Innovation in UX/UI

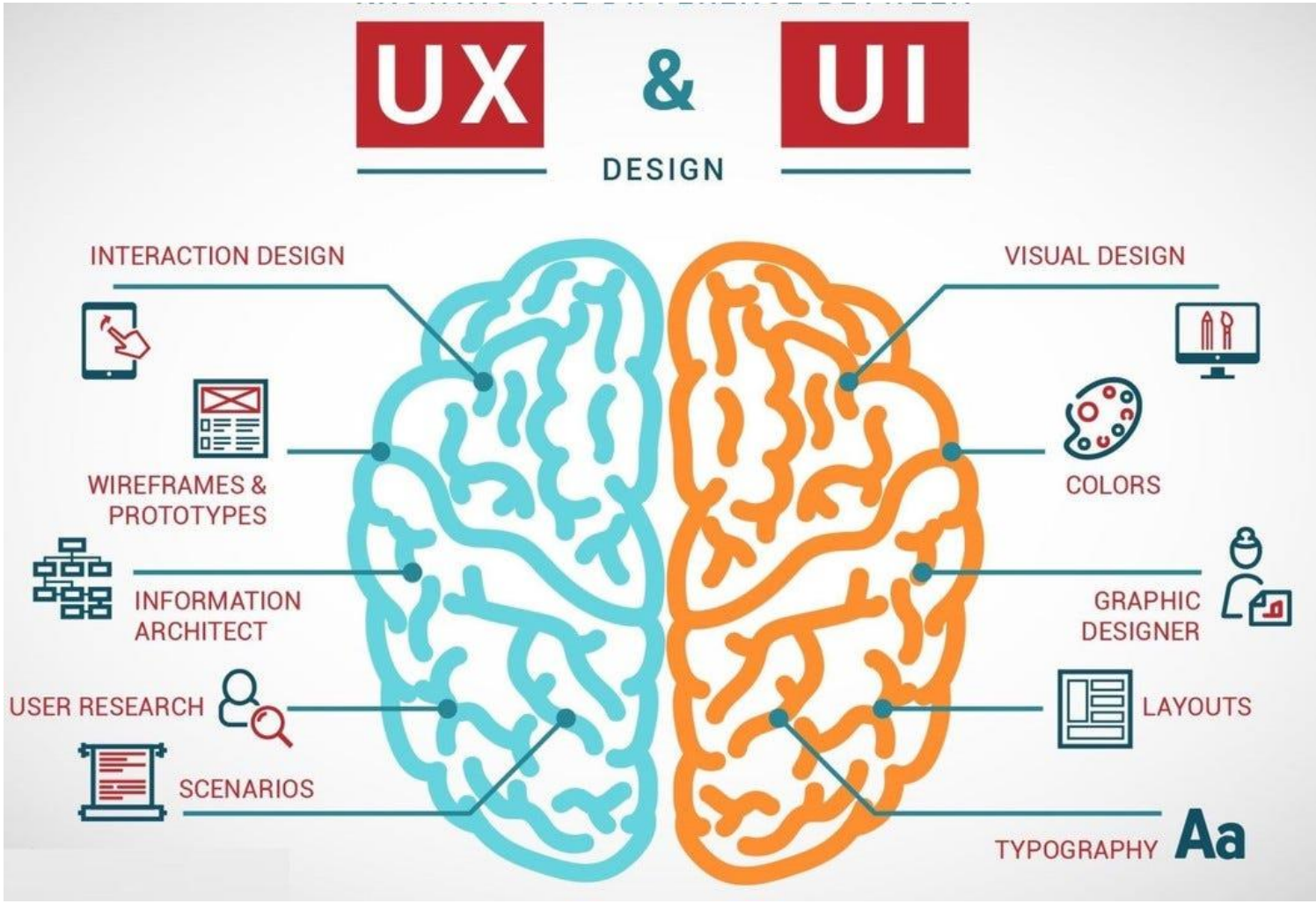
Tech Seminary 2

You ≠ User (UX Slogan #1)

