

Manual for ChessTask v2.0

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2004-03-24

You do not have to read the sections that are marked with "+" or "++" if you only want to generate HTML pages with ChessTask. A single "plus" refers to the description of advanced options for both TeX/LaTeX and HTML. The topics marked with two "plus" signs go into some details about the export to LaTeX and TeX/LaTeX itself. If you have been working with ChessTask before and are updating from a version 1.x, please regard the 17 (Changes in v2.0)!

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1 For the impatient

You can not wait to start? Your head is filled with beautiful chess tasks that you want to edit immediately? OK, here we go....

1. Start *ChessTask*.
2. Select a "main title" for your tasks with "**Edit**"/"**Set main title**", e.g. "Tips for pawn endings".
3. Use the leftmost tool button to **insert a new task**. You should now see an empty chess board to the left.
4. Set up the board by repeatedly selecting a chess **piece** and its **color**. With the left mouse button you can set the **selected** piece onto any square of the board. The middle and right button erase a square.
5. Enter the **title of the task**, e.g. "Task 1".
6. Edit the **task**.
7. Provide a **solution**.
8. Now you can go back to step 3 for inserting another task, or continue with the next step.
9. Save the list of tasks with "**File**"/"**Save**". You should use the extension '*.tsk' for *ChessTask* files.
10. Export your tasks to 7 (HTML) or 8 (LaTeX).

2 Language selection

At the moment, *ChessTask* supports the two languages "German" and "English". In the *download area* <<http://www.sourceforge.net/projects/chesstask>> you can find two executables, one with English the other with German as the default language.

No matter which you use, you can always set *ChessTask* to a language by starting it with either

```
ChessTask -english
```

or

```
ChessTask -german.
```

All menu entries, messages and the descriptions for the *Informator* symbols are displayed accordingly then.

The selected language also affects the HTML and *LaTeX* export. For example, if your *ChessTask* file contains special german characters like "ä" you have to set the language to "German". Otherwise, these characters do not appear in the *LaTeX* output (see also 13 (For the experienced *LaTeX* user)).

3 Menus

What follows is the explanation of the single menu entries:

- **File**

- **Open:** A dialog is displayed where you can select the file you want to load. If it is no *ChessTask* file, nothing will happen. Otherwise, all current tasks are deleted and the file is read.
- **Add:** Again, a file dialog is evoked. In contrast to "**Open**" this entry does not delete the current list of tasks, but "adds" the files data.
- **Save:** A file dialog appears and you can select the directory and the filename for your new collection of tasks. As already mentioned in 1 (For the impatient) you should use the extension '**.tsk*' for all of your *ChessTask* files.
- **Delete all:** Deletes all current tasks, so be careful with this one!
- **Quit:** Exits the program.

- **Edit**

- **Set main title:** A small window pops up and you can set the "main" title for the whole list of tasks. You do not have to provide a title here, but if you do, please regard the rules in 6 (Editing title, task and solution).
- **Restore task:** This is sort of an "undo" function. If you "stepped" to a task and start to edit it—i.e. set new pieces onto the board or delete some, clear the board completely or "init" it, change title, task or solution—these changes are not accepted until one of the following tool buttons is selected: **Insert Task**, **Copy Task**, **First Task**, **Back**, **Forward**, **Last Task**. Before, you can select this menu entry and restore the original state of the task.
- **Generate titles:** Starting at the current task, *ChessTask* automatically creates titles of the form "Task 1" for all following entries of the list.

- **Import**

- **FEN file:** A file dialog appears where you can select the directory and filename of an existing FEN file. The stored positions are added to the current list of tasks. For further informations see also 14 (Import of FEN/EPD files).
- **EPD file:** Again, you get a file dialog on the screen. This time, you can import an EPD file. Not only the contained positions are read, but also some of the EPD "commands" like "bm" (Best move) or "pm" (Predicted move) get interpreted and appear as solution of the task. For further informations see also 14 (Import of FEN/EPD files).

