

What I Know Is

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ABSTRACT

Storing, organizing, broadcasting and recovering technical and scientific information might be a headache for both the owner of the tool and the end-user, especially when the documented topic grows. TiddlyWiki is a Wiki file, similar to a web application, that anybody can setup, irrespective of their own html, css or javascript knowledge and use it to store information. It offers great advantages to access and navigate data in a quick and efficient way.

INTRODUCTION

The role of a clinical SAS® programmer does not consist solely of programming, but also the following of standard procedures and the Health Authorities' recommendations, maintaining a high level of technical skills, managing all administrative tasks in parallel, attending trainings, communicating information and so on... Therefore, the more experienced you become, the more Word® documents, Excel® sheets, libraries, emails, USB sticks or even post-it notes you need in order to keep a trace or share these data. Rather than roughly stacking knowledge, a pragmatic programmer will try to find a good way to, first create an easily accessible archive of his professional experience, which will allow him to be more productive and, second, to document a topic which has dozens of items today, hundreds tomorrow, in a format that can potentially be shared with the programming community.

REQUIREMENTS

To manage a proper index of what the programmer knows, several points must be considered prior to starting to build the archive tool:

COLLECTION METHOD

The tool will give the user the possibility to compile any type of data whatever the source format is. This means that plain text, tables, SAS code, links, pictures, etc. can coexist.

ORGANIZATION

The tool will give the user the freedom to hierarchize data collected in a way that makes sense and the information is easily retrievable.

TOOL DESIGN

The tool will offer the user the possibility to manage the design to fit company requirements, the type of information presented or simply user preferences, etc.

SUSTAINABILITY

The tool will give the user the possibility to modify, update or delete one or more items without damaging others, as it is possible that the user may need to come back to a previous version.

USAGE

The tool will be easy to implement and use; The developer must be able to quickly create the structure and update the content and, the end user must intuitively be able to use it.

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PORTABILITY

The tool size will be minimal so that it can be transported without constraint and be independent from any other application.

COMMUNICATION

The tool must reflect changes instantaneously across the area of use so that all persons connected to the archive can access the latest version immediately. They should also have the ability to edit it if needed.

IMPLEMENTATION

WHAT I KNOW IS ... WIKI

Although this would make sense, WIKI is not an acronym for “What I Know Is” but a Hawaiian word which means “Quick” and was used by the developer (Howard G. Cunningham [1]) of the first Wiki web application in 1995 who remembered the Honolulu airport shuttles. After an exploration phase during the late 90's, the free encyclopedia Wikipedia was launched in 2001. It is still the world's most consulted Wiki site but there are many other sites that can serve many different purposes, both public and private, including community websites and intranets.

A Wiki application is a type of collaborative website which allows anybody, regardless of their knowledge of the technology, to add, modify or delete the content via a web browser. This is what makes Wikis easy to learn and use. In contrast with a blog, there is no predetermined structure and no owner, and content is added simply by using a basic markup language. Any change to the document is instantaneously reflected in the application and becomes available to people located everywhere in the world. Among the wide range of open source Wiki softwares, we can mention: Confluence, FlexWiki, DokuWiki, MediaWiki (the most famous, that was used for Wikipedia) and TiddlyWiki, the one presented hereafter.

TIDDLYWIKI (TW)

TiddlyWiki is an open-source and free Wiki that is contained in one unique html file which includes its content and the necessary html, CSS (layout) and JavaScript code to edit and render the information. It does not require a server, only a web browser and can be published on the Web, sent by email, put on a USB stick or posted on any other repository. TW has repeatedly proven itself to be useful and powerful to keep people ideas well organized.

It is mainly seen as a non-linear personal notebook based upon micro-content information. The source file can be downloaded from the web [2] and many sites ([3], [4], [5]) will guide beginners through setting up their Wiki.

CONCEPTS

The tiddler is the basic, self-contained element in TiddlyWiki and is defined by a set of standard fields which are: the title field holding the name of the tiddler, the contents field itself, and the tags field.

The screenshot shows the 'New Tiddler' dialog box. At the top is the title bar 'New Tiddler' with buttons 'done', 'cancel', and 'delete'. Below the title bar is a 'Title field' containing the text 'New Tiddler'. Below the title field is a large 'Contents field' with the placeholder text 'Type the text for 'New Tiddler''. Below the contents field is a 'Tags field' with the placeholder text 'Type tags separated with spaces, [[use double square brackets]] if necessary, or add existing tags'. A red arrow points to the 'New Tiddler' title bar.

Figure1: Tiddler description

The tags are keywords associated to the tiddler which are used to describe it and allow refined further searches. One tag can be associated to several tiddlers, while several tiddlers can be linked to one tiddler.

The contents field is a piece of micro-content which can contain human readable text based on TiddlyWiki Markup or other text based formats, binary data, CSS for StyleSheets or JavaScript in the form of plugins. Markup language supports the insertion of pictures and hyperlinks. Figure 2 shows very basic text formatting such as highlighting or underlining text, indenting a piece of text or inserting a block of text (useful for SAS code) and its rendering. The syntax to create a table is also briefly presented.