- https://www.nngroup.com/videos/you-are-not-user-slogan/

UX vs UI

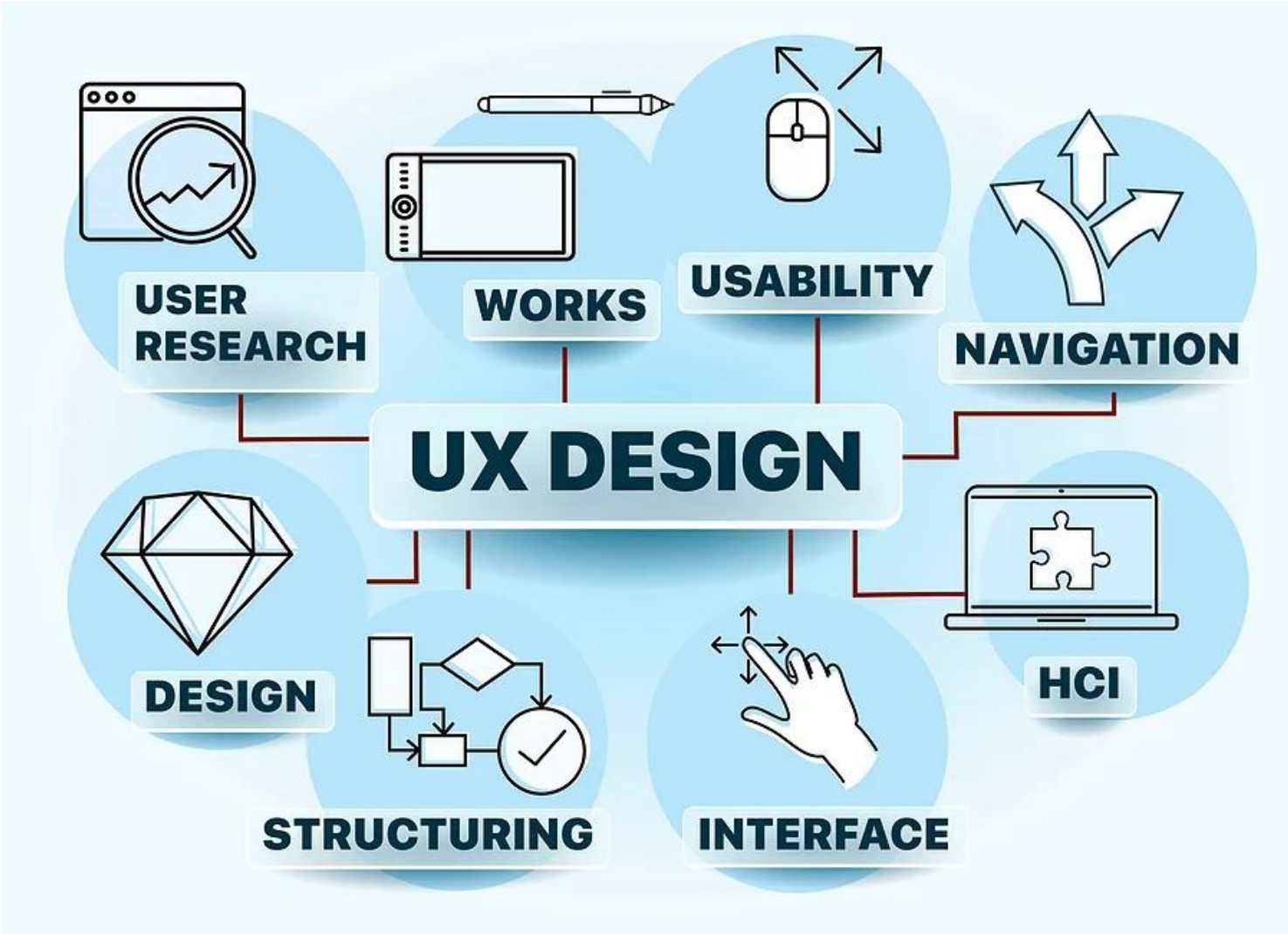
- UI (user interface design) is a specialized UX (user experience design)
- UX focus: all aspects of the USER's interaction with the company, its services, and its products
- UI focus: visuals interaction



*https://miro.medium.com/v2/resize:fit:1050/1*hp-yfKsmzsj711iLbM8eEw.jpeg

UX

- Task and responsibilities:
  - Strategy and content
  - Wireframing and prototyping
  - Execution and analysis



*https://www.keenesystems.com/hs-fs/hubfs/blog-images/ux-design.jpg?width=900&name=ux-design.jpg

UX

Image: https://webdesignledger.com/35-design-jokes-will-make-you-laugh/

UI

- Task and responsibilities:
  - The look and feel of the product
  - Responsiveness and interactivity

https://www.netsolutions.com/insights/wp-content/uploads/2022/02/neumorphism.webp

