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# SWE60-242/SWE-342

HUMAN-COMPUTER INTERACTION

## Golden Rules of User Interface Design

# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Strive for consistency

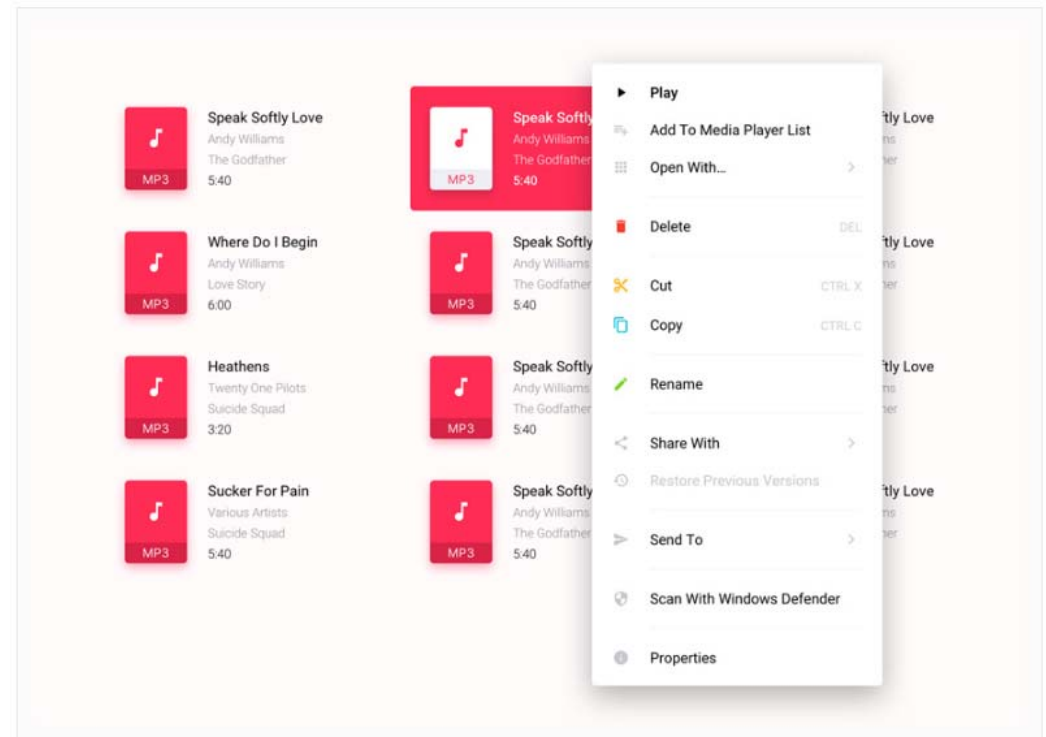
- Designing “consistent interfaces” means using the same design patterns and the same sequences of actions for similar situations.
- For example a certain style of button should always do the same thing, or navigation should function logically, going deeper in hierarchy.
- **Remember:** a consistent interface will allow your users to complete their tasks and goals much more easily.



# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Enable frequent users to use shortcuts

- As the frequency of use increases, so do the user's desires to reduce the number of interactions and to increase the pace of interaction. Abbreviations, function keys, hidden commands, and macro facilities are very helpful to an expert user.
- For example, both Windows and Mac provide users with keyboard shortcuts for copying and pasting, so as the user becomes more experienced, they can navigate and operate the user interface more quickly and effortlessly.

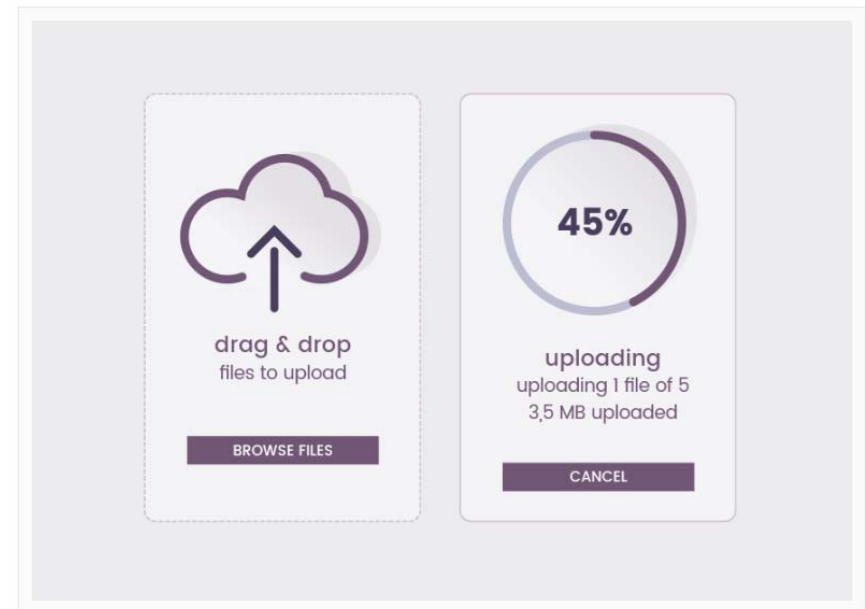


Context menu by Khalid Hasan Zibon

# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Offer informative feedback

- The user should know where they are at and what is going on at all times.
- This feedback needs to be meaningful, relevant, clear, and fit the context.

