

Hacking MediaWiki (For Users)

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Linux Users of Victoria
November 2008 meeting



<http://www.mediawiki.org/>



Who are we?

- Me: 2005—now Wikimedia editor, Wikimedia Commons administrator
~ 2 years, frustrated wannabe hacker
- You: Use MediaWiki outside of Wikimedia, comfortable with basic editing



Outline

- MediaWiki/Wikimedia
- Wiki structure
- Magic words, access levels
- User JS/CSS – Gadgets
- “Uselang” hack



MediaWiki

Open-source (GPL) wiki engine
software (uses LAMP)

Wikimedia



Name of a social movement;
also US charity
(Wikimedia
Foundation)



Wiki structure

- Subpages



Subpages

By default only in
talk, user pages

Talk:This/is/a/test







[< Talk:This](#) | [is](#) | [a](#)

But this is a subpage - look at the breadcrumb links.

page - look at the breadcrumb links.

[link](#)

Talk:This/is

B / **Ab**  **A**   \sqrt{n}   

But this is a subpage - look at the breadcrumb links.

[[.../.../|link]]

Help:Subpages



Wiki structure

- Subpages
- Links



Links

[Special:MostLinked](#)

[Special:WhatLinksHere](#)

[Special:RecentChangesLinked](#)

[Special:WantedPages](#)

<input type="button" value="Go"/>	<input type="button" value="Search"/>
toolbox	
<ul style="list-style-type: none">What links hereRelated changesSpecial pages	

[Help:Links](#)



Wiki structure

- Subpages
- Links
- Categories

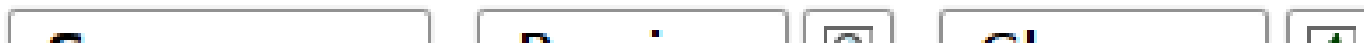


Categories

Nine special pages for categories

```
[[Category:Linux User Groups]]  
[[Category:Non-profit organisations based in Australia]]
```

[Edit summary](#) (Briefly describe the changes you have made):



Categories: [Linux User Groups](#) | [Non-profit organisations based in Australia](#)

Help:Categories



Category:Linux organizations

From Wikipedia, the free encyclopedia

Category for various [organizations](#) related to Linux.

Subcategories

This category has only the following subcategory.

N

- [\[+\] NSLU2-Linux](#) (0)

Pages in category "Linux organizations"

The following 14 pages are in this category, out of 14 total. This list may so

C

- [CE Linux Forum](#)

E

- [EuroLinux](#)

[Categories:](#) [Linux](#)

Wiki structure

- Subpages
- Links
- Categories
- Templates



Templates

Page transclusion: `{{foo}}`

`<noinclude>`,

`<includeonly>`,

`{{subst:foo}}`

Parameters

Hawthorn

[Melbourne, Victoria](#)



Hawthorn's Glenferrie Road shopping strip, facing north towards Kew.

Population:	19,784 (2006) ^[1]
Postcode:	3122
Area:	5.7 km ² (2.2sq mi)
Property Value:	AUD \$788,000 ^[2]
Location:	8 km (5 mi) from Melbourne
LGA:	City of Boroondara
State District:	Hawthorn
Federal Division:	Kooyong

Suburbs around Hawthorn:

Abbotsford	Kew East	Kew
Richmond	Hawthorn	Hawthorn East

[v](#) · [d](#) · [e](#)

Suburbs of the [City of Boroondara](#) | [Melbourne](#) | [Victoria](#)

[\[hide\]](#)

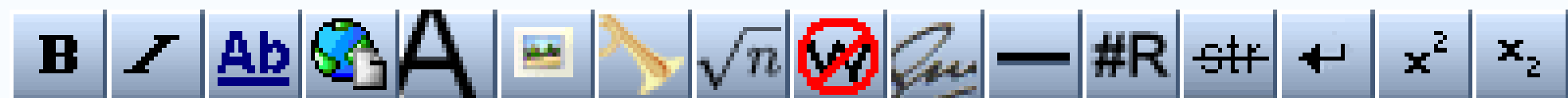
[Ashburton](#) · [Balwyn](#) · [Balwyn North](#) · [Camberwell](#) · [Canterbury](#) · [Glen Iris](#) · **Hawthorn** · [Hawthorn East](#) · [Kew](#) · [Kew East](#) · [Mont Albert](#) · [Surrey Hills](#)