UI

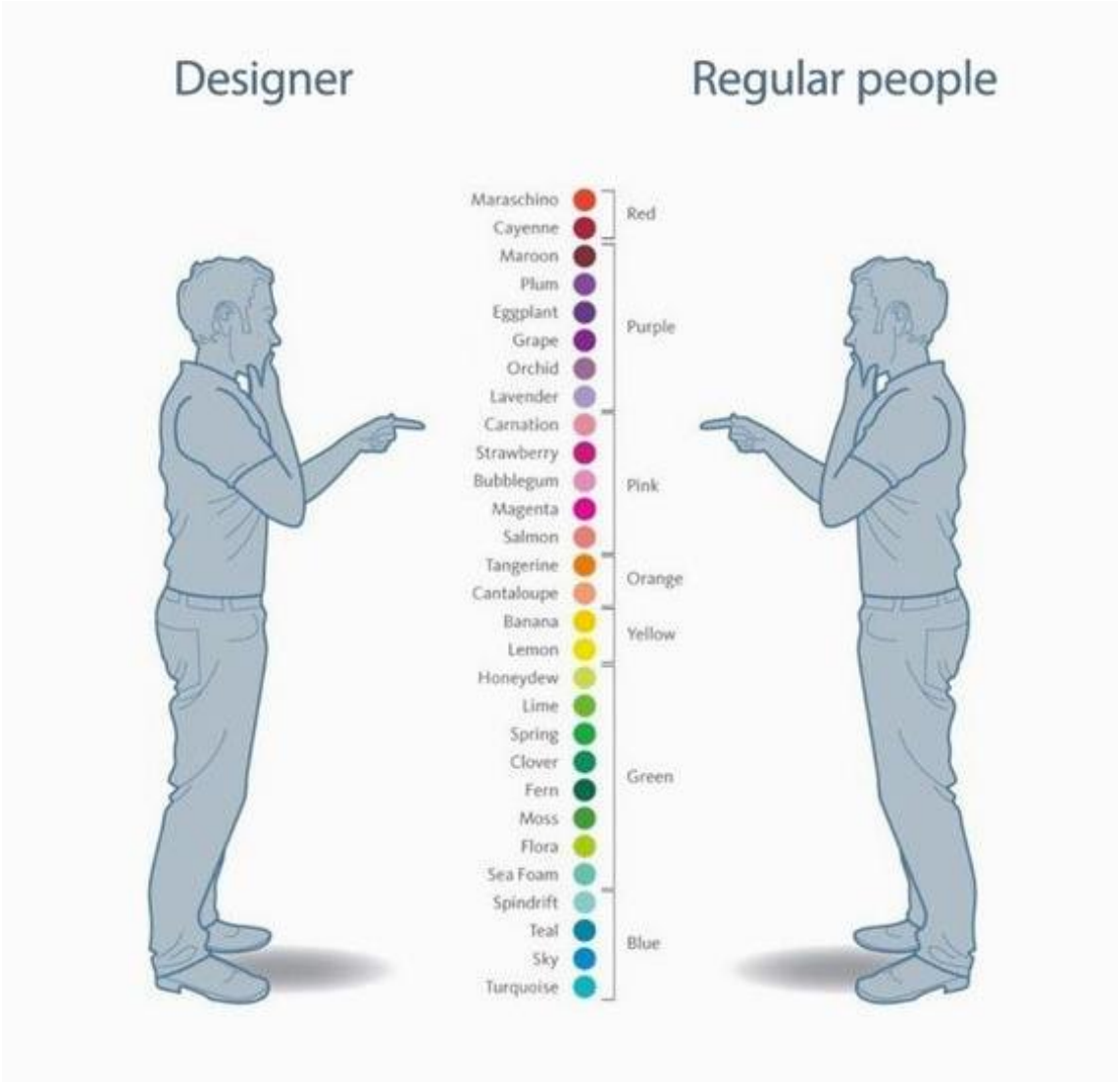


Image: https://webdesignledger.com/

10 Usability Heuristics for User Interface Design

Nielsen Norman Group
Ph.D Donald Norman - former VP of research @ Apple
Ph.D Jakob Neilsen – 79 US patents, making the internet easier to use

