

XLMSoft Database is your personal database manager for Android. Manage all of your personal data with a single app! Fast and easy to configure, easy to use! With this app you will quickly get an overview over all your collections (e.g. your CD collection, your DVD & Blu-ray collection, your collection of books or video games, your wine cellar). Keep track of your purchases, manage inventory or task lists. The possibilities are endless.

FEATURES:

Create as many databases as you like.

Several types of data fields available to store your information: single-line and multi-line text, autocomplete text, email, hyperlink, phone number, single- and multi-select text, various number formats, date, time (time-of-day or duration), checkbox value, alphanumeric value, rating.

You can add an arbitrary number of images to every record.

Sort a database by a up to three fields.

Powerful search with wildcard characters and text highlighting.

Create and save filters with as many conditions as you need.

Easily import data from CSV files.

The freely configurable list view mode lets you display your data in tabular form just like on your PC.

Backup function.

MANUAL:

Creating a new database

Click on „New Database“ or open the menu and select „New Database“ to start creating a new database. Enter a name for the database at first (e.g. „My CD Collection“), then click on „Continue“.

A database consists of a number of records. If you manage your CD collection, you would create one record for every CD. All these records contain identical data fields to store all the pieces of information you want to maintain about your CDs (e.g. artist, title, length, buying date, price). Every data field has a name and a type (e.g. „Artist“ and „Text“). The type of a field determines what kind of information can be stored in it:

Text (single-line):

A single-line text.

Text (autocomplete):

A single-line text. Completion suggestions are automatically shown while the user is typing. The list of suggestions is generated from all entries into this field made in the past. The user can simply select one of the suggestions.

Text (multi-line):

A text that can span multiple lines.

Alphanumeric value:

This type is commonly used to number records consecutively. Entries can consist of

letters, digits and special characters (e.g. „A-001“). A sequence of digits placed at the end of an entry („001“ in this example) will automatically be incremented to provide a default value for the next record, if the auto-increment feature is turned on.

Email:

A single-line text containing an Email address.

Hyperlink:

A single-line text containing a Website address (URL).

Phone:

A single-line text containing a phone number.

Text (single-select):

The user can select one text from a list of possible values.

Text (multi-select):

The user can select an arbitrary number of texts from a list of possible values.

Number (integer):

An integer number.

Number (fixed-point):

Numeric value with a fixed number of decimal places.

Number (real):

Numeric value with a variable number of decimal places.

Calculation:

A number automatically calculated from other values of the same record using a formula (PRO version only, see chapter „Calculation fields“).

Date:

A calendar date.

Time:

A value specifying a time of day or a duration. Various formats are available (12- and 24-hour clock times, HH:MM.SS, MM.SS).

Yes or No:

Boolean value represented by a check box.

Rating:

A rating ranging from zero to five stars.

To create a data field, enter a name and select the appropriate type, then click on „Add New Field“. For some field types you will now be prompted to be more specific (e.g. select a format, enter possible values or the number of decimal places), otherwise the new field will immediately show up in the list below „Existing data fields“. This list shows all data fields already created. To change the properties of an existing field, long-click on its list entry and select „Edit“ from the context menu. The „Delete“ command in the context menu can be used to delete a field. If you want to change the order of the data fields, you can achieve this by moving a field up or down in the list. Select „Move up“ or „Move down“ from the context menu to do so.

Images:

You can add an arbitrary number of images to each record. No special data fields are required for this, so you do not have to take care for this at all. If you do not want to add images to your records you can hide the image area in record view mode by changing the settings there.

The edit area can be hidden to free up more space for the data field list by touching the small triangle. Touching the triangle once more will make the edit area appear again. There are also commands in the menu to do this.

Finally you can create the new database by selecting the menu command „Create Database“.

Editing the structure of existing databases

You can add new fields to existing databases, edit the properties of existing data fields, change their order or delete no longer needed fields at any time. To edit the structure of a database, click on the middle of three buttons (the one with the yellow pen) next to the name of the database in the database list. This list appears right after you start the application. If you are at a deeper level, press the back button a few times until it appears.

A list containing all existing data fields appears. You should be familiar with this list as you have seen it before when you created the database.

