

Sophia

Maintain a database of texts

(Beta version : user interface may change)

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Sophia readme

Presentation

Sophia maintain an sqlite database of texts : it allows to easily insert, modify, search and extract information to and from the database. Made to write a philosophy thesis, *sophia* has two aims : comparing texts, and producing precise references. Its companion, *philia*, will insert references from a *sophia* database in a text.

Build and install

To build and install, edit the file `config.mk` from the root directory, and run :

```
| make install
```

In some circumstances, you might need `utroff` tools themselves to build the manual pages. In that case, build and install binaries before manual pages like this :

```
| make installbin  
| make installman
```

You can uninstall files and clean the working directory :

```
| make uninstall  
| make clean
```

For a more complete description of the build process, look at the README in the root directory.

Sophia, *philia* and their man page are distributed under a two clause BSD License ¹.

Help and bugs

Don't hesitate to ask questions at `help@utroff.org`. Please, send bugs and patches at `help@utroff.org`.

Sophia manual

Name

Sophia – Maintain a database of texts.

Synopsis

```
sophia [ insert | search | edit | update | refer | troff | print ] [ -b bookid -ba data -bb data  
-bc data -bd data -be data -bg data -bh data -bi data -bj data -bm data -bn data -bo data -bq  
data -bs data -bt data -bx data -by data -bz data -h headid -hb data -hh data -hp data -t textid  
-th data -ts data -tt data -tp data ]
```

¹ See p. 6.

Description

Sophia maintains a database of texts : It allows to easily insert, modify, search and extract information to and from the database. Made to write a philosophy thesis, *sophia* has two aims : comparing texts, and producing precise references :

Comparing text :

To write a philosophy thesis, one have to compare hundreds of texts. This can be done by turning pages of books, but this is not convenient when writing with a computer. The author of *sophia* found easier to write all the texts he had to work with in a database, and then find and compare them from the computer, just near his text editor.

Producing precise references :

While inserting references in a document, the usage is to mention the heading in which the reference appears. This is not easily done with usual bibliography software such as *refer* or *bibtex* : The heading has to be duplicated for each reference, which is fastidious and leads to typo errors and glitches. With *Sophia*, each heading is written once, and is easily recovered and automatically inserted in the text document.

Sophia is just an interface to the database of texts. To use it, the format of the database must be understood. The first argument of *Sophia* is a **command** which tell to *sophia* what to do : insert, update, search... The following arguments of *sophia* correspond to the **fields** of the database, and must be followed by the *datas* that has to be inserted, updated, searched...

Commands

edit [-b|-h|-t *id*] [-field *data* [-field *data*...]]

Call a text editor to edit a row of the database. If [-b|-h|-t *id*] option is given, the content of the fields are extracted from the database. See **TEXT FORMAT** to know how to insert information in the text editor.

head -hb *id* -tp *page*

Search the heading of the page *page* in the book of unique id *id*. Print the unique id of the row of the table **heads** where **hb** is *id* and where **hp** is less than **tp** and is more than all the other **hp** fields.

insert -field *data* [-field *data*...]

Create a new row in the database by inserting *data* in field **field**.

print -field *data* [-field *data*...]

Print the whole rows of the database where **field** contain *data*.

refer Output the **books** table of the database in the *refer* bibliography format.

search -field *data* [-field *data*...]

Search row where **field** contain *data* in the database, and print a summary of their content.

sophia -field *data* [-field *data*...]

Output row where **field** contain *data* in the format of the *sophia* command line. Usefull for scripting.

troff -field *data* [-field *data*...]

Print the content of row where **field** contain *data* in a format that troff can format.

update -b|-h|-t *id* -field *data*

Update the database, by replacing the content of **field** by *data*. The **unique identifier** of the row which is modified **must** be mentioned, by the options **-b** for table **books**, **-h** for table **heads**, **-t** for table **texts**.

Fields

The *sophia* database contain three tables : *books*, *heads* and *texts*. Each text in the table *texts* is linked to a heading in the table *heads*, and each heading in the table *heads* is linked to a book in the table *books*.

Table books fields

b	Unique identifier of the row, automatically generated by <i>sophia</i> .
ba	(field %A of refer bibliography) Author name and lastname.
bb	(field %B of refer bibliography) Book title, if the reference is an article in a book.
bc	(field %C of refer bibliography) City.
bd	(field %D of refer bibliography) Date
be	(field %E of refer bibliography) Editor of the book.
bg	(field %G of refer bibliography)
bh	(field %H of refer bibliography) How is published the book (first edition, french edition...).
bi	(field %I of refer bibliography) Issuer.
bj	(field %J of refer bibliography) Title if this is a journal.
bm	(field %M of refer bibliography) Collection.
bn	(field %N of refer bibliography) Number of the journal
bo	(field %O of refer bibliography) Other informations.
bq	(field %Q of refer bibliography) Institution author name.
bs	(field %S of refer bibliography) Serie name, if the book is part of a serie.
bt	(field %T of refer bibliography) Title.
bx	(field %x of refer bibliography) url.
by	(field %y of refer bibliography) Last update.
by	(field %z of refer bibliography) Last seen.

Table heads fields

h	Unique identifier of the row, automatically generated by <i>sophia</i> .
hb	Book unique identifier (link to the field b of the <i>books</i> table).
hh	(field %h of refer bibliography) Heading title. You should enter each heading of the table of contents, since this is needed for your reader to find the exact reference in different issues.
hp	Heading page. <i>Sophia head</i> option need this field to find the heading unique id of a page of the book.

Table texts fields

t	Unique identifier of the row, automatically generated by <i>sophia</i> .
th	Heading unique identifier (link to the field h of the <i>heads</i> table).
ts	Subtitle. Title that you choose for the text.
tt	Text content. The text must begin by troff paragraph macro (such as .PP , PQ , PI...), or, at least, by .br .
tp	(field %p of refer bibliography) Page of the text. A row of pages can be noted as p-q.

Environment

SOPHIA the database.

License

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Help and bugs

Don't hesitate to ask questions at help at utroff dot org. Please, send bugs and patches at help at utroff dot org.

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Changes of sophia

2013/10/30 20 :23 :22 VERSION-0.4

- readme.tr, sophia.tr : fix link to license.

2013/10/30 16 :31 :04 VERSION-0.3

- makefile : FIX : scripts are in BIN variables. Files to strip are in STR variable.

2013/10/30 15 :03 :41 VERSION-0.2

- makefile : Use new build system.

2013/03/24 17 :17 :57 VERSION-0.1

- Initial revision.
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