**https://www.nngroup.com/articles/ten-usability-heuristics/*

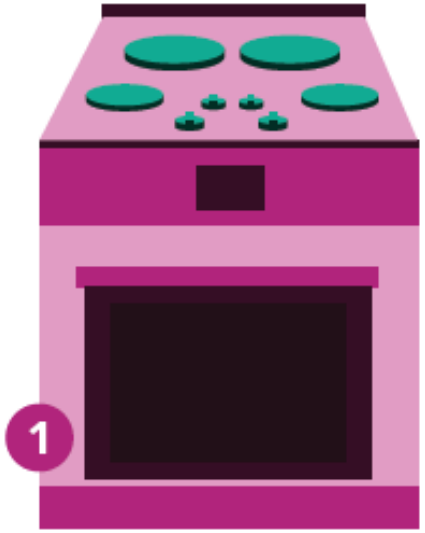
#1: Visibility of system status

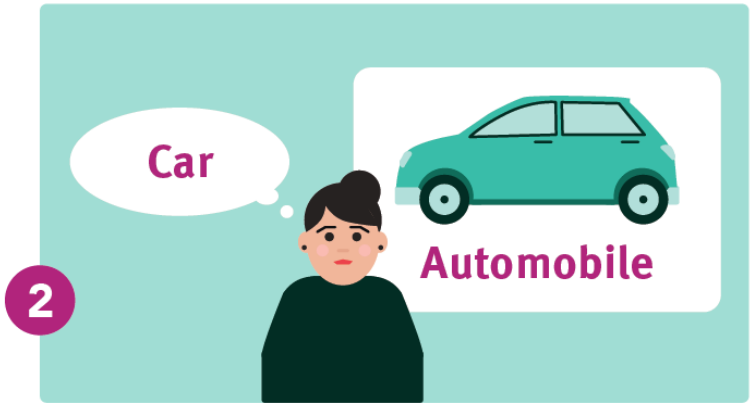
- keep users **informed** about what is going on
- appropriate **feedback** within a **reasonable** amount of time
- **predictable** interactions create **trust**

*https://www.nngroup.com/articles/visibility-system-status/

#2: Match between system and the real world

- speak the users' language
- real-world conventions and correspond to desired outcomes (natural mappings)
  - spatial similarity
  - conceptual or metaphorical similarity (up is more, green is go)
  - behavioral similarity ("raise to wake" gesture)





*https://www.nngroup.com/articles/match-system-real-world/

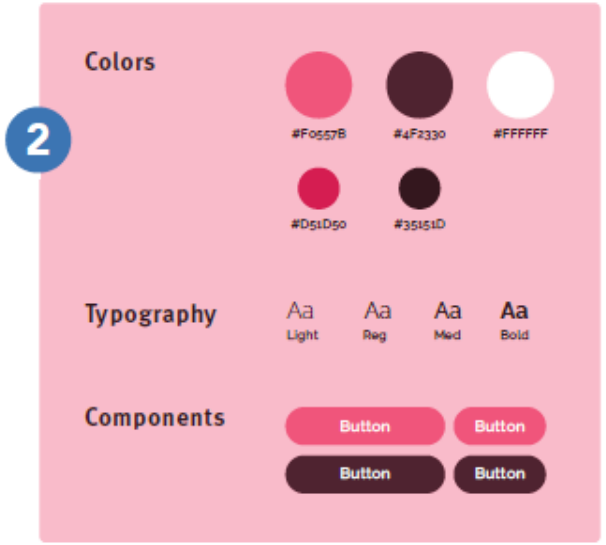
#3: User control and freedom

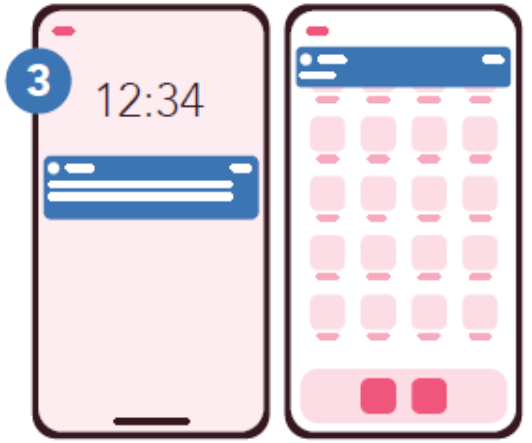
- Support *Undo* and *Redo*
- Allow Users to Easily Cancel an Action
- Show a clear way to exit the current interaction, like a Cancel Button

*https://www.nngroup.com/articles/user-control-and-freedom/

#4: Consistency and standards

- Internal Consistency
  - within a product or a family of products
- External Consistency
  - conventions in an industry
- Layers of consistency:
  - Visual (icons, symbols, imagery)
  - Layout (reuse buttons, headings, navigation)
  - User-Entered Data (dates, phone number, location)
  - Content (e.g. same style on marketing and site)





*https://www.nngroup.com/articles/consistency-and-standards/

#5: Error prevention

- Include Helpful Constraints
  - e.g. date picker
- Offer Suggestions
  - e.g. on search
- Choose Good Defaults
  - e.g. location, today date
- Use Forgiving Formatting
  - e.g. phone number