Help:Templates

Editing Template:Linux

From Wikipedia, the free encyclopedia



```
{{Navbox
|name = Linux
|title = The [[Linux]] operating system
|image = [[Image:NewTux.svg|64px|Tux, the Linu
break=yes}}
|liststyle = padding:0.25em 0; line-height:1.4
to form continuous group-->

|group1 = General
```

Editing Template:Linux

From Wikipedia, the free encyclopedia

B

Pages [transcluded](#) onto the current version of this page:

- [Template:Documentation](#) ([view source](#)) (protected)
- [Template:Documentation subpage](#) ([view source](#)) (protected)
- [Template:Documentation/docname](#) ([view source](#)) (protected)
- [Template:Linux/doc](#) ([edit](#))
- [Template:Navbar](#) ([view source](#)) (protected)
- [Template:Nowrap begin](#) ([view source](#)) (protected)
- [Template:Nowrap end](#) ([view source](#)) (protected)
- [Template:Portal](#) ([view source](#)) (protected)
- [Template:Tnavbar](#) ([view source](#)) (protected)
- [Template:·w](#) ([view source](#)) (protected)
- [Template:·wrap](#) ([view source](#)) (protected)

Special:ExpandTemplates

Expand templates

Context title, for `{{PAGENAME}}` etc.:

Input text:

```
{{Linux}}
```


Special:ExpandTemplates

Expand templates

Context title, for {{PAGENAME}} etc.:

Input text:

```
{{Linux}}
```

Result

```
<table class="navbox" cellpadding="0" style=";"><tr>
<table cellpadding="0" class="nowraplinks collapsib
style="width:100%;background:transparent;color:inhe
colspan=3 class="navbox-title"><div style="float:le
align:left;"><div class="noprint plainlinksneverexp
color:transparent; padding:0; white-space:nowrap; f
font-size:xx-small; ;;border:none;; " >[[Template:L
template" style=";;border:none;;">v</span>]]&nbsp;<
size:80%;">•</span>&nbsp;<span>[[Template talk:Linux|<spa
border:none;;" title="Discussion about this templat
style="font-size:80%;">•</span>&nbsp;<span>[http://en.wik
```

Wiki structure

- Subpages
- Links
- Categories
- Templates
- Namespaces



Namespaces

“Front” page + talk page

- Main, Project, Help
- Template
- Category
- Special*
- Image, Media*
- MediaWiki

(* = *pseudo namespace*)

[Help:Namespaces](https://help.wikimedia.org/wiki/Namespaces)



Special pages

Special:RecentChanges

Special:SpecialPages

```
{{Special:Recentchanges/5}}
```

```
{{Special:Newpages/5}}
```

```
{{Special:Newimages/4}}
```

```
{{Special:PrefixIndex/User:Pfctdayelise/}}
```

Help:Special pages



Images (uploaded files)

Special:Upload

Image namespace -> File (soon!)

`[[Image:foo.jpg]]` to embed

`[[:Image:foo.jpg]]` to link to image page,
not embed

`[[Media:foo.jpg]]` to link to file directly



MediaWiki namespace

“System (interface) messages”

Edit MediaWiki: pages to override defaults (sysops only)

Search on **Special:Allmessages** to find the right message/page

Manual:System message





WIKIMEDIA COMMONS

navigation

- Main Page
- Welcome
- Community portal
- Village pump

participate

- **Upload file**
- Recent changes
- Latest files
- Random file
- Help
- Contact us
- Donate

search

toolbox

- Special pages

special

Upload file MediaWiki:Upload

MediaWiki:Uploadtext [[wt]]

Use the form below to upload files. To view or search previously uploaded files go to the [list of uploaded files](#), uploads and deletions are also logged in the [upload log](#).
 To include a file in a page, use a link in the form `[[Image:File.jpg]]`, `[[Image:File.png|alt text]]` or `[[Media:File.ogg]]` for directly linking to the file.

