Design Principles of Wiki: How can so little do so much?

Ward Cunningham
c2.com/doc/wikisym
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Wiki Defined
Wiki
server software allowing users to modify web pages, Open Source Software.
World Wide Web (WWW) site that can be modified or contributed to by users. Wikis can be dated to 1995, when American computer programmer Ward Cunningham created a new collaborative technology for organizing information on Web sites. Using a Hawaiian term meaning “quick,” he called this new software WikiWikiWeb, attracted by its alliteration and also by its matching abbreviation...
The Chance RT-52 is a small bus measuring only 25' 11" long. It is primarily used as shuttle bus and normally carries 19 passengers.
Wiki vs. Blogs

A wiki is a work made by a community.
The blogosphere is a community made by its works.

(Wikizens can come and go without changing a wiki’s identity)
Welcome Visitors

These pages are part of the PortlandPatternRepository. They contain an incomplete and casually written history of programming ideas. It's a group project. It's an experiment. It's also fun. Please participate. Try it now!

You'll see three different kinds of links here...

* PortlandPatternRepository is a page in this section.
* PrincetonPatternReflectory is a page waiting to be written.

The last one leads to an input form that asks you to describe Princeton's Reflectory (don't, or you'll wreck this example.) You get the same form for an existing page when you follow EditText near its bottom. You can read MoreAboutMechanics if you have questions.

These pages are about PeopleProjectsAndPatterns. Please read this before you go on. Then have a look at various StartingPoints. Before you leave, try your hand at editing by adding your name to our list of RecentVisitors. For those of you infatuated with novelties, try RecentChanges.

Please do not edit this page.

EditText of this page (last edited November 8, 1996)
FindPage by browsing or searching
Count is 32027 pages in 222 megabytes.
Average page size 6947 bytes.
Average growth rate 11 pages per day.
Growth rate last week 5 pages per day.
Recorded period 2442 days (348 weeks).
Last data recorded 3 days ago.
Agile development corrects dysfunctional behavior resulting from decades of misunderstood risk.
<table>
<thead>
<tr>
<th>Correction</th>
<th>Agile</th>
<th>Wiki</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk</td>
<td>Knowledge</td>
<td>Property</td>
<td></td>
</tr>
<tr>
<td>Plan</td>
<td>Privilege</td>
<td>License</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Attention</td>
<td>Merit</td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td>Reader</td>
<td>Developer</td>
<td></td>
</tr>
</tbody>
</table>
So Much for So Little
<table>
<thead>
<tr>
<th>Wiki</th>
<th>Lines</th>
<th>Characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>SigWik</td>
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</tr>
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<td>FleaWi</td>
<td>4</td>
<td>228</td>
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<tr>
<td>NanoWiki</td>
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<tr>
<td>PeeWee</td>
<td>7</td>
<td>444</td>
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<tr>
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<td>515</td>
</tr>
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<td>814</td>
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<tr>
<td>MuWiki</td>
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<td>WjKj</td>
<td>16</td>
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</tr>
<tr>
<td>WyRiki</td>
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<td>1,361</td>
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<tr>
<td>TinyWiki</td>
<td>28</td>
<td></td>
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<td>Qiki</td>
<td>32</td>
<td></td>
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<tr>
<td>FinikiWiki</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>RikiWiki</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>
#!/usr/bin/perl
use CGI':all';

path_info=~\w+; /; $
$_=`grep -l $& *`.h1($&).escapeHTML$t=param(t)||`dd<$&`;
open F,">$&";
print F$t;
print header,pre"$_<form>",submit,textarea t,$t,9,70

-- Casey West

see this run
Wiki Design Principles

Open, Incremental, Organic, Mundane, Universal, Overt, Unified, Precise, Tolerant, Observable, Convergent.
Open Principle

Should a page be found to be incomplete or poorly organized, any reader can edit it as they see fit.

(also permeable)
Incremental Principle

It must be both possible and useful to cite unwritten pages.

(incomplete)
BezelMenu

The BezelMenu provides an extra level of event dispatching (beyond that of the FrontPanel-Dispatcher) for the bezel buttons.

The BezelMenu displays labels for active buttons and will provide scrolling when the number of active buttons exceeds that actually present in the bezel.
Figure

All figures have dependents which they notify.

Drawing
Locator
Group Figure

Line Figure

Connects two endpoints, which may be locators.

Track Handle
Display/mon
Locator

Group Figure

Holds more figures. (not in Drawing)
Forwards transformations
Cache image, void on update of master.

Figures
Organic Principle

The structure of the site is expected to grow and evolve with the community that uses it.

(co-evolution)
Mundane Principle

A small number of conventions provide all necessary formatting.