To change the properties of a field simply click on its list entry or open the context menu by long clicking and select „Edit“. You can change the name of the field and other characteristics (e.g. the format of date and time values or the selectable values for selection fields). The only thing you cannot change is the basic field type. Be careful when you delete or change selectable values of selection fields. Already slight changes of an existing value will remove it from all records.

Long click on a field and select „Delete“ from the context menu to delete a data field and the corresponding entries from all records. Use „Move up“ und „Move down“ to change the sequence of the data fields.

If you want to change the name of the database or add new fields you first have to display the edit area by touching the small triangle or by selecting the corresponding command in the menu. The next steps are the same as described in the previous chapter. Select „Save changes“ from the menu when you are ready. Until then you can dismiss all changes with the back button.

To delete a database with all its records go to the database list and click on the button with the red diagonal cross in the corresponding row.

Calculation fields

Calculation fields contain numerical values that are automatically computed from the values of other numerical data fields of the same record (available in PRO version only). You only have to specify a formula (calculation expression) that contains the names of other fields in square brackets as variables. The following operators can be used: „+“ (addition), „-“ (subtraction), „*“ (multiplication), „/“ (division). The calculation expression is evaluated from left to right, but multiplication and division are calculated before addition and subtraction. Subexpressions between parentheses „(“ and „)“ are always evaluated first. A formula may also contain numerical constants and the following functions:

abs(X): The absolute value of X.

ceil(X): The smallest integer greater or equal X (ceiling).

cos(X): Cosine of the angle X measured in degrees.

floor(X): The biggest integer smaller or equal X (floor).

lg(X): Common logarithm (base 10) of X.

ln(X): Natural logarithm (base e) of X.

max(X;Y): The greater value of X and Y (maximum).

min(X;Y): The lesser value of X and Y (minimum).

pow(X;Y): X raised to the power of Y.

round(X): The closest integer to the value X.

sin(X): Sine of the angle X measured in degrees.

sqrt(X): Square root of X.

tan(X): Tangent of the angle X measured in degrees.

Separate the arguments X and Y of a function by a semicolon. When you enter a calculation expression you can insert data fields and functions with the „Add“ button at the current cursor location. All spaces in a formula will be ignored, when it is evaluated.

Examples for calculation expressions:

[Field A]+[Field B]

[Field A]-2*[Field B]*[Field C]

(([Field A]+10)*(min([Field B],[Field C])))

max([Field A]/3;sqrt([Field B]+100))+17

Creating a new database from a CSV file

You can create a new database from a CSV file and import records from this file in one easy step (PRO version only). CSV files are normal text files with the extension „.csv“ or „.txt“. Each line contains all the fields of a single record, whereby the fields are separated from each other by a special character (tab, semicolon or comma). The first line of the file must contain the names of the data fields. Otherwise it is not possible to name the fields of the new database automatically.

First you have to copy the CSV file into the directory „XLMSoft DB“ of your device's memory card. When you are done with this you can select „New Database from CSV File“ from the menu. You will be presented a list from which you can select the file. Choose the separator char and text encoding used in the file in the next dialog. After that the database structure will be generated automatically. You can click on the data fields in the list to change their names, types and formats (see chapter „Creating a new database“ for details about data types). Finally enter a name for the new database and click on „Create“ to generate the new database and import records from the CSV file.

Hints:

If image files are referenced in the CSV file, these must be copied into the „Pictures“ subdirectory. A column of the CSV file must then contain each record's image filenames (without paths, e.g. „image1.jpg“). If there is more than one image per record, filenames must be separated by a secondary separator char (see below). Select „Images“ as field type for this CSV column.

Date, time and number values in the CSV file must match the specified format. The selectable texts of single-select and multi-select text fields will be auto-generated from the values in the CSV file. Use the secondary separator char (see below) to separate texts for multi-select text fields in the CSV file. For yes-or-no fields the following values are accepted as yes: „1“, „Yes“, „Ja“ (case-insensitive, all other values are interpreted as no). For rating fields the CSV file must contain values from 0 to 5 (number of stars).

Secondary separator char: Use the comma as the secondary separator char. If the comma is already used as primary separator char, the semicolon is accepted as secondary separator char.

If the first line of the CSV file does not contain the names of the data fields, select „Start Import at Line 1“ in the menu and specify the names by yourself.

