Usability for Developers

Who am I?

- Elizabeth Tucker Long (aka Beth)
- Editor-in-Chief of php | architect magazine



Want to write? See me after.

PHP Essentials
 Instructor





Freelance consultant

Audience Participation?

 Yes, there will be. So, when I ask the audience a question, don't be shy about answering.

Usability

According to Wikipedia:
 Usability is the ease of use and learnability of a human-made object.

According to Beth:
 Usability means structuring things so you don't leave your users angry, frustrated, and complaining about you on Facebook or Twitter.

Importance of Usability

 What is the first thing people will do when a site is difficult to use?

Where to Start

- Who are your users?
- What do you want them to do on your site?
- What do they want to do on your site?
- How tech-savvy are your users?
- Where will your users go if your site isn't working for them?

How to Test

- Create Personas
- Create a script/list of the most common procedures or tasks on your site
- Identify success criteria
- Sit down with users individually and give them one task at a time

What to Test?

- Old design
- Competitor's websites
- Sites popular with your users
- Proposed site

Design in Stages

- Create your design
- Test it on users
- Improve your design
- Test it on users
- Improve your design
- Test it on users
- And so on...

Once You Have a Design

Jakob Nielsen's Five Quality Components of Usability:

- 1. Learnability: How easy is it for users to accomplish basic tasks the first time they encounter the design?
- 2. Efficiency: Once users have learned the design, how quickly can they perform tasks?
- 3. Memorability: When users return to the design after a period of not using it, how easily can they reestablish proficiency?
- **4. Errors**: How many errors do users make, how severe are these errors, and how easily can they recover from the errors?
- 5. Satisfaction: How pleasant is it to use the design?

Common Problems to Avoid

Know your user, and you are not that user.

Don't overwhelm the user.

Consistency, consistency, consistency.

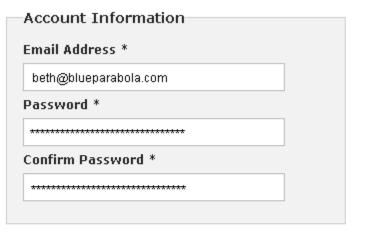
Minimize the need for a mighty memory.

Typing Practice

Account Inf	ormation		
Email Address	*		
Password *			
Confirm Passv	vord *		
		,	

First Name *	Last Name *
Address Line 1 *	Address Line 2
City *	State *
	Select a state
Zip *	Country *
	United States

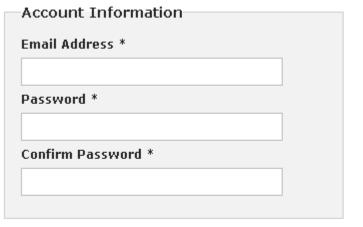
Typing Practice



First Name *	Last Name *	
Beth	Tucker Long	
Address Line 1 *	Address Line 2	
123 Street Boulevard		
City *	State *	
That Place	That State	v
Zip *	Country *	
12345	United States	~

Bam!

Your passwords do not match. Please try again.



Personal Information (see Privacy Poli	cy)
First Name *	Last Name *
Address Line 1 *	Address Line 2
City *	State *
	Select a state
Zip *	Country *
	United States
Special Shipping Instructions?	

The Sneak Attack

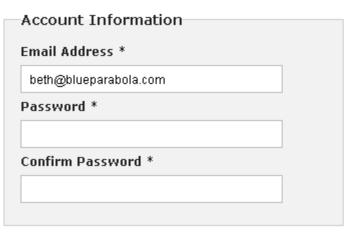


First Name *	Last Name *	
Beth	Tucker Long	
Address Line 1 *	Address Line 2	
123 Street Boulevard		
City *	State *	
That Place	Select a State	•
Zip *	Country *	
12345	United States	-

The Sneak Attack

Error messages should actually mean something to the user and tell the user how to fix the problem.

Please choose a State



First Name *	Last Name *	
Beth	Tucker Long	
Address Line 1 *	Address Line 2	
123 Street Boulevard		
City *	State *	
That Place	Select a State	▼
Zip *	Country *	
12345	United States	▼

Be Forgiving and Empowering

- Everyone makes mistakes, so every mistake should be fixable.
- The user should control the system. The system should not control the user. The user is the boss and the system should show it.
- User should be able to do what they want.
- Alert users to an error before things get worse.
- Strive to empower the user, not speed up the system.

Button Roulette



First Name *	Last Name *	
Beth	Tucker Long	
Address Line 1 *	Address Line 2	
123 Street Boulevard		
City *	State *	
That Place	That State	▼
Zip *	Country *	
12345	United States	▼

Sign Me Up

Clear Form

Button Roulette

Please choose a State



First Name *	Last Name *
Beth	Tucker Long
Address Line 1 *	Address Line 2
123 Street Boulevard	
City *	State *
That Place	Select a State
Zip *	Country *
12345	United States

Clear Form

Too Many Cooks

Users should always know how to find out what to do next.

Welcome, Friend

Create an Account

This site is an awesome place to do things and buy stuff and you should visit it every day. This site is an awesome place to do things and buy stuff and you should visit it every day. This site is an awesome place to do things and buy stuff and you should visit it every day.

We have an awesome catalog of **great products**

Sign Up Today

Have you checked out our **newsletter**?

Sign Up Today

Learn more about how awesome our **great products** are!

Check Them Out

Browse our awesome catalog of **great products**

Check Them Out

Cliff Notes

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Learn more about how awesome our **great products** are!