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done cancel delete

Markup

Markup

! Tips for most useful formatting code

"Bold " : Enclose with double single quotes "

//Italic//: Enclose with double slashes / /

__Underline__: Enclose with double underscores __ __

@@Highlight@@: Enclose with double at-signs @ @

~DeWikify a word: Precede it with tilde symbol ~

>> Indentation

* bullet1

** bullet2

```
/*{*/
Start with /*{*/
Insert a block of text
End with /*{*/
/*{*/
```

|And |the | famous| table|

|where cells are merged horizontally|>|>|

|or |||

|vertically|~|~|

|and justification | can | be| managed |

!|background color changed|||

|Nice?|||

bullets indentation titles formatting

Type tags separated with spaces, [[use double square brackets]] if necessary, or add existing tags

close close others edit more

Markup

YourName, 30 August 2013 (created 30 August 2013)

Tips for most useful formatting code

tags: bullets indentation titles formatting

Bold : Enclose with double single quotes "

Italic: Enclose with double slashes / /

Underline: Enclose with double underscores __ __

Highlight: Enclose with double at-signs @ @

DeWikify a word: Precede it with tilde symbol ~

| | Indentation

- bullet1
 - bullet2

Start with /*{*/
Insert a block of text
End with /*{*/

And	the	famous	table
where cells are merged horizontally			
or			
vertically			
and justification	can	be	managed
background color changed			
Nice?			

Figure 2: Markup

The plugins are used to implement a wide variety of features and are independent pieces of JavaScript Code. They are typically macros, features, themes, tweaks etc. such as sliders, automatic lists of tidlers, gradients, calendars, image maps, tags cloud, snapshots editions etc.

done cancel delete

Plugins

Plugins

[[Macros and plugins]]

Gradient [[plugin]], available in the starting package

<<gradient horiz #666 #000>>

Simple gradient

From grey to black

>>

<<gradient vert #ffc #fe8 #db4>>color:red;text-align:center;three colors vertically

to show a vertical gradient

Suggestion: Apply to SiteTitle or MainMenu>>

<<search>> Search plugin

<<tabs txtFavourite

Hyperlinks " " HyperLinks

Pictures " " Pictures

MainMenu " " MainMenu

>>

table gradient macros

Type tags separated with spaces, [[use double square brackets]] if necessary, or add existing tags

close close others edit more

Plugins

YourName, 30 August 2013 (created 30 August 2013)

Macros and plugins

no tags

Gradient *plugin*, available in the starting package

Simple gradient
From grey to black

three colors vertically
to show a vertical gradient
Suggestion: Apply to SiteTitle or MainMenu

search Search plugin

Hyperlinks Pictures MainMenu

GettingStarted

Figure 3: Plugins

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EXAMPLES

DESIGN

From the web downloaded source file, the layout can be changed: color, menu bar position, site title, tiddlers look. Wikis can be designed for a single small tool or be a compilation of several sources of information. There is no direction on how to build the application except that what matters is what the user(s) put in it.



Figure 4: Design

COLLECT

Typical examples of data collection are SAS code, studies, administrative tasks, IT tools, data domains information, tasks, CV records etc.



Figure 5: Collect

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ORGANIZE / SUSTAIN

Embedded tiddlers, tables, sliders, tagging etc. are different techniques used to hierarchize the information. Editing is made easy - backup files are created each time the file is saved and facilities to import tiddlers from one Wiki file to the other are available.

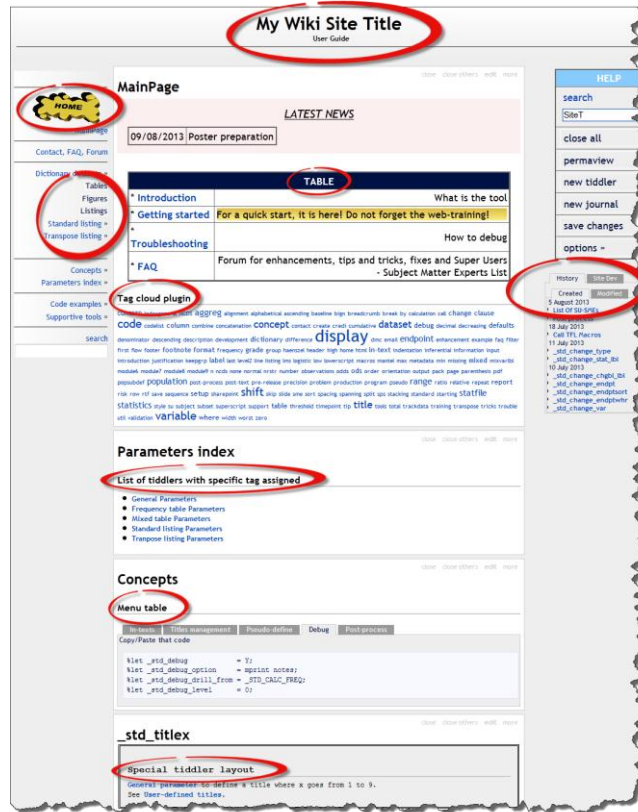


Figure 6: Organize

EASE OF USE

A great variety of web sites is available and will give instructions for markup/formatting of text and free plugins can be downloaded.

