

## WIKI

### WIKI

"Wiki wiki" redirects here. For other uses, see Wiki (disambiguation).

"WikiNode" redirects here. For the WikiNode of Wikipedia, see Wikipedia:WikiNode.

A wiki is a collection of web pages designed to enable anyone who accesses it to contribute or modify content, using a simplified markup language. Wikis are often used to create collaborative websites and to power community websites. For example, the collaborative encyclopedia Wikipedia is one of the best-known wikis. Wikis are used in businesses to provide affordable and effective intranets and for Knowledge Management. Ward Cunningham, developer of the first wiki software, WikiWikiWeb, originally described it as "the simplest online database that could possibly work".

"Wiki Wiki" (/wikiki wikiki/) is a reduplication of "wiki", a Hawaiian word for "fast". It has been suggested that "wiki" means "What I Know Is". However, this is a acronym.

### History

Wiki Wiki bus at Honolulu International Airport  
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WikiWikiWeb was the first site to be called a wiki. Ward Cunningham started developing WikiWikiWeb in 1994, and installed it on the Internet domain c2.com on March 25, 1995. It was named by Cunningham, who remembered a Honolulu International Airport counter employee telling him to take the "Wiki Wiki" shuttle bus that runs between the airport's terminals. According to Cunningham, "I chose wiki-wiki as an alliterative substitute for 'quick' and thereby avoided naming this stuff quick-web."

Cunningham was in part inspired by Apple's HyperCard. Apple had designed a system allowing users to create virtual "card stacks" supporting links among the various cards. Cunningham developed Vannevar Bush's ideas by allowing users to "comment on and change one another's text". In the early 2000s, wikis were increasingly adopted in enterprise as collaborative software. Common uses included project communication, intranets, and documentation, initially for technical users. Today some companies use wikis as their only collaborative software and as a replacement for static intranets. There may be greater use of wikis behind firewalls than on the public Internet.

On March 15, 2007, wiki entered the Oxford English Dictionary Online.

### Characteristics

Ward Cunningham, and co-author Bo Leuf, in their book *The Wiki Way: Quick Collaboration on the Web* described the essence of the Wiki concept as follows:

- a) A wiki invites all users to edit any page or to create new pages within the wiki Web site, using only a plain-vanilla Web browser without any extra add-ons.
- b) Wiki promotes meaningful topic associations between different pages by making page link creation almost intuitively easy and showing whether an intended target page exists or not.
- c) A wiki is not a carefully-crafted site for casual visitors. Instead, it seeks to involve the visitor in an ongoing process of creation and collaboration that constantly changes the Web site landscape.

A wiki enables documents to be written collaboratively, in a simple markup language using a Web browser. A single page in a wiki website is referred to as a "wiki page", while the entire collection of pages, which are usually well interconnected by hyperlinks, is "the wiki". A wiki is essentially a database for creating, browsing, and searching through information.

A defining characteristic of wiki technology is the ease with which pages can be created and updated. Generally, there is no review before modifications are accepted. Many wikis are open to alteration by the general public without requiring them to register user accounts. Sometimes logging in for a session is recommended, to create a "wiki-signature" cookie for signing edits automatically. Many edits, however, can be made in real-time and appear almost instantly online. This can facilitate abuse of the system. Private wiki servers require user authentication to edit pages, and sometimes even to read them.

### Editing wiki pages

Ordinarily, the structure and formatting of wiki pages are specified with a simplified markup language, sometimes known as "wikitext". For example, starting a line of text with an asterisk ("\*") is often used to enter it in a bulleted list. The style and syntax of wikitexts can vary greatly among wiki implementations, some of which also allow HTML tags.

The reason for taking this approach is that HTML, with its many cryptic tags, is not very legible, making it hard to edit. Wikis therefore favour plain text editing, with fewer and simpler conventions than HTML, for indicating style and structure.

MediaWiki syntax	Equivalent HTML	Rendered output
"Take some more tea," the March Hare said to Alice, very earnestly.		

"I've had nothing yet," Alice replied in an offended tone: "so I can't take more."

"You mean you can't take "less"," said the Hatter: "it's very easy to take "more" than nothing." <p>"Take some more tea," the March Hare said to Alice, very earnestly.</p>

<p>"I've had nothing yet," Alice replied in an offended tone: "so I can't take more."</p>

<p>"You mean you can't take <i>less</i>," said the Hatter: "it's very easy to take <i>more</i> than nothing."</p>  
"Take some more tea," the March Hare said to Alice, very earnestly.

