



# Documentation

## Getting started

### Spaced repetition

When you have memorised something, you need to review that material, otherwise you will forget it. However, as you probably know from experience, it is much more effective to space out these revisions over the course over several days, rather than cramming all the revisions in a single session. This is what is called the *spacing effect*.

During the past 120 years, there has been considerable research into these aspects of human memory (by e.g. Ebbinghaus, Mace, Leitner and Wozniak). Based on the work of these people, it was shown that in order to get the best results, the intervals between revisions of the same card should gradually increase. This allows you to focus on things you still haven't mastered, while not wasting time on cards you remember very well.

It is clear that a computer program can be very valuable in assisting you in this process, by keeping track of how difficult you find a card and by doing the scheduling of the revisions. Let's see how this works in practice in the Mnemosyne program.

The software will present you with a question, and your task is trying to remember the answer. Afterwards, you rate yourself on a scale between 0 and 5. These ratings will be used in computing the optimal revision schedule. Let's see what these grades mean, both for learning new cards and for reviewing cards you've memorised earlier.

### Memorising new cards

When you are learning new cards, use grades 0 and 1 to signal that you have not yet memorised them. Grade 1 cards are becoming more familiar than grade 0 cards, and will be repeated less often.

These cards will be repeatedly shown until you give them a grade 2 or higher. This means that you've memorised the card and that you'll be able to remember it for one or two days. The 'Not memorised' counter will decrease by one.

This card will be scheduled at some future date, when you're likely still be able to remember it with some effort, without having forgotten it completely. This is most efficient for the learning process.



### Reviewing previously memorised cards

If you study these cards again tomorrow, the 'Scheduled' counter will tell you how many previously memorised cards you need to review. These are grade 2 to 5 cards.

If a card reappears too soon, and you're able to remember it without any effort, rate the card a 5. The interval to see this card again will be a lot longer.

If the interval is just right, so that you remember it, albeit with some effort, use grade 4.

If, however, it takes you significant effort to remember the answer, and you think the interval was too long, then rate the card 3 or even 2.

If you fail to remember it altogether, rate it either 0 or 1, and after you have finished reviewing all the scheduled cards, it will appear repeatedly until you think you'll be able to remember it again for a few days.

For best results, it is suggested to do your revisions every day, although Mnemosyne will try to cope as well as possible if you postpone your revisions or if you want to learn ahead of time.

### Working with large numbers of new cards

When you are learning a large number of new cards, it does not make sense to try and learn them all at the same time. For this reason, Mnemosyne has a setting *Work on at most X non-memorised cards at the same time*, which defaults to 10. This means that at any given time, you will not be trying to memorise more than 10 new cards. Note that this setting does **not** tell you how many new cards you need to learn per day. You are the judge of that: you can learn more cards or less cards, depending on how you feel.

However, we recommend only going through a limited number of new cards each day, in order to help Mnemosyne achieve a better spread of your workload when reviewing those cards again.

### I'm worried I'm doing it wrong!

Mnemosyne user Michael Campbell had this to say on the [mailing list](#) [1]:

*Having used Mnemosyne a few years now and watching this mailing list pretty closely I've seen a topic surface over and over again; and that is what happens if I do something outside the "perfect" parameters; the 2 biggest being "what if I miss days?", "oh my, I've graded a card wrong; what do I do?". The answer is, "nothing". It's no big deal. Let it go. If you graded it too HIGH, you may forget it next time, which will be taken care of by your 0 or 1 grade when you next see it. If you grade it too low, you'll see it earlier than you would have otherwise, and what's the big deal?*



*And for missed days, just do what you can when you can. It can be shown that assuming you remember at least some of the time from day to day, you can do 1 card a day and eventually get through an arbitrarily large stack.*

*Ones memory is such a fluid dynamic thing that trying to curve-fit SM2 (or any algorithm) to it just isn't possible, or beneficial. Your memory may kick ass today, and absolute shite tomorrow; no algorithm can hope to model that. And each person is different too. I think these fine-tuning exercises I see people attempting, while perhaps fun, are of little to no actual benefit. The benefit comes from doing, not tweaking. I'm sure Peter or Gwern have some studies at hand that might have more information.*