(undistracted)
text

encode

"""text""]

transform

\text{b}b\text{e}\text{t}\text{a}\text{x}\text{e}\text{t}\text{b}\text{e}

render

\text{t}\text{e}\text{x}\text{t}

text
text

encode

""text"

transform

<\text{text}>}

render

misunderstanding

feature interaction

browser incompatibility

text
feedback makes whole process robust

encode

''text''

misunderstanding

transform

feature interaction

<b>text</b>

browser incompatibility

render

text
Universal Principle

The mechanisms of editing and organizing are the same as those of writing so that any writer is automatically and editor and organizer.
Overt Principle

The formatted and printed output will suggest the input required to reproduce it.

(concrete)
Unified Principle

Page names will be drawn from a flat space so that no additional context is required to interpret them.

(vocabulary)
Precise Principle

Pages will be titled with sufficient precision to avoid most name clashes, typically by forming noun phrases.

(happy accidents)
Good Style

All pages on the Heretic's Forum are editable, and we encourage you to edit them (even if you intend to sabotage them, like Jerry Weinberg.) Try to write casually but factually, and in the third person where possible. Expect others to elaborate or complete your work.

These pages need not be chronological. If something isn't complete or quite right, correct it in place. If you want to register an opposing viewpoint, try parenthetically citing a new page who's name plays off of the original title.

As an author, you can type pretty much what you want to see. But we have some formatting rules (try editing this page to see these rules in action... a screen display might be worth a thousand words. ChiefHeretic):

- Use a blank line to separate paragraphs. Normally, lines are run together to fill the page.
- Don't indent unless you want to use one of the special formatting rules below.
- Use a line of 4 or more dashes to separate sections. This displays a horizontal rule.
- Highlight text by enclosing it in multiple single-quotes. Italicize by using two/double single-quotes. Bold face by using three/triple single-quotes. Use no more than one per line. Highlight sparingly, only...
Maker Project

Workshop Outline

1. Building a one-computer circuit that flashes code on an LED
2. Adding a second computer that plays sound instead
3. Adding a third computer that will adjust speed, tempo or both
4. Adding a fourth computer that will display parameters on TV

Supplies

You will need to bring: a Bolderless Breadboard (like RadioShack 276-175), a battery holder (like RadioShack 270-398), two or more appropriate, #22 hook-up wire preferably red and wire-strippers.

Radio Shack

This page exists only on another site. Click its icon to go there.

Radio Shack

The small cabin near the bridge where the ship's telegraph operator kept his equipment and sent his messages became known as the radio shack. The notion that one could talk to ships at sea captured the imagination of amateur experimenters who fueled a cottage industry. Your local RadioShack may have one small corner devoted to tools and parts. Think of it as a small shrine to the founders of our industry. Stop by, buy some parts, and build something.

At one time, it had some use as an electronics hobby-shop; back when someone handy with a soldering iron could build gear as good as what was available commercially. Nowadays, surface mount technology and high levels of integration have done tremendous damage to electronics as a hobby; no matter how handy you are with a soldering iron; you're not gonna successfully solder that ball grid array.

Nowadays, it's still useful as a place to get accessories, some types of gear (police scanners, amateur radio), and such. If you want to buy an USB soundcard, you're still gonna have to go there.
Tolerant Principle

*All input will produce output even when the output is not likely to be that desired.*
Observable Principle

Activity within the site can be watched and reviewed by any other visitor.
EDWIN SCHLOSSBERG
INTERACTIVE EXCELLENCE

Defining and Developing New Standards for the Twenty-first Century

Wabi-Sabi

for Artists, Designers, Poets & Philosophers
Steve and Mike explained how the video refresh circuits synchronized with the waveform display. Our design to date is not affected.

However, that did get us on the topic of infrastructure for managing the user menu.
Convergent Principle

Ambiguity and duplication can be removed by finding and citing similar or related content.
Web Tools Platform

**J2EE Standard Tools (JST)**
- EJB3
- EJB
- JSF
- J2EE Projects
- J2EE Web Service Development
- J2EE Models and Frameworks
- JST Server

**Java Developer Tools**
- EMF JEM

**Web Standard Tools (WST)**
- ATF
  - Server Frameworks and Monitors
- Web Project, HTML, CSS, Javascript
- XML, Schema, DTD, SSE
- Web Service Development
- Common Frameworks (e.g. Facets)
- Relational Databases (Future: move to DTP)
- Database Adapters

**DTP (future)**
- Graphical Editor Framework (GEF)
- Eclipse Modeling Framework (EMF)
- Eclipse Platform (Project Model)
- Eclipse OSGi Runtime

See this [document](#) for public interface. Use [edit](#) to change this and nearby elements.
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Open, Incremental, Organic, Mundane, Universal, Overt, Unified, Precise, Tolerant, Observable, Convergent.
Wiki Nature

wiki as a meme vector
How can so little do so much?

Sweet spot of new technology
Assemble, guide and transform community
Leave room for other’s innovation