

PUTTING USABILITY TECHNIQUES TO USE

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Overview

A woman in a light-colored business suit is captured in a dynamic, high-kick pose. She is standing on a black office chair, with her right leg extended horizontally towards the right side of the frame. Her left leg is bent at the knee, and her right arm is raised. The background shows a typical office environment with a desk, a computer monitor, and a window. The overall scene is brightly lit, suggesting a professional yet energetic atmosphere.

Basics

Usability at Epic

Open discussion

Poll



- How familiar are you with usability concepts?

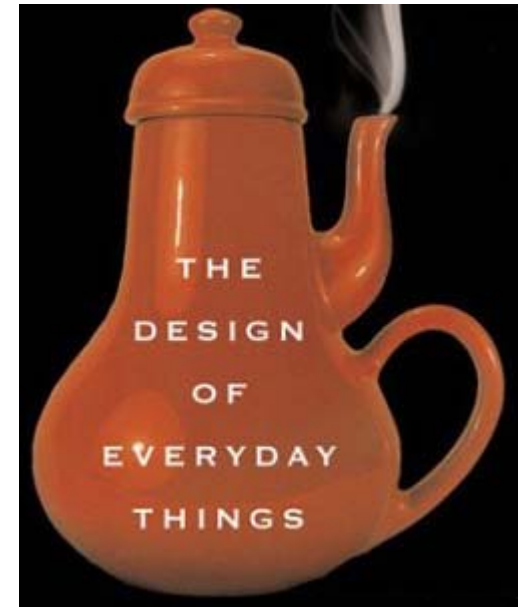
What is Usability?

Usability has several components:

- ▣ EFFECTIVENESS (accurate, complete)
- ▣ EFFICIENCY (time to complete task, memory load)
- ▣ SATISFACTION (acceptance by users)

Evaluate it from the end-user's point of view

Static usability vs. workflow usability



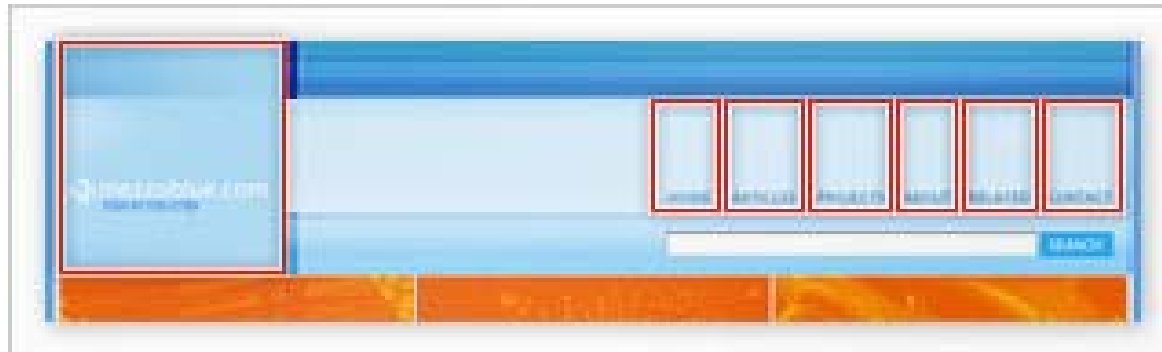
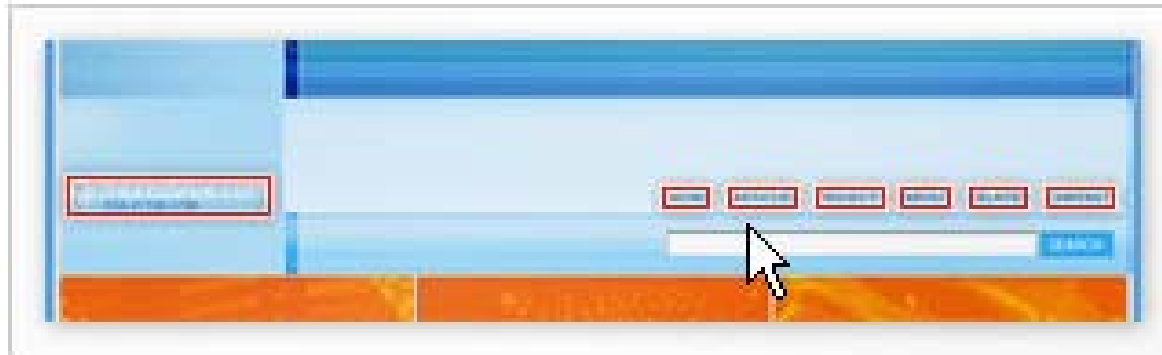
Usability Concepts*