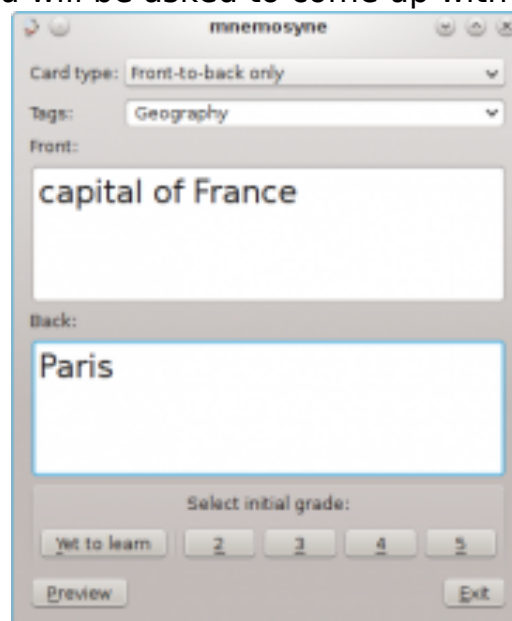
*So, make a best effort on grading, and try to do it daily or at least as often as you can, and it'll work fine. This isn't an optimization exercise, it's just meant to reduce work that may not be necessary.*

## Card types

Card types are a very powerful mechanism in Mnemosyne. Let's look at the most common ones.

### Front-to-back only

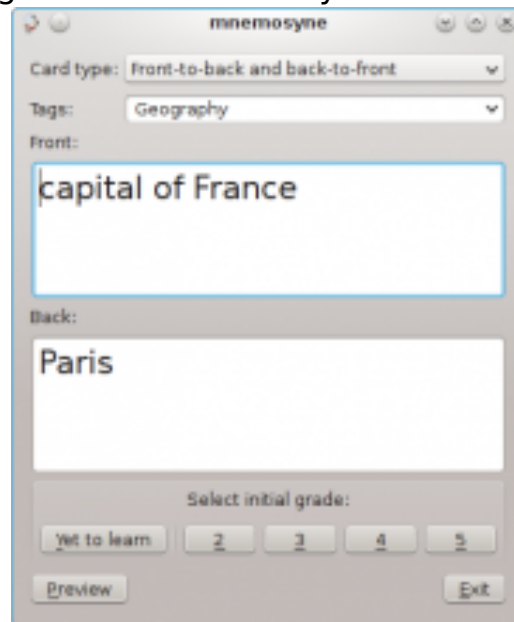
The simplest card type is where Mnemosyne only quizzes you in one direction. E.g. in the example below, you will be asked to come up with the answer 'Paris'.



### Front-to-back and back-to-front



If you also want to be quizzed in the other direction, change the card type to "Front-to-back and back-to-front". This will create a sister card of the first card. If you update the contents of the card, both sister cards will be automatically updated. Also, Mnemosyne will not schedule long-term reviews of sister cards on the same day, as that might lead to artificially easier recalls.



## Vocabulary

A more sophisticated variant of the "Front-to-back and back-to-front" is the "Vocabulary" card type, which also includes fields for pronunciation (useful if the language you are learning is in a funky script) and additional notes (e.g. grammar info).

Mnemosyne will create two sister cards for this: a so-called "Recognition" card, with the foreign word as question, and a so-called "Production" card with the meaning as question. For each card, the pronunciation and note info will be put on the answer side. To see what these cards look like, press the "Preview" button. If the language you are learning uses latin script and you are not interested in the pronunciation field, right-click on a text entry field, and choose "Hide pronunciation field for this card type".



## Card type clones

What if you want to study more than 1 language, but want to use different formatting options for each language, like a different font for the foreign word, or a different background colour? In the card type manager, create two clones from the Vocabulary card type, one for each language. Now you have two separate card types which you can format independently.

