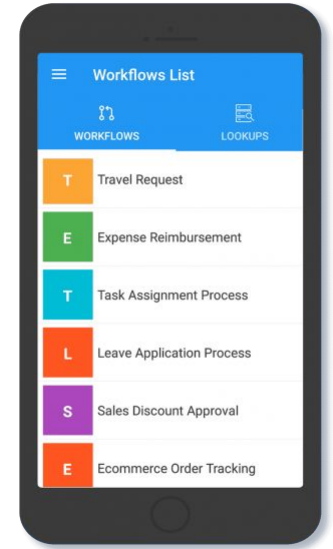
In this Application

User Interface is minimalistically designed so as to make the controlling window (window which user will be controlling, bigger)



Support internal locus of control.

- Allow your users to be the initiators of actions. Give users the sense that they are in full control of events occurring in the digital space. Earn their trust as you design the system to behave as they expect.



In this Application

The Application is designed in such a way that user would be initiating the actions with the facial movements