You can hide the example values shown in the data field list by deselecting „Show Example Values“ in the menu. The example values originate from the second line of

the CSV file.

This feature is fully functional only in the PRO version, but you can test it in the free version!

Working with databases

To open the database you want to work with, go to the database list and either click on the database name or on the button with the curved green arrow next to it. You can look at the records of a database in two different view modes, list view and record view.

List view mode

All records of the database appear in a scrollable list, whereby each list item can display the content of up to twelve data fields. You can choose between three different layouts for these twelve fields. Select the one that best suits the screen size of your device or switch between them regularly. The different configurations are: one to three rows (each with up to two four columns), one or two rows (each with up to six columns), one row with up to twelve columns. The last variant is especially useful for tablets in landscape mode to display your records in tabular form. On a small screen you will usually use just a few of the twelve fields to display only the contents of the most important data fields and switch to record view mode everytime you want to see more. You will learn how to configure list view mode in the next chapter.

Click on one of the records in the list to show it in record view mode or long click on it to open a context menu. Here you will find commands to edit or to delete the record. Click on one of the buttons in the upper right corner to create a new record (green plus), to sort the records (vertical arrows), to start a search (loupe) or to create a filter (funnel). You will learn more about sorting, searching and filtering in later chapters. By touching the small triangle you can display a header area above the list containing the names of all the data fields visible in the list. To hide the header area again (and let the button area reappear) simply touch the screen somewhere inside this area.

Record view mode

In record view mode only one record is shown at a time. The area in the upper left corner is usually used to display the images belonging to the record. You can insert an image into a record by selecting it from the memory card or (PRO version only) by taking a photo with the built-in camera.

In the lower part of the screen is a list with all data fields and their content. Clicking on an item in this list lets you edit the field's content. This is the quickest way when you only want to make one or two changes to a record. Clicking fields of type Hyperlink, Email or Phone will let you choose between more options. Long click on a field to open a context menu with commands to make further adjustments, e.g. you can force the display of empty fields that are usually not shown or use a bigger font for important data fields.

Open the menu and choose „Settings“ to configure record view mode so that it best suits your needs. You can change the size of the image area or hide it completely, and you can switch to a two-column display mode, where field names and field entries will be shown in separate columns. You will also find settings for taking photos with the built-in camera (PRO version only).

You can browse through the images of a record by swiping the image left or right or by touching its right or left border. Touching an image in the middle will enlarge it. A context menu can be opened by long clicking an image. You will be presented a list of options to add additional images, replace or remove the current image or even to delete the image file from your device's memory card.

The upper right of the screen is occupied by six buttons. The button with the green plus lets you create a new record, while the button with the yellow pen lets you edit the current record. To delete the current record click on the button with the red diagonal cross. The arrow buttons can be used to navigate to the next or previous record. To jump to a specific record simply touch the current record number below these buttons and enter the record's serial number. The button not yet mentioned switches back into list view mode.

Totals, averages etc.:

By selecting „Totals and Averages“ from the menu (PRO version only) you can display total, average, maximum and minimum values for all numeric data fields including time and date fields as well as statistics for rating fields and yes-or-no fields. If a filter or a search is active these values will only be computed over the records that are currently accessible.

Advice for editing entries:

Date and time-of-day values can either be entered with the keyboard or selected from a dialog, which can be opened by clicking the button to the right of the input field.

You can assign a value to a rating field simply by touching a star. The rating can be reset to zero stars by touching this star a second time.

When the database list is visible, you can select „General Settings“ from the menu to determine the decimal separator and which keyboard (numeric or alphanumeric) should be used for entering numbers.

Configuring the list view mode

A single list item in list view mode can display up to twelve of a record's data fields, equally distributed across one, two or three rows. Each of these three layouts can be configured individually. Then you can switch between the three variants via „Settings“ in the menu. Alternatively you can decide on one of the three variants once (the one you consider best suited for your data and your device) and configure only this one. Because it is always reasonable to have different layouts for landscape and portrait mode, both modes have to be configured separately. While you are holding your device in landscape mode, all configuration changes you make will only be effective in landscape mode and vice versa. So you can have completely different layouts for both orientations.