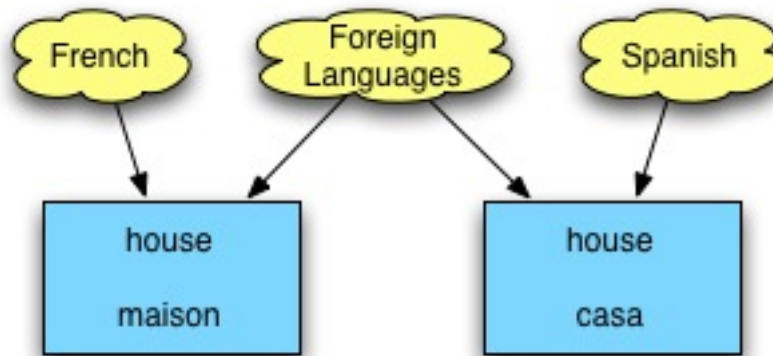
## Other card types

Mnemosyne comes with a few plugins for different card types, like Cloze deletion (to selectively hide one or more words in a sentence), Map (specifically tailored to study blank and marked maps) or Sentence (a cross between Vocabulary and Cloze to help you study languages using sentences). Have a look at the plugin description for more info on how to use them.

## Organizing cards

### Tagging cards

You can use tags to organize cards. Each card can have multiple tags. For example, in the diagram below, the card for *casa* is tagged with both Spanish and Foreign Languages, while the card for *maison* is tagged with both French and Foreign Languages. This makes tags much more flexible than the traditional folder structure to organize files on a computer, where each file can only be in one folder.



To add multiple tags to a card, just separate the tag names with a comma. A hierarchical tag structure is supported as well, just separate the different levels of the hierarchy with ::, e.g. Science::Physics

## Learning only a subset cards

In the 'Activate cards' dialog, you can select which cards you want to study based on a number of criteria, like tags and card type. You can give this subset a name for easy reference later. The system is very flexible, as a card can belong to more than one saved set. Also, if you edit a card to change its tags, its membership of the saved sets is automatically updated.

## Keep your cards in one database

You can use the *New* and *Open* options on the *File* menu to create new databases to store your cards. However, even if you are studying many different subjects, we recommend storing all of your cards in a single database (file) and using tags to add structure, as the saved set mechanism is much more powerful and allows e.g. cards being in more than one set.

## Adding media

### Adding images

Right-clicking on a text entry field brings up a file selection dialog that you can use to choose an image file. This generates tags of the form ``.

### Adding sounds

Right-clicking can also be used to insert sound files. This generates tags of the form



`<audio src="a.wav">`. To play the sound again, press *CTRL+R* in the main window. You can also play a part of the audio file, as audio tags support start and stop arguments, e.g. `start="1" stop="2">` will play the sound file from 1 to 2 seconds.

## Adding LaTeX formulas

LaTeX can render your formulas using tags like `<$>x^2+y^2=z^2</$>`.

For this, you need LaTeX and dvipng installed. Windows users can download [MiKTeX](#) [2] to achieve the same functionality.

## Achieving more control over LaTeX

The `<$>...</$>` tags use LaTeX's inline math environment, but there are two more tags:

- The `<$$>...</$$>` tags for centered equations on a separate line (LaTeX's `displaymath` environment)
- The `<latex>...</latex>` tags for code which is not in any environment, but just embedded between a typical latex pre- and postamble.

For even more control, see the section [Advanced preferences](#) [3] to set the preamble, postamble and the dvipng command. Important: you should make these changes on all devices you use Mnemosyne on, also on e.g. your phone.

Note: if you have problems with latex under OSX, add a PATH node with value `"$PATH:/opt/local/bin"` according to the procedure described [here](#) [4].

## Integration with Google Translate and Google Text-To-Speech

To use automatic translation and text-to-speech, Mnemosyne first needs to know what the language of your flashcards is. Especially if you study multiple languages, you should have a different card type for each language. This can be done by cloning an existing card type. E.g., you can create two clones of "Vocabulary", called "French Vocabulary" and "English Vocabulary". Go to the menu "Cards - Manage card types", click "New clone", select from which card type you want to clone ("Vocabulary" in this case) and then give the clone a name of your choice.

