

## Sente Assistant

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### Overview

Sente Assistant is an add-on application for browsing and searching the notes that you take in Sente.

It extends the functionality of Sente, and provides a view on your library, enabling you to:

- Browse your Sente notes, sorted by their correct position on the source page
- Perform keyword, wildcard, or tag searches of your notes
- Add XHTML annotations to your references
- Search the references you select in Sente, or across all notes/annotations in your Library
- Generate an index of all tagged notes
- Identify duplicate references in your library
- Save your filtered notes or search results in a single RTF, HTML, PDF, ODT, DOC, DOCX, or TXT file
- Customize the presentation of your notes in the Assistant

### Disclaimer

*Sente Assistant is a free, third-party application, not a supported product. It is offered "as is" at no cost, for non-commercial use only. It is my hope that it may be useful for your research. The Assistant is designed to only read your Sente Library. It includes nothing that modifies or changes the content of your library, and should be completely safe. Nevertheless, I offer no warranty or guarantee of the fitness of this application. I have tested the Assistant with Sente 6.6.5 on OS X 10.9.2, with recent versions of Safari and Firefox. It should work under other configurations (e.g. Chrome), but I haven't tried them.*

### Rationale

I was inspired to create this after I tried Dana Leighton's nifty script for exporting Sente notes. Originally, I wanted a way to filter and export my notes into a single file, but I couldn't see how to do this simply with AppleScript (I'm sure it's possible, but I didn't have the time to learn AppleScript). I also wanted a solution to a number of the issues with the presentation of notes in Sente (e.g., ordering and font size). So, I decided to create a small add-on application using a language that I know: VisualWorks Smalltalk.

### Getting Started

The Assistant is designed for ease of use. It runs as a separate stand-alone application. Rather than presenting a desktop window, it runs through a web browser. That is, you simply point your web browser at a local address, and the Assistant operates there. You do not need an Internet connection for this.

To install the Assistant, unzip the file and place the entire **Sente Assistant** folder inside your **Applications** folder. All the pieces needed by the Assistant are contained within this one folder.

To launch, simply double-click on **Sente Assistant**. Then, point your web browser at: **http://localhost:8008/**. This is a local port used only by the Assistant.

At runtime, the Assistant communicates with the Sente application to locate your Library. It will use the Library you currently have open in Sente. For this, Sente needs to be running, and this is the expected way to use the Assistant. That is, with Sente open, you launch the Assistant. If, however, you launch the Assistant first, it will in turn launch Sente to communicate about your current Library.

To quit the Assistant, use the **Quit** command through its web interface. Any changes you make on the **Preferences** page will be saved to disk, and restored for your next session. Note that the **Quit** menu command for the application icon that appears in the dock will not have any effect, as the Assistant is running in the background as a server application.

## Browsing and Searching Notes

When you open the Assistant, it will display the references that are currently selected in Sente. These should appear in the right-hand side of the Assistant window. For each reference, it will display the associated notes.

By default, these notes are sorted by page number, as in Sente, but they are further ordered by their vertical position on each page. This corrects for the problem in Sente that notes do not follow the expected order in which they appear on each PDF page. The Assistant can handle single or multiple columns of text, and even some more complex page layouts that combine both.

By selecting options from the **View** menu, you can choose various ways to present the notes. For example, **Notes and Summary** displays a summary list of all the note titles at the top, each of these headings is a hyperlink to the associated note. Each **View** option corresponds to a template file. You can edit these templates to modify the presentation, or add new ones.

## Filtering Notes

You can also filter the notes for currently-selected references by choosing the **Filter** option on the **Notes** dropdown menu, and then entering filter strings. In this way, you can search any part of the notes, or focus on the titles, quotations, or comments. If you enter more than one filter, a logical AND will be performed for titles, quotations, comments, and only the notes that contain the specified filter string(s) will be displayed. If you enter a filter in the **Any** field, it will ignore the others and perform a logical OR match for this string against all the note fields. These filtering operations are case-insensitive. Wildcards are possible using the % character.

If you select **Filter Notes: By Color** on the **Preferences** page, a color palette appears on the sidebar. Use this to filter notes by their color. To enable or disable a particular color filter, simply click on it.

Each time you change one of the filtering options, the Assistant will query the

Sente Library and refresh the notes display. You can also refresh the notes display at any time by clicking on **Assistant** at the top left.