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(Quotation above from Alice's Adventures in Wonderland by Lewis Carroll)

Although limiting access to HTML and Cascading Style Sheets (CSS) of wikis limits user ability to alter the structure and formatting of wiki content, there are some benefits. Limited access to CSS promotes consistency in the look and feel and having JavaScript disabled prevents a user from implementing code, which may limit access for other users.

Increasingly, wikis are making "WYSIWYG" ("What You See Is What You Get") editing available to users, usually by means of JavaScript or an ActiveX control that translates graphically-entered formatting instructions, such as "bold" and "italics", into the corresponding HTML tags or wikitext. In those implementations, the markup of a newly edited, marked-up version of the page is generated and submitted to the server transparently, and the user is shielded from this technical detail. However, WYSIWYG controls do not always provide all of the features available in wikitext.

Many implementations (for example MediaWiki) allow users to supply an "edit summary" when they edit a page. This is a short piece of text (usually one line) summarizing the changes. It is not inserted into the article, but is stored along with that revision of the page, allowing users to explain what has been done and why; this is similar to a log message when committing changes to a revision control system.

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Most wikis keep a record of changes made to wiki pages; often every version of the page is stored. This means that authors can revert to an older version of the page, should it be necessary because a mistake has been made or the page has been vandalized.

### Navigation

Within the text of most pages there are usually a large number of hypertext links to other pages. This form of non-linear navigation is more "native" to wiki than structured/formalized navigation schemes. That said, users can also create any number of index or table of contents pages, with hierarchical categorization or whatever form of organization they like. These may be challenging to maintain by hand, as multiple authors create and delete pages in an ad hoc manner. Wikis generally provide one or more ways to categorize or tag pages, to support the maintenance of such index pages.

Most wikis have a back link feature, an easy way to see what pages link to the page you're currently on.

It is typical in a wiki to create links to pages that do not yet exist, as a way to invite others to share what they know about a subject new to the wiki.

### Linking and creating pages

Links are created using a specific syntax, the so-called "link pattern" (also see CURIE).

Originally, most wikis used CamelCase to name pages and create links. These are produced by capitalizing words in a phrase and removing the spaces between them (the word "CamelCase" is itself an example). While CamelCase makes linking very easy, it also leads to links which are written in a form that deviates from the standard spelling. CamelCase-based wikis are instantly recognizable because they have many links with names such as "TableOfContents" and "BeginnerQuestions". It is possible for a wiki to render the visible anchor for such links "pretty" by reinserting spaces, and possibly also reverting to lower case. However, this reprocessing of the link to improve the readability of the anchor is limited by the loss of capitalization information caused by CamelCase reversal. For example, "RichardWagner" should be rendered as "Richard Wagner", whereas "PopularMusic" should be rendered as "popular music". There is no easy way to determine which capital letters should remain capitalized. As a result, many wikis now have "free linking" using brackets, and some disable CamelCase by default.

### Searching

Most wikis offer at least a title search, and sometimes a full-text search. The scalability of the search depends on whether the wiki engine uses a database. Indexed database access is necessary for high speed searches on large wikis. Alternatively, external search engines such as Google can sometimes be used on wikis with limited searching functions in order to obtain more precise results. However, a search engine's indexes can be very out of date (days, weeks or months) for many websites.

### Software architecture

Wiki software is a type of collaborative software that runs a wiki system, allowing web pages to be created and edited using a common web browser. It is usually implemented as a software engine that runs on one or more web servers. The content is stored in a file system, and changes to the content are stored in a relational database management system. Alternatively, Personal wikis run as a standalone application on a single computer. Examples: WikidPad and VoodooPad.

### Trust and security

Controlling changes

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Wikis are generally designed with the philosophy of making it easy to correct mistakes, rather than making it difficult to make them. Thus, while wikis are very open, they provide a means to verify the validity of recent additions to the body of pages. The most prominent, on almost every wiki, is the "Recent Changes" page—a specific list numbering recent edits, or a list of edits made within a given time frame. Some wikis can filter the list to remove minor edits and edits made by automatic importing scripts ("bots").