Upload file

Source filename: PT

Permitted file types: png, gif, jpg, jpeg, xcf, pdf, mid, ogg, svg, djvu. MediaWiki:Upload-permitted [[wt]]

Destination filename:

Summary: [[wt]]

Licensing:

MediaWiki:License

Watch this page Ignore any warnings

MediaWiki:Watchthisupload MediaWiki:Ignorewarnings

MediaWiki:Licenses
(drop-down list items)

MediaWiki:Uploadbtn PT

MediaWiki:Edittools

Interesting pages

MediaWiki:sidebar

MediaWiki:welcomecreation

MediaWiki:copyrightwarning, 2

MediaWiki:searchresulttext

MediaWiki:uploadtext



About the sidebar...

search

navigation

- [Main Page](#)
- [Recent changes](#)
- [all wiki pages](#)
- [upload a file](#)

toolbox

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)

MediaWiki:Sidebar

- SEARCH
- navigation
 - [mainpage|mainpage-description](#)
 - [recentchanges-url|recentchanges](#)
 - [special:allpages|all wiki pages](#)
 - [special:upload|upload a file](#)
- TOOLBOX
- LANGUAGES



Manual:Interface/Sidebar

About the sidebar...

MediaWiki sidebar

Move search box
to top for
usability

- SEARCH
 - navigation
 - mainpage|mainpage-description
 - recentchanges-url|recentchanges
 - special:allpages|all wiki pages
 - special:upload|upload a file
 - TOOLBOX
 - LANGUAGES
-



About the sidebar...

MediaWiki

Move search box
to top for
usability

▪ SEARCH

▪ navigation

▪ mainpage|mainpage-description

▪ recentchanges-url|recentchanges

▪ special:allpages|all wiki pages

▪ special:upload|upload a file

▪ TOOLBOX

▪ LANGUAGES

MediaWiki:Mainpage

Main Page



About the sidebar...

MediaWiki sidebar

▪ SEARCH

▪ navigation

▪ mainpage|mainpage-description

▪ recentchanges-url|recentchanges

▪ special:allpages|all wiki pages

▪ special:upload|upload a file

▪ TOOLBOX

▪ LANGUAGES

Move search box
to top for
usability

MediaWiki:Mainpage

Main Page

Delete defaults,
Add your
own links



Look & feel

MediaWiki:Common.css

MediaWiki:Common.js

Monobook skin: (same for others)

MediaWiki:Monobook.css

MediaWiki:Monobook.js



Skins – roll your own

Modify an existing one:

User:Foo/monobook.css,js

Your user page	Name of skin. Must start with lowercase
----------------	---

User profile	Skin	Files	Date ar
Recent changes	Watchlist	Search	

- Chick (Preview)
- Classic (Preview)
- Cologne Blue (Preview)
- Modern (Preview)
- MonoBook (default) (Preview)
- MySkin (Preview)
- Nostalgia (Preview)
- Simple (Preview)

Myskin – empty to start with



Magic words

“Behaviour switches”:

`__NOTOC__`, `__TOC__`

`#REDIRECT [[Foo]]`

`__HIDDENCAT__` (on category pages)

[Help:Magic words](https://www.mediawiki.org/wiki/Help:Magic_words)



___HIDDENCAT___

Recent changes | Watchlist | Search | **Misc** | Gadgets

Threshold for [stub link](#) formatting (bytes):

Underline links:

- Format broken links [like this](#) (alternative: [like this?](#)).
- Justify paragraphs
- Auto-number headings
- Show table of contents (for pages with more than 3 headings)
- Disable page caching
- Enable "jump to" accessibility links
- Do not show page content below diffs
- Show hidden categories

Categories: [Finnish language](#)

Hidden categories: [Articles lacking sources from October 2007](#) | [All articles lacking sources](#) | [needing cleanup](#) | [Wikipedia articles needing factual verification since October 2007](#) | [factual verification](#)

Help:Magic words



Variables

Look like `{{CAPS TEMPLATES}}`

Especially used in templates - context.

- Time, revision related
- Stats!

`{{NUMBEROFARTICLES}}`

`{{NUMBEROFEDITS}}`

`{{NUMBEROFUSERS}}`

`{{PAGESINCATEGORY:Foo}}`

Help:Magic words



User access levels

[Special:ListGroupRights](#)

- “Anonymous” /IP editor
- (registered) User
- -> Autoconfirmed!
- Sysop (==“admin”)
- Bureaucrat
- Bot

[Manual:User rights](#)



Autoconfirmed?