## Searching your Reference Library

By default, the Assistant will only display the references you have selected in Sente. It is also possible to expand your search from the currently-selected references to all references in your entire Library. For this, select **All References** from the **References** drop-down menu. Other options in this menu enable you to filter references for strings in the title, author names, or annotations on your references (annotations are explained below). Using these options, your note filtering options can be applied to either a larger or more specific set of references. This may be useful for locating all notes on a particular author or concept.

## Working with Tagged Notes

Using the filters, you can find all notes that have been marked with a specific tag (e.g. **#history**) in the note's comment field. That is, you can enter the tags as free-form text in the note comment. Wildcard searching of tagged notes is also possible, e.g., a search for **##history** would find **#americanHistory**.

To view an index of all the tags used by the currently-selected references, select **Tag Index** on the **View** drop-down menu. You can also view an index of all the tags you have used in the entire library by selecting the **All References** filtering option.

By default, the tag format uses a hash mark (e.g., **#history**), but you can specify your own custom format from the **Preferences** page. The format specified on this page is used to generate the tag index. If you use the hash mark or another single character, your tags cannot include spaces; however, if you use curly brackets or some other characters at the beginning and ending of the tag pattern (e.g., **{my tag}**), your tags can be short phrases that include spaces, hyphens, or other non-alphanumeric characters. For the tag delimiters, only non-alphanumeric characters are recognized for tags, with the exception of a few reserved characters used by the SQLite database (e.g., single quote, underscore, percent sign, and ampersand) which are not recognized.

## Finding Duplicate References

Use the **View** option **Duplicate References** to see all references with identical titles. (This option ignores all of the note filtering settings.) Each duplicate is accompanied by a Sente link. You can click on these light blue links to switch focus to Sente and select the duplicate reference. Although it is best to double-check the duplicate items first, you can easily hit **Command+Delete** in Sente to remove a duplicate reference from your Library.

## Annotations

Use the **View** option **Annotations** to view and edit annotations on your references. Annotations are like tagged metadata, but they associate free-form XHTML with each Sente reference. In this fashion, you can annotate your references with formatted text, ordered and unordered lists, hyperlinks, etc. For example, when viewing a reference to a book in the **Annotations** view, click **Edit**

followed by **Add** to create a new annotation. You can then select and edit the name and content of the annotation using the built-in text editor. When finished, click **Done** to save your changes.

The Assistant can filter your references to find strings in your annotations. For example, to find all references that include the string "american history" in an annotation, select **Filter All** on the **References** drop-down menu, and enter "american history" in the **Annotation** field.

Annotations are associated with Sente References, but they are held in a separate database. In keeping with the design of Sente Assistant, your library is never modified. For this reason, an annotation is associated with a specific reference in a specific library. If you move the reference to another library, the annotation will not be duplicated. They are stored in the file ~/Documents/Sente Assistant Annotations.sqlite.

Annotations can also be used to hold metadata such as a summary or table of contents. The Assistant knows how to fetch this information from the WorldCat database (at present, for books only). For this, click **Get Metadata**. The **Annotations** view also includes a **Get all Metadata** link in the upper-right corner of the view. Clicking on this enables you to fetch metadata in bulk from WorldCat, for all references in the Assistant's view. Note that if you fetch metadata and then edit it, fetching it again will overwrite your changes.

## Limitations

Sente includes a built-in web browser, and it was originally my intention to run the Sente Assistant in one tab of this browser. Behind the scenes, the Assistant uses AppleScript to communicate with Sente and query for details about the library and current selections. The Sente scripting interface includes a way to explicitly specify the library, but it does not seem to work. Even if the library is specified, Sente only responds with meaningful data when the library is the active tab. Thus, it is not currently possible to run the Assistant as a tab inside Sente. If the Sente developers remove this restriction in a future release of the product (and I hope they will consider this), the Assistant could be used inside Sente, as originally intended.

## Customizing

While the Sente Assistant has been written using the Smalltalk language, much of the application is implemented using server pages, JavaScript, and CSS. You can customize both the appearance and function of the application by editing the various files in the **/templates** directory. Styles and layouts are defined in the file **template.css**, while the various views are generated by JSP-style server pages in the **template\*.ssp** files. You can add new template files and the Assistant will find them when you refresh. As always, you should make a back-up before you attempt any changes. Each time you modify a page, it may be necessary to restart the Assistant for it to take effect. As necessary, I can provide more details about the internals of the application.

Enjoy!