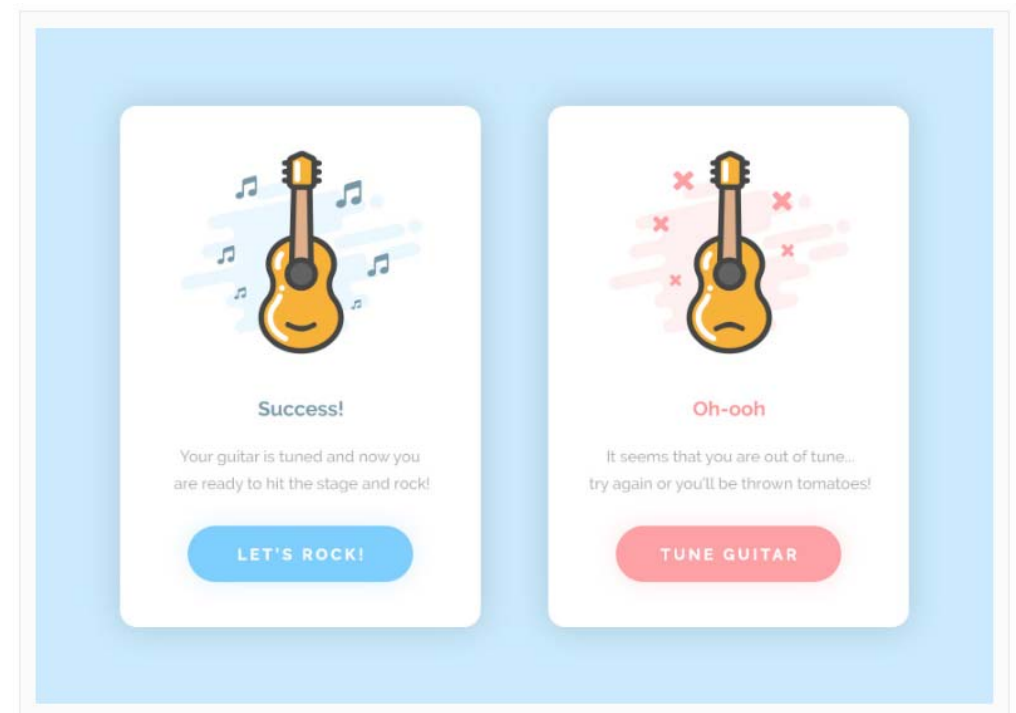


File upload by Antonija Vresk

# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Design dialogue to yield closure

- Sequences of actions need to have a beginning, middle and end. Once a task is completed, give some peace of mind to your user by providing them informative feedback and well-defined options for the next step if that's the case. Don't keep them wondering!
- For example, users would appreciate a "Thank You" message and a proof of purchase receipt when they've completed an online purchase.