*https://www.nngroup.com/articles/slips/

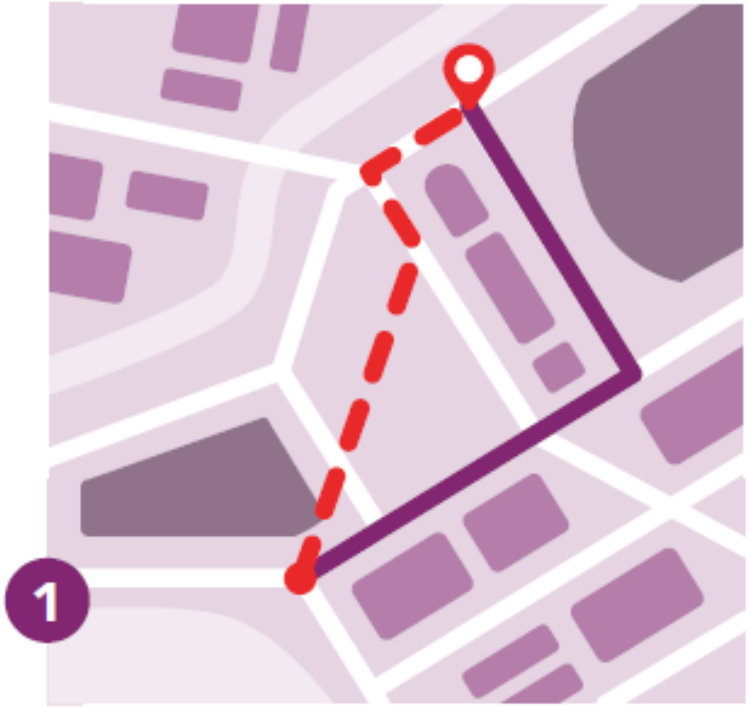
#6: Recognition rather than recall

- Reduce the information that users have to remember.
- Let people **recognize** information in the interface, rather than forcing them to remember (“**recall**”) it.
- Offer help in context, instead of giving users a long tutorial to memorize.

*https://www.nngroup.com/articles/recognition-and-recall/

#7: Flexibility and efficiency of use

- **Multiple methods** to accomplish the same task according to one's preferences
- **Accelerators** that don't slow down inexperienced users, but speed up advanced users
  - Keyboard swipe
  - Macros (e.g. excel procedures)
- Enable expert users to **customize** the interface to suit their needs



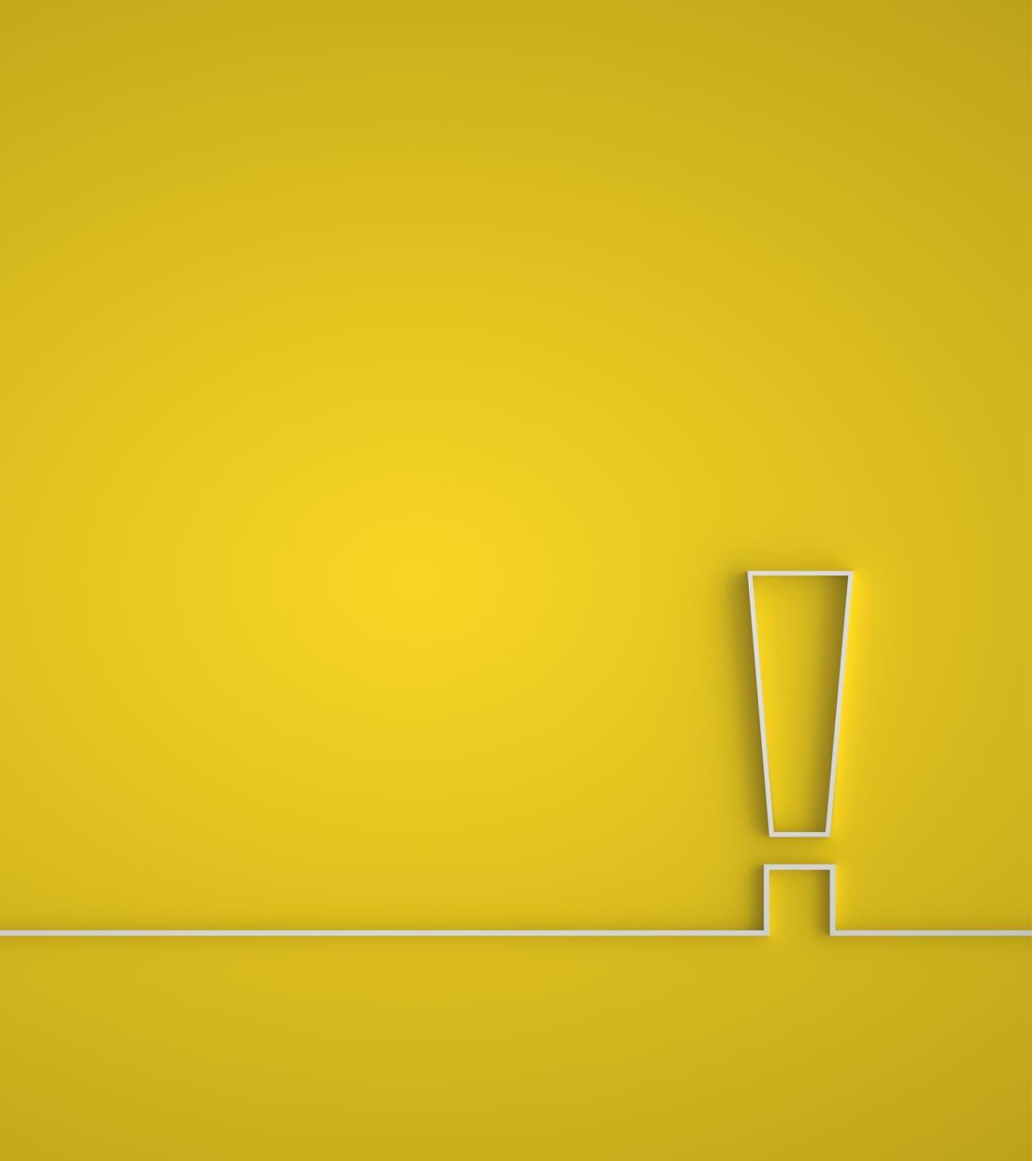
*https://www.nngroup.com/articles/flexibility-efficiency-heuristic/