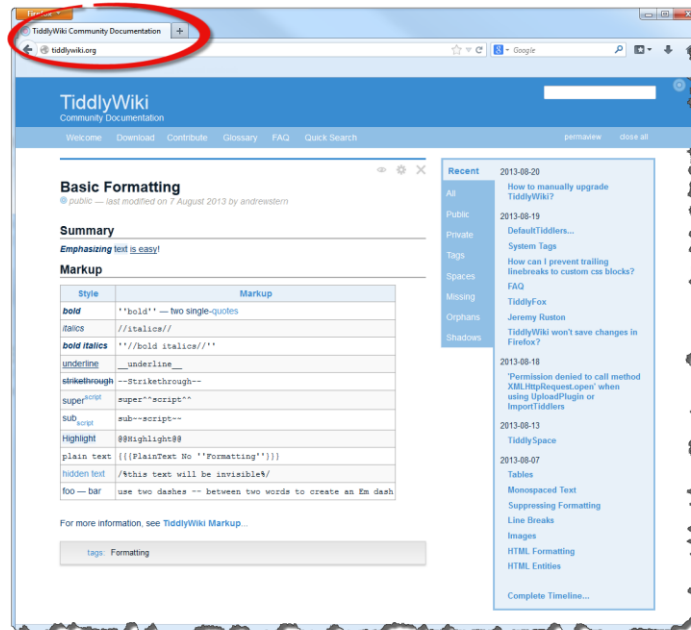


Figure 7: Ease of use

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PORTABILITY / DISTRIBUTION

The html file is a basic text file.



Figure 8: Size

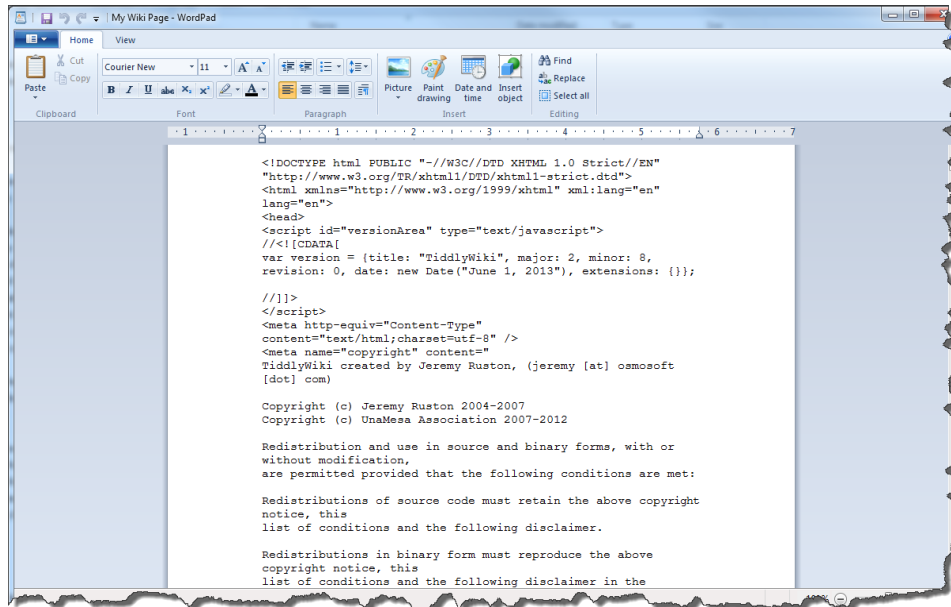


Figure 9: Text file

CONCLUSION

Storing all accumulated experience for personal development or sharing content that constantly evolves is not necessary complicated, but organizing it in a valuable manner quickly becomes so.

TiddlyWiki offers all the advantages of a Wiki website and does allow the user to collect, organize and maintain their knowledge. In addition, it is easily transportable, free and independent from any other application or server. Last, its ease of use will comfort both the developer and the community.

REFERENCES

- [1] The original wiki, created by Ward Cunningham in 1995, from which all other wikis are descended.
<http://c2.com/cgi/wiki>
- [2] TiddlyWiki a reusable non-linear personal web notebook
<http://tiddlywiki.com/>
- [3] TiddlyTools... Small Tools for Big Ideas
<http://www.tiddlytools.com/>
- [4] TiddlyWiki for the rest of us - An easy-to-use entry-level...
www.giffmex.org/twfortherestofus.html
- [5] TiddlyWikiCommunity Documentation
<http://tiddlywiki.org/>

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