- Consistency
- Labels
- Layout
- Visibility
- Efficiency
- Prevent Errors



* Known as usability heuristics in the industry

Efficiency – Fitt's Law



Visibility



User Testing

- User Testing = Usability Testing = User Acceptance Testing
- One on one session between facilitator and user to get feedback on the “feel” and use of the functionality.
- Not a show and tell, user is the driver.

Why perform user testing?

- Helps avoid the “expert blind spot.”
- New and different suggestions for usability
- Avoid fixes down the road
- Help others realize the user perspective

Informal vs. Formal User Testing

□ Informal

- Can be done with a co-worker in their office
- 1-2 small tasks
- No formal write ups or results process

□ Formal

- Done with 5-6 end-users in a lab (record the screen)
- Up to 10 or more tasks
- Formal results reports
- Multiple rounds

Other Usability Tools

- Personas
- Surveys
- Focus Groups

Anything Else?

- Any other methods your company uses or that you have heard of?

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Using the concepts

- Focuses on static usability
- Individually review UI
- Checklists

Heuristic Checklist

1. Visibility of System Status

The system should always keep users informed about what is going on, through appropriate feedback within a reasonable time.

#	Checklist	Yes	No	N/A	If No, Explain	Suggested Solution	QAN Written
1.1	If something takes longer than 1 second to load, does the cursor change to an hourglass?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.2	If something takes longer than 10 seconds to load, does it have a progress bar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.3	Do you know that the action you just took has completed successfully?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.4	Once you've completed an action, is it clear that you can start the next group of actions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.5	Is there an appropriate title for the activity or form?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.6	When first opening the form or activity is all the pertinent information there?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.7	Can you see the most relevant information without scrolling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.8	Are the most common actions you want to perform immediately apparent instead of being hidden under a nested menu?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.9	When changing forms or activities is it clear how to get back to the previous form or activity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

UI Element-Centered Checklist

Buttons, Links, Tabs *See UI Guide > Buttons and Links*

- Hotkeys** Do they exist? Do they make sense and are consistent? Do they work?
- ToolTips** Do they exist? Is the wording correct? Sentence case capitalization?
- Name** Title case capitalization? In end-user's language? Can it be shortened?
- Alignment** See surrounding fields and buttons. Consider those that can appear or disappear depending on security or other factors
- Visibility** Is it noticeable enough? Too noticeable?

Data Fields

- Labels** Sentence case capitalization? In the end-user's language? Can it be shortened? *See UI Guide > Style, Capitalization, etc*
- Alignment** See surrounding fields. Consider those that can appear or disappear depending on security or other factors
- Tab order** Left to right, top to bottom
- ID numbers** Should not display
- Visibility** Is it noticeable enough? Too noticeable?

Tables *See UI Guide > Tables*

- Uses subtle divider lines rather than alternate row coloring?
If the latter is necessary, are the colors very subtle?