From the change log, other functions are accessible in most wikis: the Revision History showing previous page versions; and the diff feature, highlighting the changes between two revisions. Using the Revision History, an editor can view and restore a previous version of the article. The diff feature can be used to decide whether or not this is necessary. A regular wiki user can view the diff of an edit listed on the "Recent Changes" page and, if it is an unacceptable edit, consult the history, restoring a previous revision; this process is more or less streamlined, depending on the wiki software used.

In case unacceptable edits are missed on the "Recent Changes" page, some wiki engines provide additional content control. It can be monitored to ensure that a page, or a set of pages, keeps its quality. A person willing to maintain pages will be warned of modifications to the pages, allowing him or her to verify the validity of new editions quickly.

### Trustworthiness

Critics of publicly-editable wiki systems argue that these systems could be easily tampered with, while proponents argue that the community of users can catch malicious content and correct it. Lars Aronsson, a data systems specialist, summarizes the controversy as follows:

"Most people, when they first learn about the wiki concept, assume that a Web site that can be edited by anybody would soon be rendered useless by destructive input. It sounds like offering free spray cans next to a grey concrete wall. The only likely outcome would be ugly graffiti and simple tagging, and many artistic efforts would not be long lived. Still, it seems to work very well. "

### Security

The open philosophy of most wikis, allowing anyone to edit content, does not ensure that every editor is well-meaning. Vandalism can be a major problem. In larger wiki sites, such as those run by the Wikimedia Foundation, vandalism can go unnoticed for a period of time. Wikis by their very nature are susceptible to intentional disruption, known as "trolling". Wikis tend to take a soft security approach to the problem of vandalism; making damage easy to undo rather than attempting to prevent damage. Larger wikis often employ sophisticated methods, such as bots that automatically identify and revert vandalism and JavaScript enhancements that show characters that have been added in each edit. In this way vandalism can be limited to just "minor vandalism" or "sneaky vandalism", where the characters added/eliminated are so few that bots do not identify them and users do not pay much attention to them.

The amount of vandalism a wiki receives depends on how open the wiki is. For instance, some wikis allow unregistered users, identified by their IP addresses, to edit content, whilst others limit this function to just registered users. Most wikis allow anonymous editing without an account, but give registered users additional editing functions; on most wikis, becoming a registered user is a short and simple process. Some wikis require an additional waiting period before gaining access to certain tools. For example, on the English Wikipedia, registered users can only rename pages if their account is at least four days old. Other wikis such as the Portuguese Wikipedia use an editing requirement instead of a time requirement, granting extra tools after the user has made a certain number of edits to prove their trustworthiness and usefulness as an editor. Basically, "closed up" wikis are more secure and reliable but grow slowly, whilst more open wikis grow at a steady rate but result in being an easy target for vandalism. A clear example of this would be that of Wikipedia and Citizendium. The first is extremely open, allowing anyone with a computer and internet access to edit it, making it grow rapidly, whilst the latter requires the users' real name and a biography of themselves, affecting the growth of the wiki but creating an almost "vandalism-free" ambiance.

### Communities

#### User communities

Many wiki communities are private, particularly within enterprises. They are often used as internal documentation for in-house systems and applications. The "open to everyone", all-encompassing nature of Wikipedia is a significant factor in its growth, while there are other wikis which are highly specialized.

There also exist WikiNodes which are pages on wikis that describe related wikis. They are usually organized as neighbors and delegates. A neighbor wiki is simply a wiki that may discuss similar content or may otherwise be of interest. A delegate wiki is a wiki that agrees to have certain content delegated to that wiki.

One way of finding a wiki on a specific subject is to follow the wiki-node network from wiki to wiki; another is to take a Wiki "bus tour", for example: Wikipedia's Tour Bus Stop. Domain names containing "wiki" are growing in popularity to support specific niches.

For those interested in creating their own wiki, there are publicly-available "wiki farms", some of which can also make private, password-protected wikis. PeanutButterWiki, Socialtext, Wetpaint, and Wikia are popular examples of such services. For more information, see List of wiki farms. Note that free wiki farms generally contain advertising on every page.

The English-language Wikipedia has the largest user base among wikis on the World Wide Web and ranks in the top 10 among all Web sites in terms of traffic. Other large wikis include the WikiWikiWeb, Memory Alpha, Wikitravel, World66 and Susning.nu, a Swedish-language knowledge base.