Just calling a card type "French Vocabulary" is not enough for Mnemosyne to know that the cards are in French, though. You need to explicitly select the correct language from the drop-down box in the second column. There should be no need to change the default values automatically filled in the "Foreign language field"



column.

Once this is done, you can add automatic translation or text-to-speech when adding or editing cards, simply by placing your cursor where you want the result to show up, right-clicking and selecting the required action from the popup menu.

## Formatting cards

You can use HTML tags to change the color, formatting and style of your text. Even if you're new to HTML, the tags are relatively simple and you can probably learn them quickly.

### Bold, italics, and underline

Bold example: `<b> phrase in bold </b>`

Italics example: `<i> phrase in italics </i>`

Underline example: `<u> underlined phrase </u>`

### Comments

You can also use HTML comment tags if you want to annotate a list of cards that you plan to import into Mnemosyne.

Example: `<!-- enter your comment here -->`

## Importing cards

### Plain text and Microsoft Office (Word and Excel)

Mnemosyne can import plain text files where each line contains a question/answer pair separated by a tab. So e.g. if you have such a list in Word, save it as plain text (\*.txt), choose 'other encoding - Unicode (UTF-8)' if your data contains foreign characters, and then you get a file which you can import in Mnemosyne if you choose the 'Tab-separated text files' format.

The same goes for Excel using 'save as', 'tab delimited (txt)'. However, Excel's unicode text format is not the standard UTF-8, so this only works for latin characters.





## OpenOffice Calc

Choose *File-> Save as* and select csv as the format. Then click on the box that says *edit filter*

*options* and choose utf-8 as the character set, tab as the field delimiter, and clear as the text delimiter. It works perfectly with unicode (a major advantage over Excel!).

## Importing cards in the Vocabulary card type

For each card, put 'foreign word', 'pronunciation', and 'meaning' on a single line, separated by tabs.

## Syncing

Mnemosyne has a built-in sync mechanism to sync your learning data between different machines. It supports an unlimited number of machines, and adding cards on one machine while reviewing cards on another machine will not result in a conflict and will be seamlessly merged. The sync protocol has been heavily optimised, and is much more efficient than e.g. putting everything on Dropbox.

## Server configuration

To enable syncing, pick one machine as your server (e.g. your desktop computer). On that machine, go to 'Settings - Configure Mnemosyne' and in the 'Sync server' tab, activate the sync server and pick a username and a password that the client should provide. After clicking 'OK', Mnemosyne will tell you on which IP address the server is running, e.g. 192.168.2.33 . Everytime you want to sync another machine with your server, Mnemosyne needs to be running on that server. (Note: if you want to run the sync server on a headless machine, i.e. without a UI, start Mnemosyne from the command line with the `--sync-server` argument).

## Client configuration

For the initial sync, if you're on a desktop client, make sure you start from an empty database which has the same name as the server database. (For Android, the initial sync will fetch the database currently active on the server, which cannot be changed later on.) Then, choose 'File - Sync' and fill in the server address (e.g. the IP address you got above), username and password. The initial sync can take a long time, as the entire database needs to be sent across, but future syncs will be much faster. Note that both the client and the server should be running the latest version of Mnemosyne.



## Important

The sync should always be initiated by the client, e.g. from your phone.

## Troubleshooting

If you run into issues, the first thing to check is that the sync server is actually running on your desktop. Also, make sure that there's no firewall or router configuration that blocks Mnemosyne's traffic. It's best to try the setup above with two computers on your home network, and make sure it works there.

If you also want to use e.g. a server on your home network and a client at work, you will probably need to configure your internet router at home to forward the port Mnemosyne uses (by default 8512) to your server. Consult your router documentation for this.

You can also contact us for support [here](#) [5].

## Alternatives

If for some reason you can't or don't want to use Mnemosyne's built-in sync mechanism (e.g. because you can't keep your server running all the time), for desktop clients alternatives like Dropbox work (in combination with starting Mnemosyne with the `-d <datadir>` option to set a custom datadir, as described [here](#) [6].), but will be less efficient. However, make sure you sync the entire Mnemosyne data directory (under Windows e.g. `C:\Users\<your user name>\Application Data\Roaming\Mnemosyne`), and not just the database file itself, otherwise the statistics you submit to the science server will get confused. Also, make sure that you don't leave two copies of Mnemosyne running at the same time on different machines, as this will cause corruption and issues with the science log upload.