Check Them Out

Browse our awesome catalog of **great products**

Check Them Out

Cliff Notes

Welcome to our site! It looks like you don't have an account yet, be sure to sign up for an account to receive the maximum benefits from our site. Also, we have a great newsletter that you can sign up for as well. We have some great reviews of our products on this site, and you can click here to view the products we have available for purchase.

Unicorn Puke

Things that look the same should act the same. Things that look different should act differently.

Welcome to our site! It looks like you don't have an account yet, be sure to sign up for an account to receive the maximum benefits from our site. Also, we have a great newsletter that you can sign up for as well. We have some great reviews of our products on this site, and you can click here to view the products we have available for purchase.

Great Expectations

The user should always know what is happening.

Resources:

- A Day in the Life of an Astronaut
- Biography of Neil Armstrong
- Early photos of astronaut training
- Buzz Aldrin, in his own words

Lost in Translation

The information for the decision must be there when the decision is needed.

Pizza Size:

012"

018"

024"

Pizza Crust:

oJoe's Specialty

oThe Original

oThe New Original

Keep It Simple

 The more you do something, the easier it should be to do.

Don't waste clicks and keystrokes.



SEARCH

The Ohio Academy of Science

1500 W Third Ave Ste 228, Columbus OH 43212 (614) 488-2228 Fax (614) 488-7629 oas@iwaynet.net



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Registration deadline extended: Tuesday, September 25, 2012



Entrepreneurial Engagement Ohio

Entrepreneurial Engagement Ohio and The Ohio Academy of Science Invite You to Attend Their

Fall 2012 STEMM Invention, Commercialization & Entrepreneurship Forum

Let us not forget ...
Neil Armstrong 1930-2012



If at first you don't succeed... you may walk on the moon someday!

Read about Astronaut Armstrong's Experience in the late 1940s at a District Science Day at

Bowling Green State University.









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Roster of contacts

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Local Science Day Certificates

Templates for Judging Cards

Science Day Guide online

Science Fair 101

Science Fair 101

Have you visited the KnowledgeBank?

SCIENCE Archives
Knowledge
Bank 181021000

The Ohio Journal of Science

Environmental Science Scholarships

Important Dates

2013 Annual Meeting April 6, 2013 University of Findlay Call for Papers deadline Nov. 5, 2012

February 1, 2013

Ohio Patent Award

March 2013

<u>District Science Days</u> at 15 locations

May 11, 2013

<u>State Science Day</u> at

The Ohio State

University

October 1, 2012 and May 1, 2013 Postmarked <u>Deadline</u> for Environmental Science Scholarship Applications

June 20, 2012
Postmarked <u>deadline</u>
for Governor's Thomas
Edison Awards for
Excellence

What is the Academy?
The Ohio
Academy of
Science is a membership

based.

volunteerdriven, not-forprofit organization. The Academy is the leading organization in Ohio to foster curiosity, discovery, and innovation and to

unite all who value education, science, engineering,

http://www.ohiosci.org









Gmail

A Google approach to email.

Gmail is built on the idea that email can be more intuitive, efficient, and useful. And maybe even fun. After all, Gmail has:



Lots of space

Over 10293.662278 megabytes (and counting) of free storage.



Less spam

Keep unwanted messages out of your inbox.



Mobile access

Get Gmail on your mobile phone. Learn more

About Gmail

New features!

Switch to Gmail

Create an account



Take Gmail to work with Google Apps for Business

Love Gmail, but looking for a custom email address for your company?

Get business email, calendar, and online docs @your_company.com. Learn more



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English (United States)

Recap

- Typing Practice Don't delete good information
- Sneak Attack Be clear on what is missing
- **Button Roulette** Keep buttons consistent
- Too Many Cooks Make the path obvious
- Cliff Notes Make the content scannable
- Unicorn Puke Pick a color and stick with it
- **Great Expectations** Same cause, consistent effect
- Lost in Translation Use the user's language

Lund, A. M. (1997). Expert ratings of usability maxims. Ergonomics in Design, 5(3), 15-20. A study of the heuristics design experts consider important for good design.

When evaluating the design and usability of a website, consider the following:

- 1. Know the user, and You are not the user.
- 2. Things that look the same should act the same.
- 3. The information for the decision must be there when the decision is needed.
- 4. Error messages should actually mean something to the user and tell the user how to fix the problem.
- 5. Every action should have a reaction.
- 6. Everyone makes mistakes, so every mistake should be fixable.
- 7. Don't overwhelm the user.
- 8. Consistency, consistency, consistency.
- 9. Minimize the need for a mighty memory.
- 10. Keep it simple.
- 11. The user should always know what is happening.
- 12. The more you do something, the easier it should be to do.
- 13. The user should control the system. The system should not control the user. The user is the boss and the system should show it.
- 14. Eliminate unnecessary decisions and illuminate the rest.
- 15. The best journey has the fewest steps. Shorten the distance between the user and the goal.
- 16. User should be able to do what they want.
- 17. Alert users to an error before things get worse.
- 18. Users should always know how to find out what to do next.
- 19. Strive to empower the user, not speed up the system.
- 20. Things that look different should act different.
- 21. These are presented in a descending order determined by their mean rating of importance.

Sites to check out

- Usability First http://www.usabilityfirst.com/
- Usability Toolkit http://www.stcsig.org/usability/resources/too
 lkit/toolkit.html
- http://www.usability.gov/
- Jakob Nielsen http://www.useit.com/

Feedback

Joind.in:

https://joind.in/7092

E-mail:

Beth@BlueParabola.com

Find Me

Twitter: e3betht

 Madison PHP User Group (Meetup) <u>http://www.madisonphp.com</u>

 Slides Available on joind.in and: http://www.TreelineDesign.com/slides



Ask me about writing articles for php | architect magazine!

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