#8: Aesthetic and minimalist design

- Keep the content and visual design of UI focused on the essentials.
- 5 principles for visual communication:
  - **scale:** use relative size to signal importance
  - **visual hierarchy:** color, spacing, placement
  - **balance**: elements distributed on both side of an imaginary axis
  - **contrast:** emphasize the elements are distinct
  - **gestalt principles** tendency to perceive the whole as opposed to the individual: grouping is important

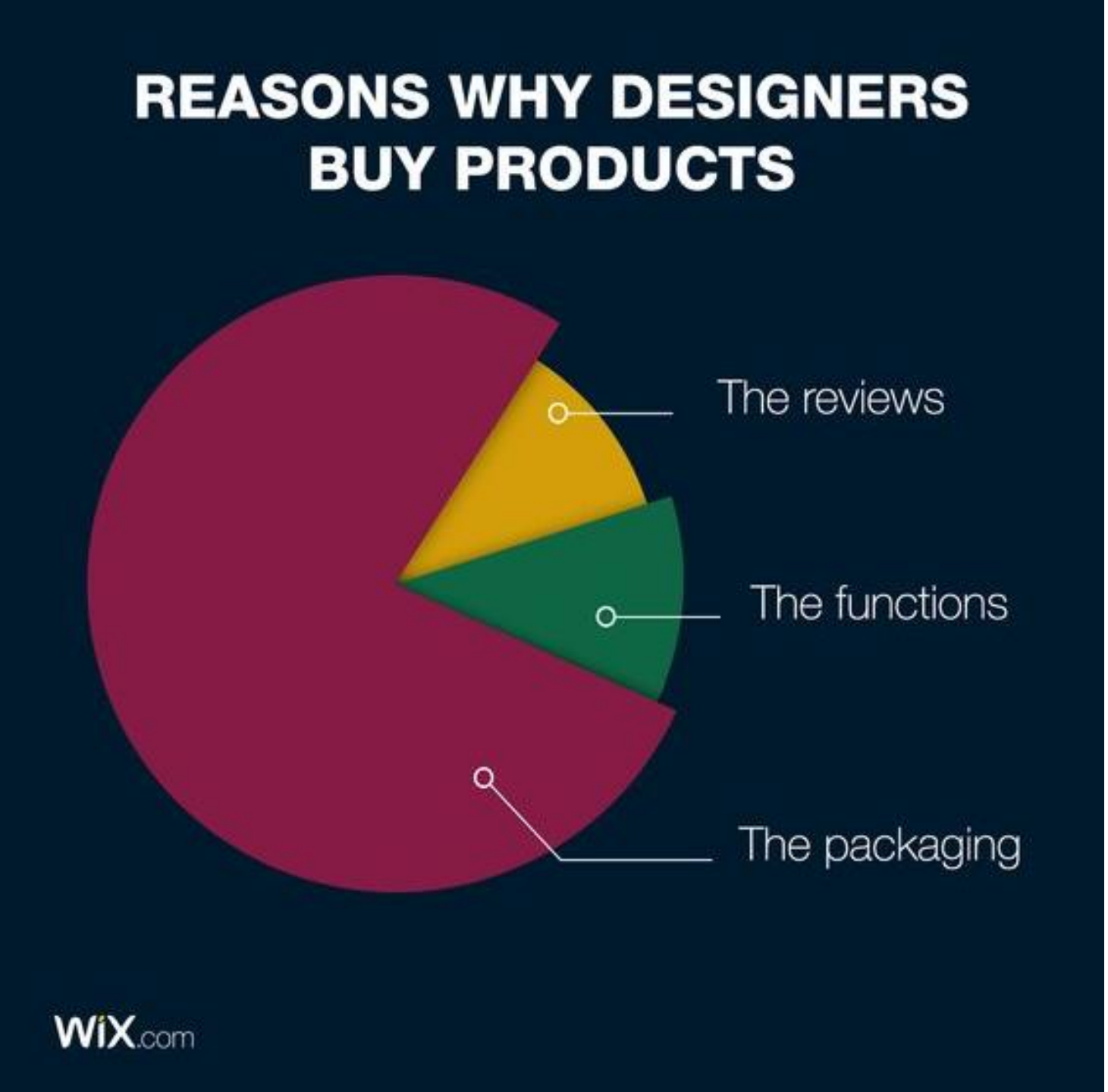
#9: Help users recognize, diagnose, and recover from errors

