

Defining an Inflection Dictionary

The description below explains how to set up the Inflection Dictionary. Setting up the Simple Dictionary is straightforward.

Foreign Language Words Database File and Signature

The program allows you to create databases of words. You can create databases for many languages. The concept of databases is very easy but it is important that you understand it. Each database consists of two files that are automatically created when you select New DB... from the DB menu: they are the main file and the keys file. These two files are necessary to access the database and they should always be kept together. When you select the New DB... menu item, you are asked to enter a DB Signature. The DB Signature is NOT the name of the database file. It is an arbitrary string (for instance: French Verbs by John Brown) that identifies all databases derived from the same parent. The signature is visible in the Rules Generator window.

Example

In the picture below you can see a diagram that explains the role of the database signature. An author creates two databases with the signatures French Verbs and Greek Verbs respectively (1). In fact there are two files for each database but in the diagram we've skipped the "keys" files. The author can then distribute these databases to other users who can add new verbs and comments to the original databases (2). So now there are several files with the signature French Verbs or Greek Verbs. Then somebody can collect these databases from the other users and merge them into a single huge database with everyone's verbs and comments in it, by using the Add DB... option in the "Verbs and Nouns" application to merge the databases automatically (3). But it is important that the Greek Verbs database is not merged with the French Verbs database by mistake. This is why the original databases (1) have their signatures, so the daughter databases (2) can inherit this signature (even if the file names for these daughter databases differ).

Access Code

After you've entered the new signature you are asked to enter the access code. This acts as a password known only to the author of the database. Knowledge of this code allows you to define the inflection rules for the words. It is important that all daughter databases share the same set of rules (because of the automatic merging feature). This is the reason why a database user can add words and apply rules to words but cannot modify the rules. Only the author of the database can change the rules, so the compatibility of the daughter databases is preserved.

File Name

Then you should enter the file name for your database in a standard dialog box. Two files will then be

created (for example, if you enter the name Verbs, then files with the names "Verbs" and "Verbs keys" will be created). The database name is not important and can be changed. If you change the name of the database file in the Mac operating system, you must rename both (main and keys) files so that the name of the keys file is the same as the main file name plus the word "keys". For example you could change the file names of "Verbs" and "Verbs keys" to "Nouns" and "Nouns keys"

DB Settings and Rules

- **Rules**

After setting-up the new database the next thing is to specify the inflection rules for the regular verbs or nouns. Let's assume that you want to construct a database of verbs.

/M is an abbreviation for Tense/Mood combination. To define a new T/M category, press the button New T/M. The predefined category name is Present/Indicative but you can change this name (like all names you'll enter in the future) by using the Rename T/M button. Typical T/M categories are: Past/Indicative, Future/Indicative, Present/Imperative, etc. You can split the conjugation of regular or almost-regular verbs into main patterns. In the pattern name box, you should enter the name or number of the pattern you intend to use. There can be one or more sub-patterns for the suffixes of the main conjugation pattern. The 4 buttons at the bottom of the window allow you to define sub-patterns for the conjugation. The predefined sub-pattern has the name "1" but you can rename it using the Rename button. Then you have to define rules for this sub-pattern. You have to enter the rules inside the text boxes at the right side of the window.

To enter the rule you should:

- choose the desired T/M (from the pop-up menu);
- fill the 6 boxes at the left with prefixes if needed (prefixes are usually used in the compound tenses and they consist of an auxiliary verb in an appropriate form + a space at the end);
- choose the stem (you usually choose stem 1 but for some languages - Polish for example - the stem for the present tense differs from the stem for the past tense and then you will have to enter more

stems for each verb that you add to the database); if you need more stems for a single paradigm then choose Multiple from the Stem pop-up menu;

- fill the 6 boxes at the right with suffixes (if alternate forms of suffix exist then separate them with a comma without a space). The complete form of the verb will be constructed by the program in the following way:

prefix+stem(1...6)+suffix. There are 6 check boxes on the right side. If a form is not available for this T/M (see also "defects" filters) then you should uncheck the appropriate check box. You should repeat all these steps for all available T/M modes (you change them in the upper pop-up menu).

After you have entered the whole rule you should click the Enter Rule button to save this pattern (rule) to the disk.

Now you can press the New (or New via Copy - useful if the new rule is similar to the selected one - it copies the currently selected rule but not saves it) button to enter a new sub-pattern name and repeat all the above steps to define the rules for the next sub-pattern.

The text in Pattern name box is visible in the main Browse Window for information purposes only. A pop-up menu of rules (Rule) is provided in the Entering Verbs/Nouns window to allow you to assign the correct rule for the newly-introduced regular verb or noun. See the next chapter for information on Adding and Changing Words.

I suggest that you should create two separate databases: one for Verbs and another for Nouns. The T/M menu for the nouns database will usually contain only two items for the declension pattern: singular and plural. I plan to introduce the possibility of using the two databases (verbs and nouns) simultaneously from the same window in future versions of this program.

- **Defects & Fonts**

There is a support for the "defective" words (i.e. words that do not have some forms; examples: nouns that have only singular form, verbs that cannot be used in 1-st person etc.). You can define many 'filters' and give them names. When you add a regular but "defective" word to the database then you can just assign the required defect name to it.

You should also choose the default font for the new database. There is a pop-up menu for this at the bottom of the window. This font is applied to all foreign language words (except for the comment box where the standard Font/Size/Style Edit menus apply).

- **Titles & Refl. Verbs**

The Titles item allows you to enter words that precede the words in the paradigm (like: I, you, he ... etc.). If you begin the T/M name with "." then the ". Extra" titles are applied (otherwise the "Standard" titles are default).

Distributing Verbs or Nouns Databases

You can create the new database for your personal use or for distribution to other users of the "Verbs and Nouns" application.

You can distribute the database as a commercial, shareware or freeware package. In the first two cases you might wish to prohibit users from full access to the database until they pay the registration fee. This can be done by choosing the menu item Password in the DB menu. You have to enter the password and press OK. After that users can browse only the first 50 words from the database.

To get full access to the database, a user has to select the Password menu item and enter the password. After that the database becomes fully accessible.

If you want to distribute your database I'd be glad if you'd let me know about it so I can list your database in future versions of the program documentation. You cannot distribute the registration number for the "Verbs and Nouns" program itself. If someone wants to use this program with all the features enabled then they should always register the "Verbs & Nouns" application with me.

The opportunity to merge databases that have been updated by different users makes exchanging databases between users very useful.