Usability Goals

Lesson Plan

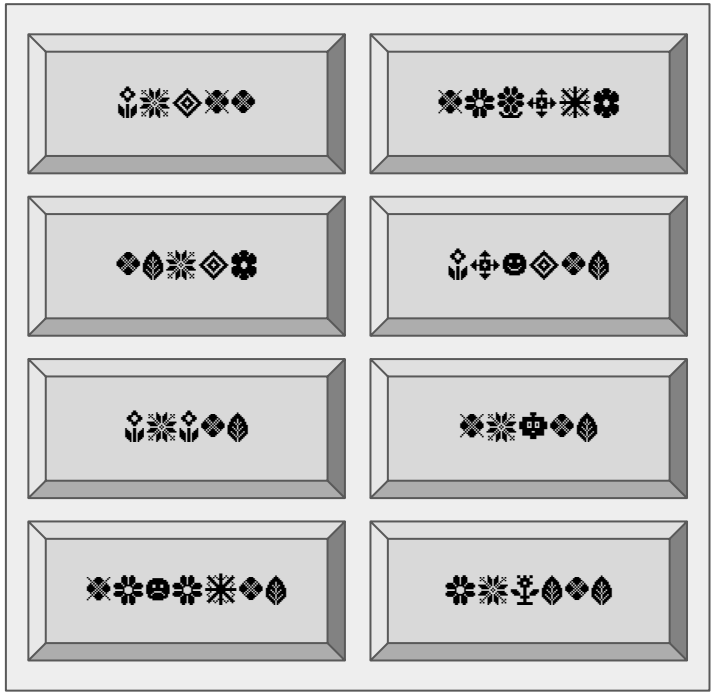
- Activity - Design Critique
- Introduction to Usability Goals
- Review and Conclusion

Introductory Activity

Scenario: Alien Spaceship

- Ambassadors for an Alien-Human Exchange program
- Aliens have set up a living space on the ship with functionality to support human life, based on their understanding of humans.
- They want to know if there are any issues with the design of the control panel to use the room's functions.

Controller



Your room on the alien spaceship is very advanced. Through a control panel on the wall you have access to the following functionality:

- Synthesize Food
- Synthesize Drinks
- Raise temp by 50 (randomly chooses C or F)
- Lower temp by 50 (randomly chooses C or F)
- Turn the lights on
- Turn the lights off
- Call a crew member
- Initiate Self Destruct Sequence

Each function is activated by pressing the labeled button on the control panel.

Usability Goals

Usability Goals

From *Interaction Design* 5th Edition by Sharp, Rogers, and Preece

Effectiveness - How good is the product at doing what it is supposed to do?

Efficiency - How well does the product support users in carrying out their tasks?

Safety - Does the product protect the user from dangerous conditions and undesirable situations?

Utility - Does the product provide the right kind of functionality so that the users can do what they need or want to do?

Learnability - How easy is it to learn how to use the product?

Memorability - How easy is it to remember how to use the product once it has been learned?

Effectiveness

Effectiveness is a general goal that refers to how good a product is at doing what it is supposed to do.





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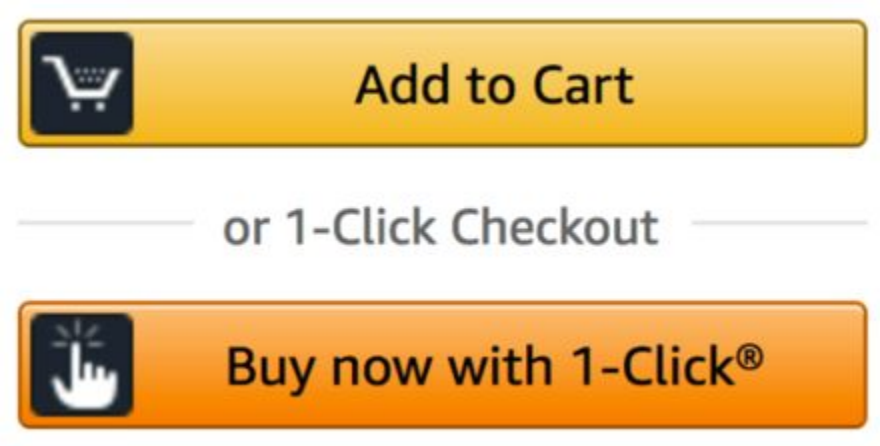




How good is it at doing what it is supposed to do?

Efficiency

Efficiency refers to the way a product supports users in carrying out their tasks.

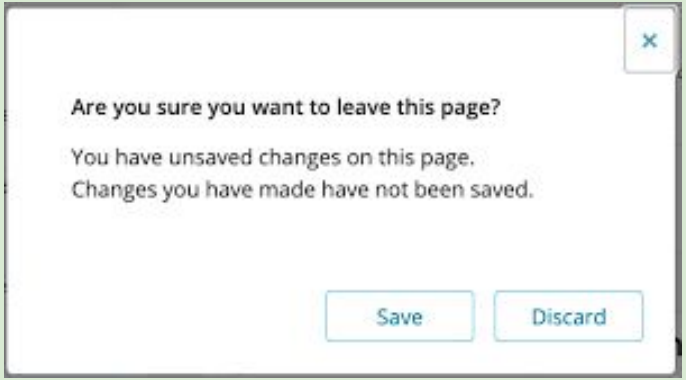


How well does it support the users in carrying out their tasks?