## Advanced features

## Keyboard shortcuts

Many keyboard shortcuts are available when doing repetitions and entering data. Here's a non-exhaustive list:

- Enter, Space, Return: default action (mostly show answer)
- Number keys 0-5: grade card. Any number key can also be used to show the answer. The `` key (to the left of the '1' key) can also be used as an



alternative for grade 0.

- When adding cards, use Ctrl+number key to give the initial grade.
- In the review window, when cards are too big to fit in the window, use PgUp, PgDown to scroll the card contents
- When starting 'Preview cards' from the card browser, you can use PgUp, PgDown to preview the previous/next card in the browser selection.
- Ctrl+R: Replay sound

In text fields, the standard cut, copy, paste, undo and redo shortcuts are available.

## Custom data directory

Mnemosyne can use any custom data directory.

For Linux and Mac OS X, just use the -d option at the command line:

```
mnemosyne -d /foo/bar
```

For Windows, open a command prompt (Start-> All Programs-> Accessories-> System-> Command Prompt) and type:

```
"C:\Program Files\Mnemosyne\Mnemosyne.exe" -d your_custom_data_dir
```

Alternatively, you can create a shortcut on your desktop, right-click it, choose "Properties" and under "Target" add the -d argument.

## Advanced preferences

To avoid cluttering the interface, only the most frequently used options are listed on Mnemosyne's configuration screen. For advanced options, you can edit the config.py file to exercise a fine-grained control over the program's behaviour. Do let us know if you find you really need to use a certain option a lot. In that case, we can consider moving it to the main interface.

The config.pyfile can be found in the following locations:

- Windows: C:\Users\<your user name>\Application Data\Roaming\Mnemosyne (hidden directory)
- Linux: ~/.config/mnemosyne/
- OSX: ~/Library/Mnemosyne/

Here is an example config.py file:



```
# Mnemosyne configuration file.

# This file contains settings which we deem to be too specialised to be
# accesible from the GUI. However, if you use some of these settings,
# feel
# free to inform the developers so that it can be re-evaluated if these
# settings need to be exposed in the GUI.

# Science server. Only change when prompted by the developers.
science_server = "mnemosyne-proj.dyndns.org:80"

# Set to True to prevent you from accidentally revealing the answer when
# clicking the edit button.
only_editable_when_answer_shown = False

# Set to False if you don't want the tag names to be shown in the review
# window.
show_tags_during_review = True

# The number of daily backups to keep. Set to -1 for no limit.
backups_to_keep = 10

# Start the card browser with the last used column sort. Can have a serious
# performance penalty for large databases.
start_card_browser_sorted = False

# The moment the new day starts. Defaults to 3 am. Could be useful to change
# if you are a night bird. You can only set the hours, not minutes, and
# midnight corresponds to 0.
day_starts_at = 3

# On mobile clients with slow SD cards copying a large database for the
# backup
# before sync can take longer than the sync itself, so we offer reckless
# users
# the possibility to skip this.
backup_before_sync = True

# Latex preamble. Note that for the pre- and postamble you need to use
# double
# slashes instead of single slashes here, to have them escaped when Python
```



```
# reads them in.
latex_preamble = "\\\"\\\"\\\"\\\"\\documentclass[12pt]{article}
\\\"\\\"\\\"\\\"\\pagestyle{empty}
\\\"\\\"\\\"\\\"\\begin{document}\\\"\\\"\\\"\\\"

# Latex postamble.
latex_postamble = "\\\"\\\"\\\"\\\"\\end{document}\"

# Latex command.
latex = "latex -interaction=nonstopmode"

# Latex dvipng command.
dvipng = "dvipng -D 200 -T tight tmp.dvi"
```

## Memory research

### Aims of Mnemosyne memory research

The first thing we will investigate is how well our scheduling algorithm performs, how robust it is with respect to late revisions, etc.