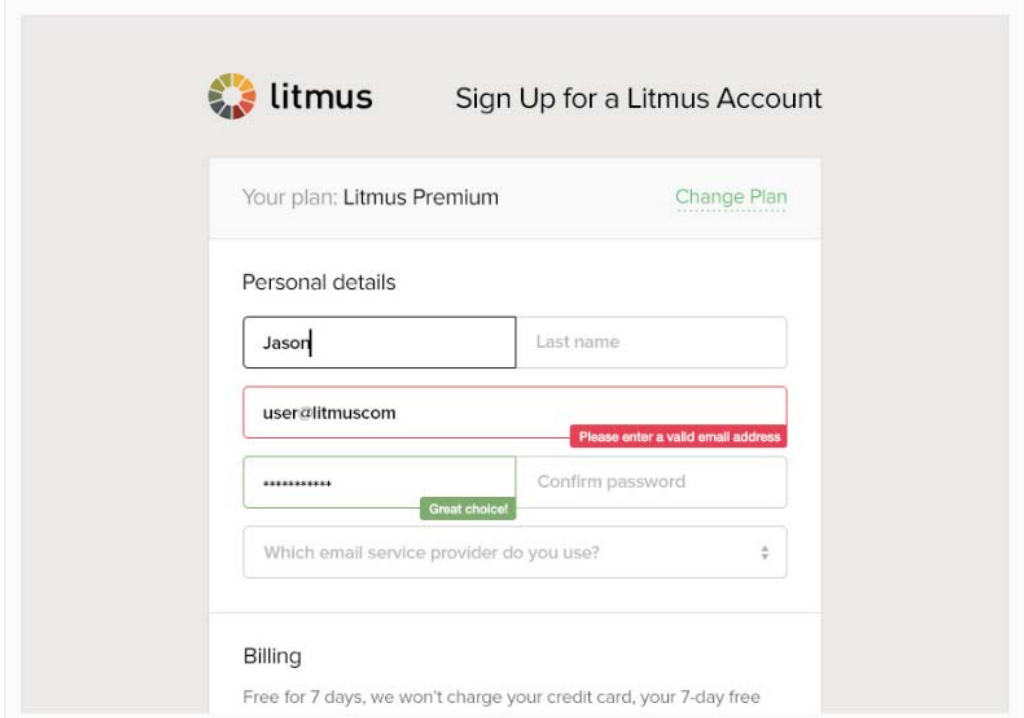


Flash message by Jose Antonio Orellana

# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Offer simple error handling

- A good interface should be designed to avoid errors as much as possible. But when errors do happen, your system needs to make it easy for the user to understand the issue and know how to solve it.
- Simple ways to handle errors include displaying clear error notifications along with descriptive hints to solve the problem.



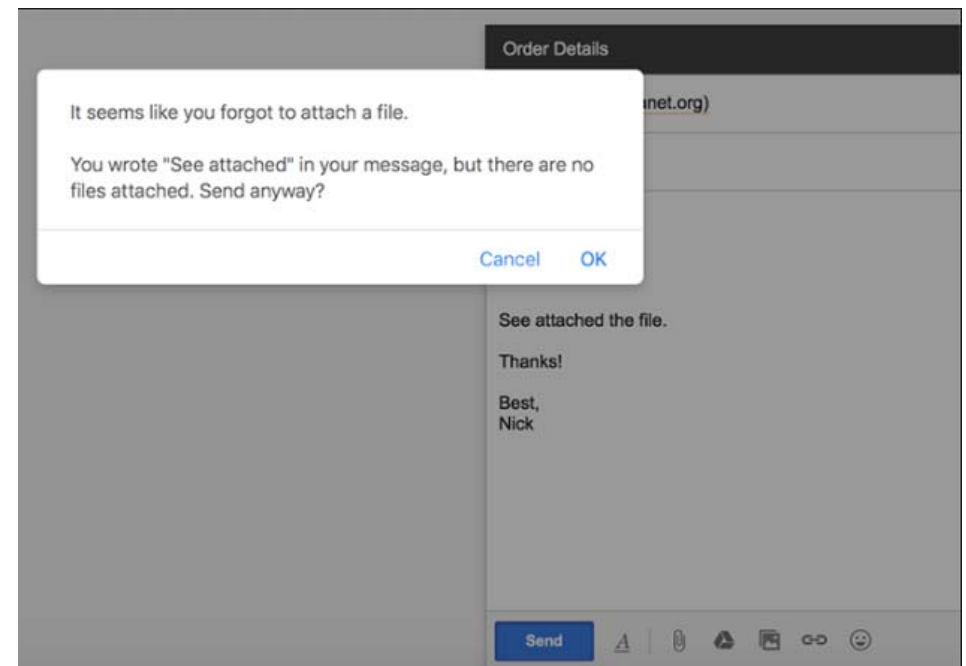
The screenshot displays the Litmus sign-up interface. At the top, the Litmus logo and the text "Sign Up for a Litmus Account" are visible. Below this, a section titled "Your plan: Litmus Premium" includes a "Change Plan" link. The "Personal details" section contains several input fields: a "Last name" field with the text "Jason" entered, an email field with "user@litmuscom" entered and a red error message "Please enter a valid email address" displayed below it, a password field with masked characters "\*\*\*\*\*" and a green "Great choice!" message below it, and a dropdown menu for "Which email service provider do you use?". The "Billing" section at the bottom states "Free for 7 days, we won't charge your credit card, your 7-day free".

