Usability Basics

SWEN-101
What is Usability?

We could design the product with a simple point-and-click interface...

Or we could require the user to choose among thousands of poorly documented commands, each of which must be typed exactly right on the first try.

Bear in mind, we'll never meet a customer ourselves.

Make it so they have to reboot after every typo.
What is Usability?
Usability questions:

- Easy to Learn?
- Easy to Use?
- Easy to Understand?
Understanding the User Profile

- Identify user types for the system
- Focus on the primary users
- For each user type, describe relevant characteristics such as:
  - Age, gender, culture
  - Disabilities/physical characteristics
  - Educational background/computer experience
  - Motivation, attitude
Pinpointing Tasks

Identify the tasks users need to accomplish

**Task** - A specific description of a complete action that a specific user (may) perform(s)
Typical Interface Errors

- Lack of consistency
- Too much memorization
- No guidance / help
- No context sensitivity
- Poor response
- Arcane/unfriendly
"Studies of user behavior on the Web find a low tolerance for difficult designs or slow sites. People don't want to wait…..

….People have to be able to grasp the functioning of the site immediately after scanning the home page—for a few seconds at most."

Otherwise, most casual users simply leave the site and browse or shop elsewhere.”

- Jakob Nielsen  "Web-Site Usability: Usability On The Web Isn't A Luxury"."
Golden Rules

- Place the user in control
- Reduce the user’s memory load
- Make the interface consistent
Heuristics

These are ten general principles for user interface design.

They are called "heuristics" because they are more in the nature of rules of thumb than specific usability guidelines.

- Jakob Nielsen
Heuristics (cont).

• Visibility of system status
• Match between system and the real world
• User control and freedom
• Consistency and standards
• Error prevention
Heuristics (cont).

- Recognition rather than recall
- Flexibility and efficiency of use
- Aesthetic and minimalist design
- Help users recognize, diagnose, and recover from error
- Help and documentation