There are several similar programs out there, implementing different spaced repetition algorithms with various levels of sophistication. However, most of these programs are commercial, and therefore there is no real independently verifiable data that e.g. algorithm A outperforms algorithm B. In order to get such data in a statistically relevant way, one needs two things:

- A large number of participants.
- A study which has no commercial bias.

These two needs are best served with open source software. As Mnemosyne is completely free and will always remain so in the future, there is no barrier for new users to participate. Also, thanks to the internet, we can easily gather the anonymous data, without requiring any user intervention (after they gave their initial permission, of course). Secondly, since we have no commercial interest, there is no need for us to claim that the algorithm in a next (expensive!) version is really better than the one in the version you already bought.

The Mnemosyne Project has been collecting data since 2006. Looking to the future, we would like to continue to collect data over a very long time span (years and hopefully decades). This could potentially give us very valuable insight into the nature of long-term memory and the ultimate performance of spaced repetition.



Due to time constraints, at the moment we are no longer accepting any further collaborations to analyse the data. This could change in the future, however.

## The Mnemosyne algorithm

The Mnemosyne algorithm is very similar to [SM2](#) [7] used in one of the early versions of [SuperMemo](#) [8]. There are some modifications that deal with early and late repetitions, lapses, and also to add a small, healthy dose of randomness to the intervals.

Supermemo now uses SM11. However, we are a bit skeptical that the huge complexity of the newer SM algorithms provides for a statistically relevant benefit. But, that is one of the facts we hope to find out with our data collection.

We will only make modifications to our algorithms based on common sense or if the data tells us that there is a statistically relevant reason to do so.

## How we collect anonymous data

Contributing data to the Mnemosyne project is your choice; you may use Mnemosyne without ever transmitting any data back to our servers. If you select to share your anonymous data with us, we will certainly appreciate your contribution to our research.

When you select to send us anonymous data, the Mnemosyne software assigns you a random number as identification, which cannot be traced back to you.

Also, your question/answer pairs are identified only as numerical IDs, and contain no information about the text of the cards.

So, you can safely use Mnemosyne to help you remember to the number of your safe! If you want to see for yourself the data that is uploaded, take a look at the file `log.txt` in the Mnemosyne data directory.

## Online access requirements

Even if you select to share your anonymous data with the project, you do not need to be online to use the program. The Mnemosyne software will only upload data when there is enough log data to send to the server (64K uncompressed).

If you are offline at that time, Mnemosyne will simply try again to upload the next time you start the program.

## Website feature - sharing cards



The Mnemosyne website allows you to share card collections that you have prepared with the wider Mnemosyne community.

## Preparing to Share Your Card Collection

To share your card collection on the website, please use the following approach.

1. **Organize your card collection using tags.** Tags allow you to assign categories to your cards. You usually only want to export cards with certain tags, so make sure to add relevant tags when adding cards.
2. **Ensure that the cards to export are the only active cards in your database.** Mnemosyne 2 exports all active cards. Often, you will want to export a sub-set of your cards, not your entire database. To deactivate cards, select *Cards -> Browse Cards* from the menu. In the window that appears, uncheck "All tags" under "having any of these tags." Then, check the checkboxes for the tags of the cards that you wish to export.
3. **Export your cards.** Select *File -> Export* from the menu. As the file format, *2.x \*.cards files* should be selected by default. For the file to export to, choose *Browse* and assign a file name. Then click OK.
4. **Enter metadata.** In the window that appears, enter the name of your card set (you will also use this name on the website) as well as your name, e-mail address, and the tags that the cards should have when imported into another user's card database. You may also add notes and revision information.
5. [Register for or log in to the Mnemosyne website.](#) [9]
6. **Select [Add a Card Set](#) [10] from the menu.**
7. Complete the form with the requested information.

Thank you in advance for contributing back to the Mnemosyne Project!