Icons *See UI Guide > Icons (IDEA)*

- Developer should re-use current icons if available.
- Otherwise should have IDEA group design the icon to fit our standards

Concept-Centered Checklist

<i>Consistency</i>	Font size correct?
	Date and time formats consistent?
	Record IDs - only show if useful to end user
<i>Labels</i>	Correct capitalization?
	In the end-user's language?
	Can it be shortened?
<i>Layout</i>	Tooltips - do they exist? Is the wording correct? Sentence case capitalization?
	Spacing around each element - is it consistent on the form? Is it an appropriate amount?
	Alignment
	Appropriate field width
	Can I take anything off the form (extraneous help text, headers, border lines)?
<i>Keyboard Efficiency</i>	Initial focus on the form
	Tab order - left to right, top to bottom
	Shortcut keys - do they exist? Do they work? Are they consistent?
<i>Visibility</i>	Feedback - do I know a task is complete?
	Data loading - if something takes a long time to load is there an hourglass icon or progress bar?
	Navigation - is it clear how to get to this form?
	Items disabled appropriately?
	Tooltips - do they exist? Is the wording correct? Sentence case capitalization?
<i>Modal Windows - warning + error messages</i>	Appropriate icon?
	Appropriate wording of message?
	Correct buttons?
	Are the buttons centered on warning/error message boxes?
	Alt + A, Alt + C, Esc keys work?
<i>Workflow</i>	Tasks - are the most common tasks easy to do?
	Will user know what they need to do next?
	Is the control noticeable?
	Will user know how to use the control?
	Once action is complete, does user know progress is being made towards their goal?

User Testing at Epic

- Both informal and formal
- Done during design, QA, and release
- Mostly facilitated by QAers
- Mostly internal but some customer involvement
- Standard surveys
- Common results format

Questions	Strongly Disagree					Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I think that I would enjoy using this feature if I had to use it frequently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I found the feature unnecessarily complex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I thought the feature was easy to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I think that I would need the support of a technical person to be able to use this feature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

I found the various functions in this feature were well integrated.
I thought there was too much inconsistency in this feature.
I would imagine that most people would learn to use this feature very quickly.
I found the feature very cumbersome to use.
I felt very confident using the feature.
I need to learn a lot about this feature before I could effectively use it.

Error Rating Categories	
Critical	<p>The most critical level, where users were unable to complete their tasks.</p> <p>A common error of this type is where users cannot determine how to perform the steps necessary to complete the task.</p> <p>Products should not be released with critical usability problems.</p>
Moderate	<p>Users had significant problems.</p> <p>A common error of this type is where users incorrectly use a control in an interface or incorrectly interpret feedback from the system.</p> <p>These errors typically account for a high incidence of support requests.</p>
Minor	<p>These errors irritated the users and leave them frustrated and dissatisfied.</p> <p>A common error of this type is where users are able to complete the tasks without assistance, but describe the workflow as inefficient or unintuitive.</p> <p>It is recommended to fix these errors for a better User Experience.</p>
Good	<p>These things work well.</p>

Other Usability Methods at Epic

- Personas
 - ▣ Built into our testing system
 - ▣ Used during design sessions
- Usability focus group
 - ▣ Local customers
 - ▣ Discuss and show current development topics
- Webcasts
 - ▣ Sneak-peaks
 - ▣ Survey-type answers
- Feedback on released functionality

Resources for QA Staff

- UI Guide
 - ▣ Simple Six
- UI Help Desk
- Classes

Overview

A woman in a light-colored business suit is captured in a dynamic, high-kick pose. She is standing on a black office chair, with her right leg extended horizontally towards the right side of the frame. Her left leg is bent and tucked under her. She has a focused expression. The background is a bright office space with a desk, a computer monitor, and a window. The overall scene is a humorous take on professional behavior.

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Are these processes familiar?

- How does your company review design?
- What do you find most useful?
- Any differences?

What is the best way to manage standards?

- What happens when standards change?
- How to educate and re-educate?

Complex end-user workflows?

- How do you test for this?
- Best way to make sure what you build is what the end-user needs?
- Group review?

Involving realistic end-users

- Do you get customer input?
- How do you recruit them?
- Barriers to showing unfinished functionality?

Timing



- Choosing the best technique
- Choosing the most effective place in the timeline
- Resource constraints

Objective Methods

- Does anyone use automated methods?
- Click counting?
- Fitts Law?