Time - `$wgAutoConfirmAge`

Edit count - `$wgAutoConfirmCount`

After passing both, User automatically graduates to Autoconfirmed

(On Wikipedia thought to be ~ 4 days)



Semi/protection

Confirm protection

Edit

Move

(default)

Block unregistered users

Sysops only

(default)

Block unregistered users

Sysops only

Unlock move permissions

Protect pages included in this page (cascading protection)

Expires:

Comment:

Watch this page



Manual:Administrators

Semi/protection

Confirm protection

Edit	Move
(default)	(default)
Block unregistered users	Block unregistered users
Sysops only	Sysops only

Unlock move permissions

Protect pages included in this page (case sensitive)

Expires:

Comment:

Watch this page

AND
non-
autoconfirmed
users!

Manual:Administrators



JS/CSS Gadgets

Massively simplify user JS/CSS sharing:
no more copying user subpages

MediaWiki:Gadgets-definition
-> New Preferences tab

Extension:Gadgets



MediaWiki:Gadgets-definition

MediaWiki:Gadget-section-browsing-gadgets

browsing-gadgets

MediaWiki:Gadget-Navigation popups

- `Navigation_popups|popups.js|navpop.css`
- `HideFundraisingNotice|HideFundraisingNotice.js|HideFundraisingNotice.css`

List of file names
MediaWiki:Gadget-foo.js/css

editing-gadgets

- `wikEd|wikEd.js`
- `Twinkle|Twinkle.js`
- `Friendly|Friendly.js`
- `HotCat|HotCat.js`



Special:Preferences -> Gadgets

Recent changes | Watchlist | Search | Misc | **Gadgets**

Below is a list of custom features you may enable for your account. These [gadgets](#) require JavaScript to be enabled in your browser. Note that these tools are not part of the core MediaWiki software and are generally developed and maintained by users on Wikipedia.

Browsing gadgets

- [Navigation popups](#), article previews and editing functions pop up when hovering over links
- Allows for individual users to hide the site notice for the Function

Editing gadgets

- [wikEd](#), a full-featured integrated text editor for [Firefox](#), [Safari](#) and [Google Chrome](#). Please read the [help page](#) for usage instructions.
- [Twinkle](#) a set of tools for [Firefox](#), [Safari](#) and [Opera](#) that auto

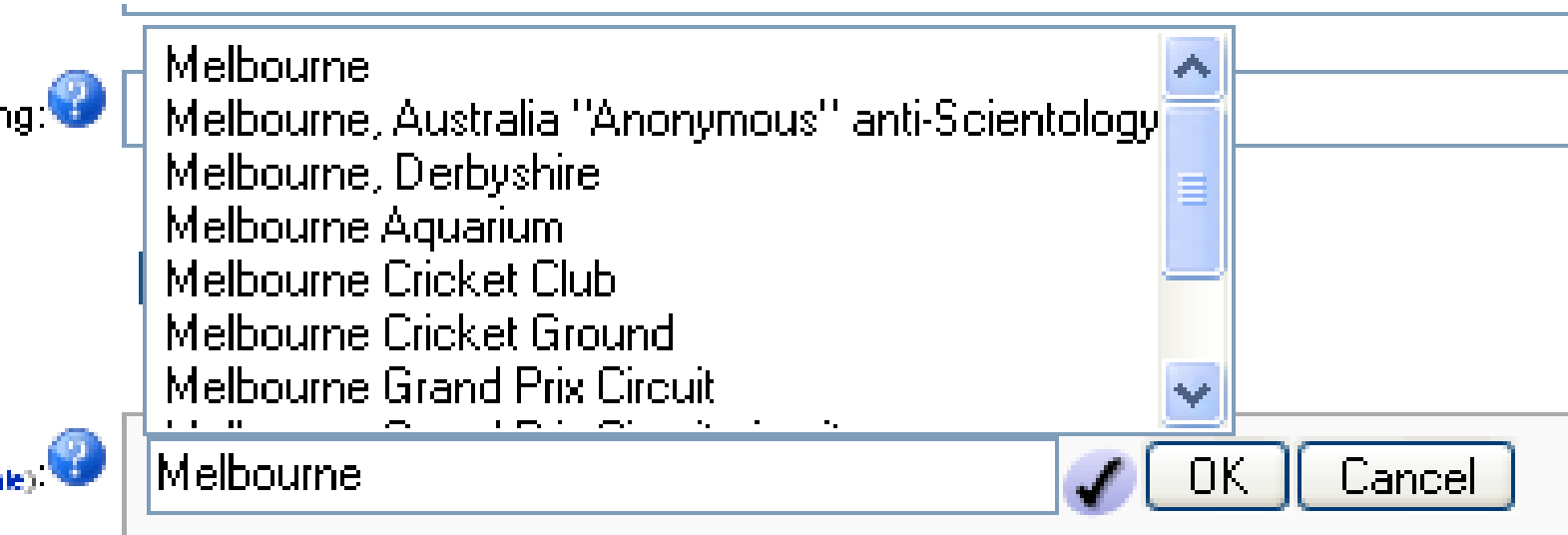


Gadget rec: HotCat

Instead of this:

```
[[Category:Melbourne Cricket Ground]]
```

Try this:

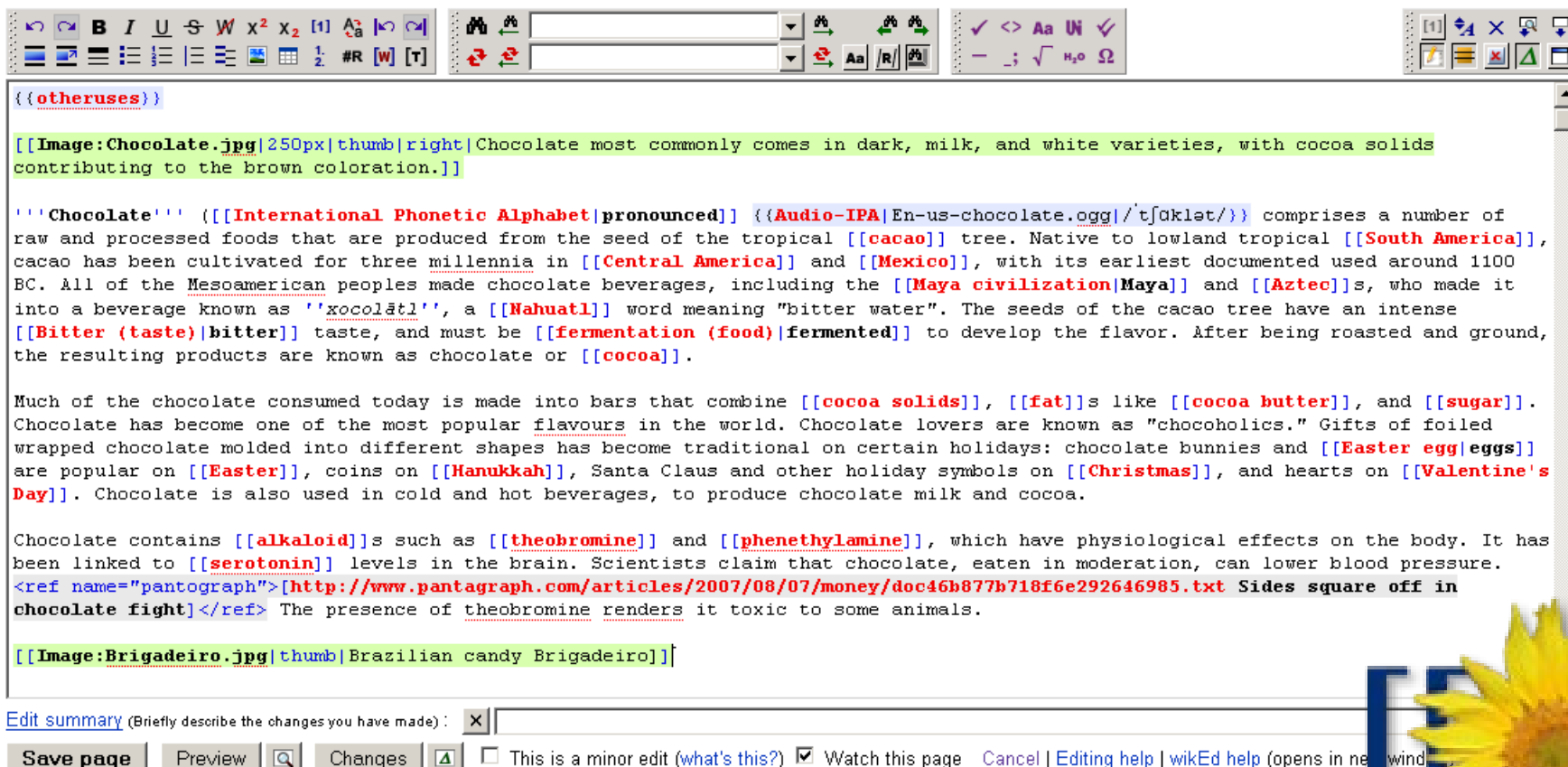


<http://commons.wikimedia.org/wiki/MediaWiki:Gadget-HotCat.js>



Gadget rec: wikEd

Make your edit box less scary:



The screenshot shows the WikEd edit box interface. At the top is a rich text editor toolbar with various icons for bold, italic, underline, link, unlink, list, table, and other editing functions. Below the toolbar is a preview window showing the article content. The content includes a heading for "Chocolate", a paragraph describing its origin and production, and a section about its health effects. The preview window also shows a small image of a yellow flower. At the bottom of the edit box is a "Save page" button, a "Preview" button, and a "Changes" button. There is also a checkbox for "This is a minor edit" and a "Watch this page" checkbox.

[[Image:Chocolate.jpg|250px|thumb|right|Chocolate most commonly comes in dark, milk, and white varieties, with cocoa solids contributing to the brown coloration.]]

'''Chocolate''' ({{International Phonetic Alphabet|pronounced}} ({{Audio-IPA|En-us-chocolate.ogg|/ˈtʃɒkəlɪt/}}) comprises a number of raw and processed foods that are produced from the seed of the tropical [[cacao]] tree. Native to lowland tropical [[South America]], cacao has been cultivated for three millennia in [[Central America]] and [[Mexico]], with its earliest documented use around 1100 BC. All of the Mesoamerican peoples made chocolate beverages, including the [[Maya civilization|Maya]] and [[Aztec]]s, who made it into a beverage known as ''xocolātl'', a [[Nahuatl]] word meaning "bitter water". The seeds of the cacao tree have an intense [[Bitter (taste)|bitter]] taste, and must be [[fermentation (food)|fermented]] to develop the flavor. After being roasted and ground, the resulting products are known as chocolate or [[cocoa]].

Much of the chocolate consumed today is made into bars that combine [[cocoa solids]], [[fat]]s like [[cocoa butter]], and [[sugar]]. Chocolate has become one of the most popular flavours in the world. Chocolate lovers are known as "chocoholics." Gifts of foiled wrapped chocolate molded into different shapes has become traditional on certain holidays: chocolate bunnies and [[Easter egg|eggs]] are popular on [[Easter]], coins on [[Hanukkah]], Santa Claus and other holiday symbols on [[Christmas]], and hearts on [[Valentine's Day]]. Chocolate is also used in cold and hot beverages, to produce chocolate milk and cocoa.

Chocolate contains [[alkaloid]]s such as [[theobromine]] and [[phenethylamine]], which have physiological effects on the body. It has been linked to [[serotonin]] levels in the brain. Scientists claim that chocolate, eaten in moderation, can lower blood pressure.

<ref name="pantograph"><http://www.pantagraph.com/articles/2007/08/07/money/doc46b877b718f6e292646985.txt> Sides square off in chocolate fight</ref> The presence of theobromine renders it toxic to some animals.

[[Image:Brigadeiro.jpg|thumb|Brazilian candy Brigadeiro]]

Edit summary (Briefly describe the changes you have made):

This is a minor edit (what's this?) Watch this page [Editing help](#) | [wikEd help](#) (opens in new window)

<http://enwp.org/WP:WIKED>



“UseLang” hack

(This is not really recommended...)

Use it to make different versions of special pages,
eg upload form

UseLang parameter overrides user language prefs
`Special:Upload?uselang=fr` – I can see the
French version of the form without changing
my prefs

[http://commons.wikimedia.org/wiki/
Commons:Redesigning_the_upload_form](http://commons.wikimedia.org/wiki/Commons:Redesigning_the_upload_form)



“UseLang” hack

What if I make a link to

`Special:Upload?uselang=blah` ?

For each message 'Foo', MW checks

- `MediaWiki:Foo/blah` (*localised message*)
- `MediaWiki:Foo` (*localised default wiki lang message*)
- `MessagesBlah.php` file (*MW defaults*)

[http://commons.wikimedia.org/wiki/
Commons:Redesigning_the_upload_form](http://commons.wikimedia.org/wiki/Commons:Redesigning_the_upload_form)



Support

- <http://mediawiki.org> is half-decent now
- Still lots of info on <http://meta.wikimedia.org/>
- IRC is popular: <irc://irc.freenode.net/mediawiki>
- MLs: mediawiki-l
- Forum: <http://mwusers.com/> (unofficial)



Thankyou!

Questions?

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<http://brianna.modernthings.org/>

