9th April, 2015

USABILITY BASICS

Usability is a quality attribute that assesses how easy user interfaces are to use. The word "usability" also refers to methods for improving ease-of-use during the design process.

Utility = whether it provides the features you need.

Usability = How easy and pleasant these features are to use.

Useful = Usability + Utility.

Key things when creating usability tests:

1) Learnability – How easy is it to accomplish tasks the first time the user encounters the design
2) Efficiency – Once users learn the design how quickly can they accomplish the task
3) Memorability – When a user returns to the design after a period of not using it, how quickly can they establish proficiency
4) Errors – How many errors do users make, how severe are these errors and how easily can they recover from these errors
5) Satisfaction – How pleasant is it to use the design

Heuristic (is a mental short-cut):

Usability heuristics

1) Visibility of system status
   - The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

2) Match between the system and the real world
    - The system should speak users' language, with words, phrases and concepts familiar to the user.
3) User control and freedom
    - Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted site without having to go through an extended dialogue.
    - Users should feel safe using your system.
4) Consistency and standards
    - Create something users understand; Users should not wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.
5) Error preventing
    - Even better than good error messages is a careful design which prevents a problem from occurring in the first place.
6) Recognition rather than recall
    - Minimize the user's memory load by making objects, actions and options visible. The user should not have to remember information from one part of the dialogue to another.
7) Flexibility and efficiency of use
    - Accelerators (unseen by the novice user) may often speed up the interaction for the expert user such that the system can cater for both inexperienced and experienced users.
    - Allow users to tailor frequent actions.

8) Aesthetic and minimalist design
    - Dialogues should not contain information which is irrelevant or rarely needed.
9) Help users recognize, diagnose and recover from errors
    - Error messages should be expressed in plain language; precisely indicate the problem and constructively suggest the solution.
10) Help and documentation

- In some systems it may be necessary to provide documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out and not be too large.

Homework:

1. Design a study
2. Purposeful Rule Breaking
   Deliverable:
   For each of the 10 heuristics, think of a reason to break the rule, and find an example.
3. Do that study

Fun fact:

Building a useful system is a lot like driving a car; you know all the rules but at some point you will have to break some of them to get to the end goal.

Pro tips:

1. Embrace being wrong
2. Think aloud protocol – make your users talk to you while they test your product
3. Reading:
   http://www.nngroup.com/articles/how-many-test-users/