Interaction Design
Helping users work better

Interface design is the combination of navigational strategies, visual design and information organization that influences the way a reader experiences the online work.

“Developing a User Interface for an Online Document” - 1993
So many words...

Technical communications • Usability • Interface design • Information architecture • Performance support • Interaction design • Ethnography • Experience design • User experience design • Brand design • User-centered design • Market research • Document design • User interface design • Interaction architecture • Human factors • Marketing • Writing • Human-computer interaction • Industrial design • Graphic design • Information design • Ergonomics • Interactive design • Customer experience • Quality control

...are they the same thing?
Elements of user experience

Application
- Focused on doing things or actions
- Rely on task analysis
- Built on user interface design
- Need good interaction design

Information
- Focused on finding information
- Rely on content analysis
- Build on information architecture
- Need good navigation design

Both are built on understanding user needs

“The Elements of User Experience” by Jesse James Garrett

Plan for user success

ISO 13407: Human-centred design process
Two different users...

Jerilynn
Office Clerk

- Likes helping people and knowing how to get things done
- Dislikes constant change and the new computer systems

Toni
Citizen

- Busy life with work and family - never has enough time
- Needs help with something, but doesn’t know exactly what agency to turn to

... have different usability needs
What do we know about the use...?

**How often is the application used?**
- Only occasionally and briefly
- Daily, for long sessions

**How difficult or intimidating is the task?**
- General knowledge only
- Some domain knowledge
- Detailed specialist knowledge

**Design for ease of learning?**

**Design for efficiency?**

**Design to engage the user?**

**How well do users understand the task?**
- General knowledge only
- Some domain knowledge
- Detailed specialist knowledge

**Design for ease of learning?**

**Design for efficiency?**

**How important is the outcome?**
- Trial and error is part of the task
- Mistakes are annoying
- Mistakes are difficult to correct

**Design for effectiveness?**

**Design for error tolerance?**

---

Whitney Quesenbery | whitneyq@WQusability.com | www.WQusability.com
What is the relationship?

Calculator: No relationship
- No need to log in
- No work maintained between sessions

Register Your Car: One-time transaction
- Identification through a document ID
- Transaction completed in one session
- Long-term memory not part of the web service

Online Banking: Ongoing relationship
- Personal log in
- Used over time, and maintains history

Relationship changes the design

1. Are the applicant, spouse or any of their dependents, regardless if applying for coverage, currently...

What are you asking me??!!
Usability is a balance

- Effective
  Users can accomplish their goals...
- Efficient
  ...in a reasonable time...
- Engaging
  ...in a pleasant and satisfying way
- Error Tolerant
  ...without mistakes...
- Easy to Learn
  ...and that is easy to learn to use.

“What Does Usability Mean: Looking Beyond ‘Ease of Use’”
Whitney Quesenbery, Proceedings of the STC, 2001

Types of applications

- Reports or Data View
- Transactional ‘Desktops’
- E-Commerce
- Customer Self-Service
## Interaction styles

<table>
<thead>
<tr>
<th>RELATIONSHIP</th>
<th>Weak</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports or Data View</td>
<td>- Information-focused</td>
<td>- Activity-focused</td>
</tr>
<tr>
<td></td>
<td>- Goal is knowledge</td>
<td>- Goal is complex mix of knowledge and task</td>
</tr>
<tr>
<td></td>
<td>- Knowledgeable relationship</td>
<td>- Strong relationship</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>- Browsing towards single transaction</td>
<td>- Browsing towards multiple transactions</td>
</tr>
<tr>
<td></td>
<td>- Goal is purchase</td>
<td>- Goal is transaction</td>
</tr>
<tr>
<td></td>
<td>- Casual or “as needed” relationship</td>
<td>- Use may be ‘stressful’</td>
</tr>
</tbody>
</table>

### Interaction style

**Customize Group**

- **Message approval:** No
- **Reply to:** Group
- **Group type:** Mail

---

**Step 2 of 3: Customize list type**

- Do you want to approve messages before they are delivered?
  - Yes, messages are delivered immediately. [learn more](#)
  - Only messages from team members require approval. [learn more](#)
- Message replies should go to:
  - All group members. [learn more](#)
  - Only to message sender. [learn more](#)
- Do you want to share the group’s web presence, such as photos, blog, calendar, polls, and chat?
  - Yes, and share the group’s web presence. [learn more](#)
  - No, web presence will be a “closed group” and only visible to the group. [learn more](#)
Interaction style

Be informative

- Don’t make users guess what to do or how to do it

What can I do here?

**Online Registration Renewal**

A simple 4-step process!

1. ENTER VEHICLE INFORMATION
2. ENTER OWNER INFORMATION
3. PAY FEES
4. PROVIDE FEEDBACK (optional)

Make sure you have the following ready:

- Your registration renewal form
- Your Social Security Number (SSN)
- Your Insurance Identification Card
- A valid credit card
Provide direction

- Balance freedom of navigation and structure within a task

Balance complexity and clarity

- Make the complexity of the interaction appropriate for the users and the task

Both of these are right for me…in the right context
Be tolerant

- Don’t make the user do work the computer can do

Allow for different needs

- Let the user customize the page view

Why can’t I enter the rest of my credit card number?

1234-107517-43006

Let me control my own experience.
When I'm working on a problem, I never think about beauty. I think only how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong.

- R. Buckminster Fuller

About me

Whitney Quesenbery
Whitney Interactive Design
+1 908-638-5467
whitneyq@WQusability.com
www.WQusability.com

Whitney Quesenbery is a user interface designer and usability specialist with a passion for clear communication. She is an expert in developing new concepts for product designs and has produced award winning multimedia products, web sites, and web & software applications.

She is President of the Usability Professionals' Association and the Director of the UPA Voting and Usability Project. She was recently appointed to a US government committee on guidelines for voting systems for the EAC (Elections Assistance Commission).

Before she was ‘seduced’ by a little beige computer into the world of usability, Whitney was a theatrical lighting designer on and off Broadway. The lessons and stories from the theatre stay with her in creating user experiences.