Safety

Safety involves protecting the user from dangerous conditions and undesirable situations.

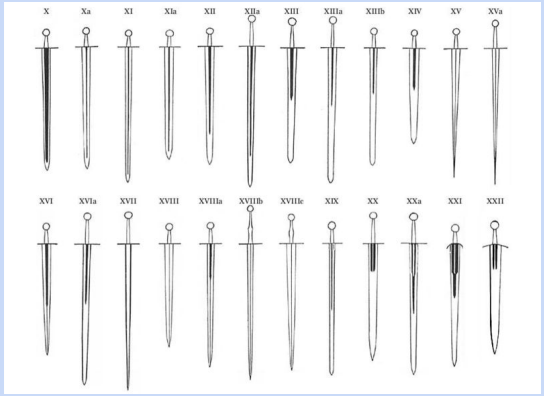


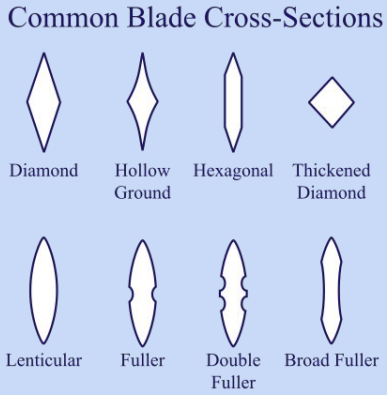


How well does it protect the user from undesirable situations?

Utility

Utility refers to the extent to which the product provides the right kind of functionality for the tasks the user wants to accomplish.





Does it provide the right kind of functionality?

Learnability

Learnability refers to how easy a system is to learn how to use.

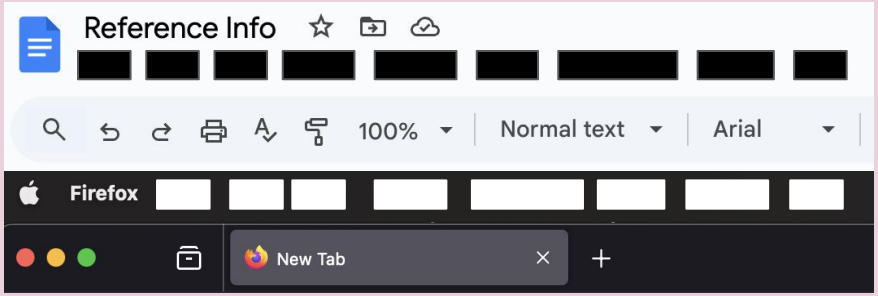




How easy is it to learn?

Memorability

Memorability refers to how easy a product is to remember how to use once learned.



How easy is it to remember how to use?

Review and Conclusion

Usability Goals

Effectiveness - How good is the product at doing what it is supposed to do?

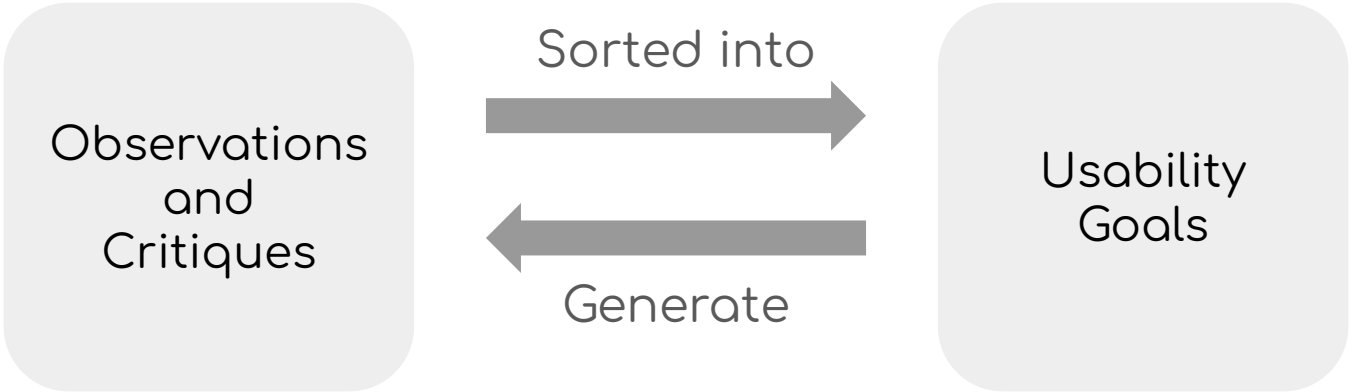
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Observations and Critiques
Sorted into
Generate
Usability Goals

What Next?

Usability Goals can be used as a starting point for critique to scaffold the process of analysing a design.

Challenge: Find something you use regularly and analyse it using the 6 Usability Goals as a guide.

Other frameworks of Usability Goals that use different language can be found online. Reviewing and comparing different perspectives on usability can help deepen your understanding and support long-term retention.

What Next?

Knowledge of Usability Goals can be applied in various settings:



Education
Assignments, Research Projects, and Presentations.



Employment
Interviews, Internships, and in common CS careers.



Fun
Impress (or annoy) your friends! Enjoy your ability to think critically about design.