- Use traditional error-messages visuals, like bold, red text
- Tell users what went wrong in language they understand
- Offer users a solution, like a shortcut that can solve the error immediately.



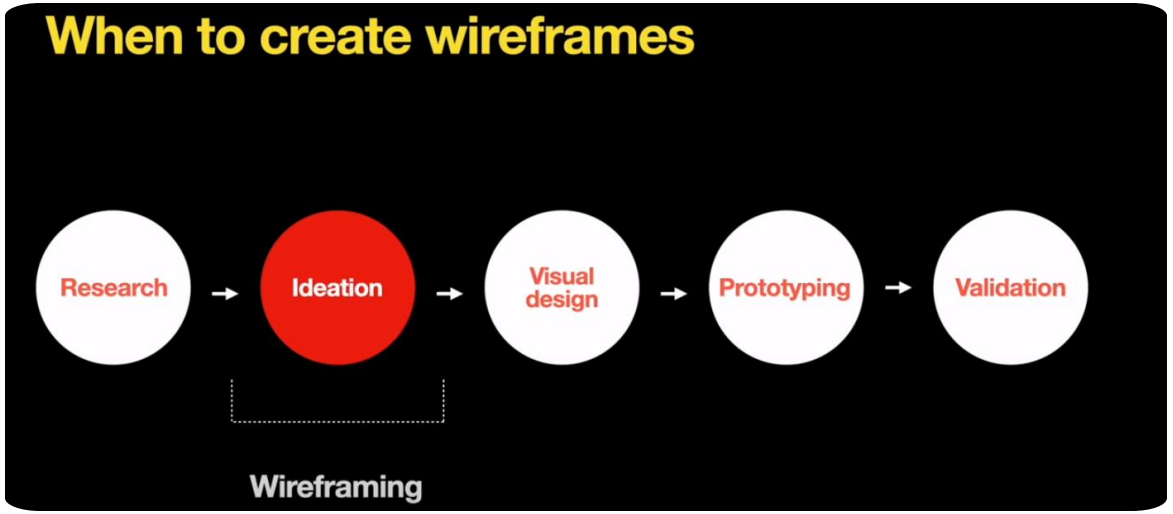
#10: Help and documentation

- Best systems don't require documentation
- Ensure that the help documentation is easy to search
- Whenever possible, present the documentation in context right at the moment that the user requires it.
- Proactive help:
  - tutorials
  - instruction overlays
  - tooltips
  - wizards



and maybe all of us...