## Importing Card Collections

1. Download a card collection from the website.
2. Open Mnemosyne.
3. Select *File -> Import* from the menu.
4. As the **File format**, make sure that *Mnemosyne 2.x \*.cards files* is selected.
5. Select the card collection you downloaded as the **File to import from**.
6. Usually, you do not need to enter anything into **Add additional tag(s) to cards**.

## Why do I have to license my content under a Creative Commons license?

In order to ensure that the Mnemosyne Project has the legal right to host all uploaded card collections, as well as to make it clear which rights that users enjoy with respect to such collections, all card collections must be licensed under the

---



Creative Commons Attribution-NonCommercial-ShareAlike license.

At its simplest, the Mnemosyne project and card collection users can:

- Copy and share the card collection freely.
- Edit the card collection and share their edits.

In exchange, the Mnemosyne Project and users agree to:

- Credit the original author(s).
- Not use the work commercially.
- Share any changes made to the card collection under the same license as the original card collection.

This Creative Commons license is very similar to the GPL, which is the software license under which the Mnemosyne software itself is made available.

Please note that this is a non-exclusive license; you are free to license your card collection under different terms to other individuals/organizations or other websites. However, to add your collection to the Mnemosyne website, you must agree to license your collection to the Mnemosyne Project and its users under the terms of the Creative Commons license.

Reference: [Read a "plain English" version of the restrictions imposed by the Creative Commons license used by the Mnemosyne Project.](#) [11]

## **Can I add cards to the website that are based on the vocabulary list in a textbook?**

Yes, so long as you do not infringe on the copyright of the textbook author. In general, there should be no problem with adding cards that use the vocabulary lists and ideas from textbooks. However, if you are copying large sections of a textbook verbatim, this is probably a violation of the author's copyright. Please do not add such card collections to the Mnemosyne website.

## **My Helpful Content**

In order to show which pieces of contributed content (card collections, plugins, and scripts) are the most popular, registered users can indicate which content they found helpful by clicking the "helpful" link for a given piece of content.

By marking the content that you use as helpful, you can assist the Mnemosyne community in finding the most useful content.

The content you mark as helpful will be saved in the *My Helpful Content* list, which will be displayed in the sidebar when you log in.





## Backing up and restoring

Your Mnemosyne data represents a long-term commitment to learning. If you are serious about using Mnemosyne as a learning tool, you should frequently back up your data. Losing your Mnemosyne data after months or years of use could be tragic. Don't let it happen to you!

Mnemosyne creates automatic backups which it stores in its data directory. You can revert to these backups using the 'File' 'Open' menu, and go into the 'backups' directory in your data directory. The filename reflects the date of when the backup was taken

However, these automatic backups will not help you in case your hard drive crashes, so you should backup this entire data directory (which also contains your old logs and your media files) to a different location too. Here is the location of that data directory:

- Windows: C:\Users\<your user name>\Application Data\Mnemosyne , or C:\Users\<your user name>\AppData\Roaming\Mnemosyne depending on your Windows version. This is a hidden directory, so you might want to change your file explorer settings.
- Linux: ~/.local/share/mnemosyne and ~/.config/mnemosyne/
- OSX: ~/Library/Mnemosyne/

## Android client

Some topics related to the Android client:

### Syncing problems

In case you run into syncing problems, it's always best to start again from scratch, i.e. after deleting /sdcard/Mnemosyne. If you still have troubles, contact us at [Google Groups page](#) [5] with the exact error message you're getting, and we'll be more than happy to help.

### Use default.db

At the moment, the Android client only supports syncing the default database. If your cards are in multiple databases, you can use File - Import to import all your



other \*.db files into default.db, and then use 'Activate cards' and saved sets to only study parts of your cards.

### Can I store my database on an external SD card?

Maybe. Android is notably fractured when it comes to dealing with SD cards. By default, Mnemosyne will store its database in a directory returned by `getExternalStorageDirectory()`, which typically is `/sdcard`. However, on some devices this is still internal storage, not external storage.