Go ahead with the following steps to configure list view mode:

1. Hold your device either in portrait or landscape mode. List view mode must be active.
2. Open the menu, select „Settings“, then select the layout you want to configure: 3 Rows/4 Columns, 2 Rows/6 Columns or 1 Row/12 Columns.
3. Open the menu once more and select „Settings: Configure List View Mode“

At the top of the screen you can see twelve squares symbolizing the twelve fields already mentioned several times. You can also see which of these fields are already used to display the content of a data field. Touch a field to show all of its settings. You can now assign a different data field to this list field or free up the space occupied by the field by selecting [empty] in order to make more place for the other list fields in this row.

To display a whole row in tabular form with fixed column widths, activate „Display in tabular form“ (with this feature turned off the widths of the fields in the list view will vary from record to record, depending on the length of the texts and values that have to be displayed). Now you have to specify the width of every used list field in this row. To do this you can either use the slider or touch the percentage value to the left of it.

Then you can enter an exact value with the keyboard. You specify the width of each field as a percentage of the screen width.

The font characteristics can also be set individually for every list view field. You can choose between three font sizes and select boldface and/or italics as style attributes. Finally you can select one base font size valid for all twelve list view fields.

To save your configuration choose „Save Settings“ from the menu. You also have the option to dismiss all changes.

Sorting

You can sort the records of a database by selecting „Sort“ from the menu. While you are in list view mode you can simply click on the button with two vertical arrows instead. Then select the data field to sort by and either choose „Ascending“ or „Descending“.

You can sort by up to three data fields. To do so you first have to sort by the field with the lowest priority. Then select „Sort“ again and now choose the field with the higher sort priority. You can repeat this a third time to choose the data field with the highest sort priority.

Example: If you want to sort your CD collection first by artist and then by album title, you have to go the opposite way. Sort first by album title, then by artist.

Searching

You can search the current database for occurrences of a certain string. To start a search select „Search and Filter: New Search“ from the menu. While you are in list view mode you can also click on the button with the loupe. Now you can enter the text to search for. You can use the asterisk * as a wildcard character to substitute for any zero or more characters. When you search for „a*I*s“ you will find occurrences of „apples“, „animals“ and „always“ for example.

After a search has been started you will only see those records that contain the search string. In record view mode all occurrences will be highlighted in red. To be able to see all records again you have to switch off search by touching the small loupe symbol, that always appears after a search has been started. You can also choose „Search and Filter: Switch Off Search“ from the menu.

Only text data fields will be searched. Use a filter to search for certain values in non-text fields.

To delete all records containing the search string at one go, you can select „Search and Filter: Delete All Records“ from the menu.

Filtering

By using a filter you can set up conditions that records must meet in order to be displayed. You can specify as many criteria as you want and combine them with AND or OR. Combining them with AND means, that a record must meet all conditions (e.g. Artist contains „Beatles“ AND Medium is „CD“ AND Year of Release from „1965“ to „1968“). When conditions are combined with OR a record must fulfill at least one of them (e.g. Artist contains „Beatles“ OR Artist contains „Stones“ OR Artist contains „Floyd“).

To create a new filter select „Search and Filter: New Filter“ from the menu. While you are in list view mode you can also click on the button showing only the blue funnel. Now select the data field you want to filter on. For text fields you can create

conditions like „contains XYZ“, „begins with XYZ“ or „ist less than XYZ“. For most other field types you can either specify a range of values (e.g. a date must lie between 01/01/2012 and 12/12/2012) or set only one of both borders. After the filter has been created you will only see those records that meet the condition you have set.

You can add further conditions to the filter by clicking on the button with the funnel and the green plus (list view mode only) or by selecting „Search and Filter: Add Filter Condition“ from the menu. On creating the second condition you must select if the conditions should be combined with AND or OR.

To delete all filtered records at one go, you can select „Search and Filter: Delete All Records“ from the menu.

To turn off the filtering function in order to display all records again simply touch the small funnel symbol, that always appears when a filter is active. You can also select „Search and Filter: Switch Off Filter“ from the menu.

You can save filters in order to be able to reutilize them anytime in the future. When switching off a filter you will automatically be asked if you want to save it. You can also save a filter by selecting „Search and Filter: Save Filter“ from the menu before turning off the filtering function.