Litmus form validation by Adnan Khan

# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Permit easy reversal of actions

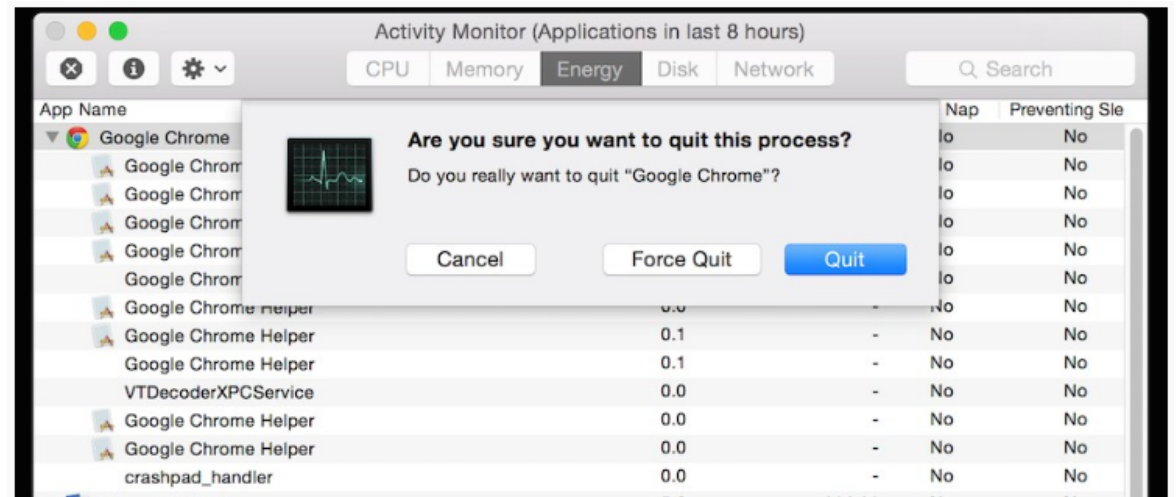
- It's an instant relief to find that "undo" option after a mistake is made. Your users will feel less anxious and more likely to explore options if they know there's an easy way to reverse any accidents.



# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ 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.
- They don't like to be surprised with changes in familiar behavior or feel as though they are unable to reach their desired result.
- So you should design the system in a way that makes the users feel like they are the initiators of actions and not the responders.

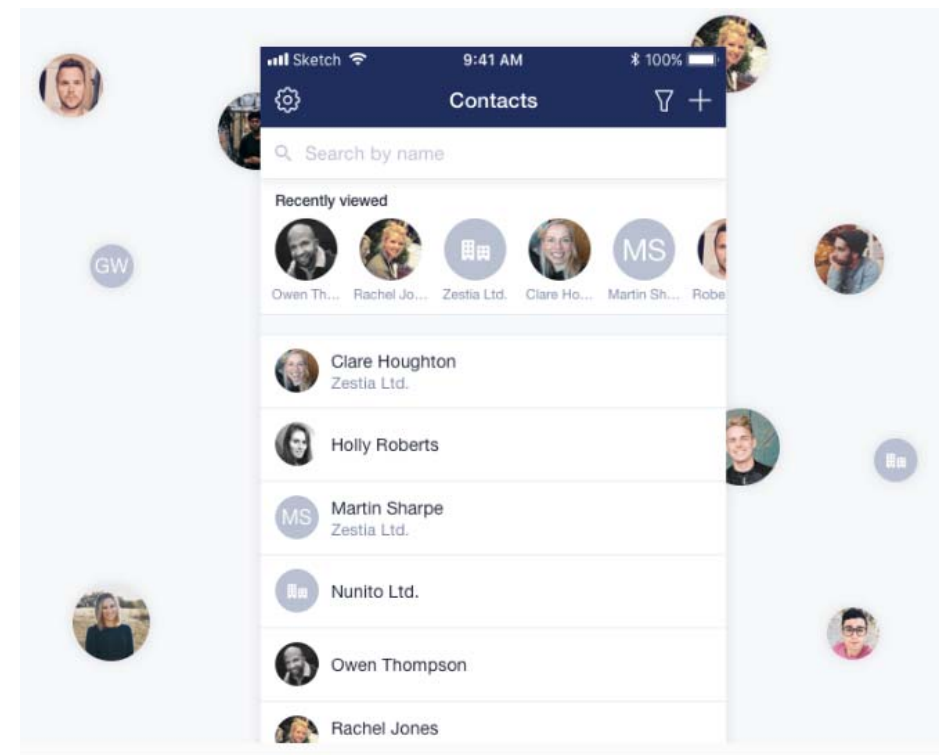




# SHNEIDERMAN'S "EIGHT GOLDEN RULES OF INTERFACE DESIGN"

## ■ Reduce short-term memory load.

- Interfaces should be as simple as possible with proper information hierarchy, and choosing recognition over recall. Humans are only capable of retaining 5 items in our short term memory at one time
- Recognizing something is always easier than recall because recognition involves perceiving cues that help us reach into our vast memory and allowing relevant information to surface.
- For example, in an ecommerce environment, a list of recently viewed or purchased items.



Recently viewed contacts for Capsule by Gavin Williams

## GROUP EXERCISE 7

- (15 Points) Find web application and discussion. Does the website follow the eight golden rules of the interface design? Please discuss step by step.