If you want to use a different location, create a file `datadir.txt` in `/sdcard/Mnemosyne` with a line containing the required `datadir`, e.g.:

```
/storage/3738-3234/Android/data/org.mnemosyne/files
```

For permissions, it's very important that the path ends with `Android/data/org.mnemosyne/files`. Then, you can copy/move the other files from `/sdcard/Mnemosyne` to the new `datadir`, so that e.g. `default.db` sits right under the `.../files/` directory.

### Running from an USB drive

First, copy the Mnemosyne program directory from `C:\Program Files\Mnemosyne` to your USB drive, and then copy your data directory to inside the Mnemosyne program directory on the USB drive.

Your data directory is usually `C:\Users\<your user name>\Application Data\Mnemosyne`, but depending on your Windows version and setup, it could also be `C:\Users\<your user name>\AppData\Roaming\Mnemosyne`, or a different variant of that. Note that this directory is typically hidden, so you'll have to configure Windows Explorer to also show hidden files.

Alternatively, you can start Mnemosyne with the `-d` option to specify where the data directory is located, e.g. `F:\Mnemosyne\mnemosyne.exe -d F:\mnemosyne_data_dir`. This method has the disadvantage however that it's not robust against drive letter changes.

If you have Mnemosyne both on your USB drive and on your hard drive, make sure that you start the correct version. Starting the program on your hard drive will use the data directory on your hard drive, and starting the program on your USB drive will use the data directory on your USB drive. If you mix these two up, you will get two diverging copies of your data.



# Tips for creating good flashcards

The following are some tips that you might find helpful when creating your own flashcards. The advice is somewhat geared towards language learning flashcards, but could be useful for other fields as well.

- Make sure the answer of your flashcard is only a single piece of information. If the card asks you to recall multiple things at the same time, the card is doing double duty.
- Make sure there's enough relevant context for vocabulary. Rather than learning isolated words, prefer to use chunks or even sentences. That way you avoid using a word in a wrong context
- To reconcile the two previous points, make use of Mnemosyne's Sentence card type. E.g. if you put this in the 'Sentence' field: "La [casa:house] es [grande:big]", you'll get three sister cards with the following questions: "La casa es grande", "La [house] es grande", "La casa es [big]"  
.
- Reviewing flashcards should only be a small part of your language learning activities. Make sure to have enough actual interaction with the language (listening, reading, speaking, writing, ...). Be aware that reviewing flashcards is a highly artificial activity, which does not always directly translate to actual language fluency.
- If you've been using Mnemosyne for long time, and your reviews pile up, don't hesitate to use the option to stop showing cards after they reach a number of successful repetitions, especially if you have lots of interaction with the language. If the words pop in your actual use of the language, that will act as a natural revision system. If they don't, then perhaps these cards were not relevant to begin with.

## Mnemosyne and multiple computers

If you want to transfer your cards from one computer to another, the 'File - Export' functionality is not what you should use, as this is meant for sharing cards with other people and this will not export your own learning data.

In case you want to transfer your data from an old computer you will no longer use, it's enough to backup Mnemosyne's data directory and copy it to your new computer. More info about the location of the directories etc. [here](#) [12].

If you still want to review your cards on both computers, the sync mechanism is the way to go. More info [here](#) [13].



**Source URL:** <https://mnemosyne-proj.org/help/index.php>

### Links

- [1] <https://groups.google.com/d/msg/mnemosyne-proj-users/uDprmAH7vJs/aroEmd7G2U0J>
- [2] <http://www.miktex.org/>
- [3] <https://mnemosyne-proj.org/advanced-preferences.php>
- [4] <http://developer.apple.com/qa/qa2001/qa1067.html>
- [5] <https://groups.google.com/forum/#!forum/mnemosyne-proj-users>
- [6] <http://mnemosyne-proj.org/help/changing-start-directory.php>
- [7] <http://www.supermemo.com/english/ol/sm2.htm>
- [8] <http://www.supermemo.com>
- [9] <http://mnemosyne-proj.org/mp>
- [10] <http://mnemosyne-proj.org/node/add/card-set>
- [11] <http://creativecommons.org/licenses/by-nc-sa/3.0/>
- [12] <https://mnemosyne-proj.org/help/backups.php>
- [13] <https://mnemosyne-proj.org/help/syncing>