To reuse a saved filter, click on the button with the funnel and the list symbol (list view mode only) or choose „Search and Filter: Select Filter“ from the menu. A list displays all filters you have saved in the past. Simply select the one you want to reutilize.

A saved filter can be deleted by activating it one last time and then choosing the menu command „Search and Filter: Delete Filter“.

You can combine a search with a filter for even greater possibilities.

Importing and exporting data

You can **import** records from CSV files quite easily. CSV files are normal text files with the extension „.csv“ or „.txt“. Every line contains all the fields of a single record, whereby the fields are separated from each other by a special character (tab, semicolon or comma). The first line of the file should contain the names of the data fields, although this is not mandatory.

Copy the CSV file you want to import into the directory „XLMSOFT DB“ of your device's memory card. If image files are referenced, these must be copied into the „Pictures“ subdirectory. A column of the CSV file must then contain each record's image filenames (without paths, e.g. „image1.jpg“). If there is more than one image per record, filenames must be separated by a secondary separator char (see below).

To import a CSV file you first have to open the database where the import is going to take place. Select „Import and Export: Import from CSV file“ from the menu then (it is recommended to make a backup of the database first). Now you can choose the appropriate separator char and a text encoding. If you are not sure about the encoding you have to try out. If the CSV file comes from a Windows PC it is probably „Windows/ANSI“, otherwise „UTF-8“. Finally click on the button „Select File“. A list with all CSV files in the directory „XLMSOFT DB“ will appear. Select the one you want to import data from. If the first line of the file contains field names that match exactly those in the database, the columns of the CSV file will now automatically be assigned to the right data field. Otherwise you will have to make the assignment yourself by clicking on the list items representing the columns of the file one after another. To make this easier for you the contents of the first line will appear in the list next to the column numbers.

When every column has been assigned to a data field, you can click on „Start Import“. It is possible to specify a line range if only a part of the data in the file shall be imported. If the file contains field names in its first line, the import should start at line two.

Date and time values should match the format specified in the database settings as best as possible. Examine the imported data carefully afterwards to see if all values have been accepted.

For single-select and multi-select text fields only values from the list of selectable texts are imported. All other values will be ignored. Use the secondary separator char to separate texts for multi-select text fields.

For yes-or-no fields the following values are accepted as yes: „1“, „Yes“, „Ja“ (case-insensitive). All other values are interpreted as no.

For rating fields the number of stars has to be present in the CSV file, i.e. a value from 0 to 5.

Secondary separator char: Use the comma as the secondary separator char. If the comma is already used as primary separator char, the semicolon is accepted as secondary separator char.

To **export** the records of a database to a CSV file, select „Import and Export: Export to CSV File“ from the menu (PRO version only). Enter a file name, select a separator char and an encoding. The order of the records in the CSV file is determined by the current sort order. If a filter or a search is active only the currently visible records will be exported. The CSV file will be saved to the „XLMSOFT DB“ directory on the memory card.

Backing up and copying databases

To create a backup of a database, you only have to select „Import and Export: Database Backup“ from the menu. You can accept or change the given filename and click on OK to start the backup process. The backup file will be saved to the „XLMSOFT DB“ directory of your device's memory card.

To restore a database from a backup file go to the database list, open the menu and select „Restore Database“. Then simply choose the file containing the database to be restored. If the original database still exists, a copy of it will be created.

In the PRO version you will be asked what data shall be restored (only the database structure or also the records, the filters and/or the settings). To create an exact duplicate of the original database with the same database structure, all records and all settings, simply leave all checkboxes checked. Otherwise only a part of the database will be restored (e.g. the database structure and the settings). You can use this feature to create a new empty database with the structure of an existing database.

Exclusive features of the PRO version

The PRO version contains no ads.

Create a new database and populate it with data from a CSV file in one easy, automated step.

Add photos to records with the built-in camera.

Export data to CSV files.

Use calculation fields and enter formulas for automatic calculations.

Display statistics with totals, averages, minimum and maximum values.

Enhanced options for copying databases.

Transfer your databases from the free version to the PRO version:

Backup all your databases by selecting „Import and Export: Database Backup“ from the menu after opening them in the **free version**.

Switch to the **PRO version**, open the menu and select „Restore Database“. Choose one of the backup files, leave all checkboxes checked in the next dialog and click the OK button. Repeat these steps with your other databases.