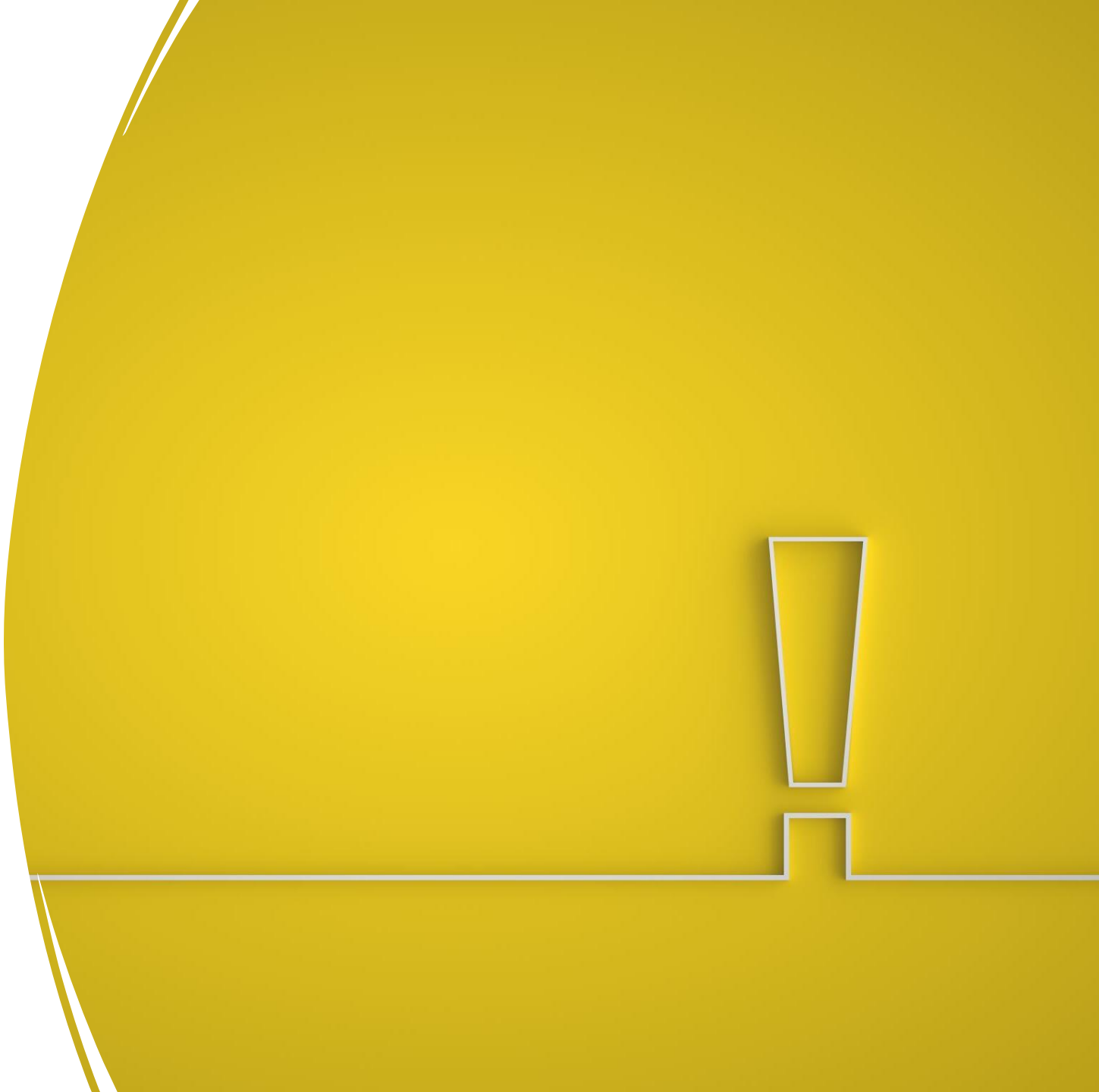
Wireframing



- Test an idea and get feedback quickly
- Wireframes visualize a user **path** or **flow**, as well as **page layouts**, information **hierarchy**, and even **interactions**.
- Depending on their purpose, they can vary in fidelity — from quick sketches to detailed representations

Wireframing
| questions to ask

- What should user do on this page?
- What information need?
- What should users expect?
- How does this page fil in the flow?



Wireframing | how to?

- https://www.nngroup.com/articles/draw-wireframe-even-if-you-cant-draw/
- Template https://miro.com/templates
  - iPhone App Template
  - Low fidelity prototype
  - Website Wireframing Template
  - App Wireframe Template

Milestones (week 5,6):

- Wireframing **(7p)**
  - Low fidelity wireframing
- Establish color theme **(2p)**
- Create a logo **(optional)**

References

- https://www.nngroup.com/articles/ten-usability-heuristics/
- https://www.nngroup.com/videos/you-are-not-user-slogan/
- https://careerfoundry.com/en/blog/ux-design/the-difference-between-ux-and-ui-design-a-laymans-guide/
- https://www.youtube.com/watch?v=1jtQ0uIIs94