- **Export**

- **LaTeX file:** A file dialog appears where you can select the directory and filename for the *LaTeX* file. Normally, *TeX/LaTeX* files get the extension '**.tex*'. For further informations see also 8 (Export to *LaTeX*).

- **ChessCards file:** Exports a special LaTeX input file. The tasks are arranged in a 2x4 grid on each page and after each page with tasks the solutions follow immediately. So if you print them doublesided and cut out the single cards you can train your chess everywhere. For more informations about the fixed format that is used see 8.2 (ChessCards files).
- **HTML files:** Again, you get a file dialog on the screen. This time, you can only select the directory all HTML files are written to. Make sure that you have set the option "**Levels to graphics directory**" to the correct value as described in 7 (Export to HTML).
- **LaTeX directory:** A file dialog appears and you can select the "source" directory that contains the *ChessTask* files you want to export. The extension '**.tsk*' is mandatory, all other files are neglected! The "source" directory may include subdirectories, these are also scanned for '**.tsk*' files. After choosing the "source" directory you get a small info dialog, telling you that you are about to select the "destination" directory now. If you confirm with "OK" another file dialog is shown and you can specify the directory where all the '**.tex*' *LaTeX* files are put during the export. Having done this, a small dialog appears showing the progress of the export operation until it finishes. All *LaTeX* files are output with the settings from "**Export**" / "**Options**". For further informations see 15 (Directory tree export to HTML/LaTeX).
- **ChessCards directory:** Just the same as for the "**LaTeX directory**" export, but the 8.2 (ChessCards) format is used.
- **HTML directory:** The single steps are also the same as for the "**LaTeX directory**" export, only that this menu entry generates HTML files. The HTML settings in "**Export**" / "**Options**" affect the output like they do for the export of a single file. The only exception from this rule is the option "**Levels to graphics directory**". For further informations see 15 (Directory tree export to HTML/LaTeX).
- **Copy LaTeX position:** Here, no file is created. Instead, the current position on the board is copied to the application's clipboard, formatted as *LaTeX* input text. Afterwards you can paste the text into another program, e.g. an editor like "gvim" or "ktexmaker2". With this feature *ChessTask* can help you to edit board diagrams for a *LaTeX* file that deals with chess in general.
- **Copy HTML position:** The same as for "**Copy LaTeX position**" holds, only this time HTML source text is generated. You can paste it directly into a HTML document that you are creating. The HTML code still needs the PNG graphics to work, so make sure that the option "**Levels to graphics directory**" is set to the correct value as described in 7 (Export to HTML) and that a proper "graphics" directory exists.
- **Options:** If not already opened, a window pops up where you can set some options for the *LaTeX* and HTML export. The *LaTeX* options (see 8 (Export to LaTeX)) should be self-explanatory, the meanings of the HTML options are described in 7 (Export to HTML) and 11 (Informator symbols).

- **Info**

- **About:** Displays some general information about *ChessTask*.

4 Toolbar

The toolbar contains the following nine buttons from left to right:

- **Insert Task:** Inserts a new and empty task into the list. This new entry is always appended and gets displayed immediately. If you want to insert a task in the middle of the list use **Copy Task** instead, followed by **Clear Board** or **Init Board** if appropriate.

- **Copy Task:** A new task is inserted right after the current position. The text fields for title, task and solution are empty but the position is copied from the current task. This is useful if you want to edit a series of diagrams that do not differ very much.
- **First Task:** Jumps to the first task in the list, if there exist tasks at all.
- **Back:** Steps one task back in the list, if possible.
- **Forward:** Steps one task forward in the list, if possible.
- **Last Task:** Jumps to the last task in the list, if there exist tasks at all.
- **Delete Task:** Deletes the currently displayed task from the list.
- **Clear Board:** Clears all squares on the board.
- **Init Board:** Initializes the board to the starting position.

5 Selection and setting of chess pieces

In the upper middle of the *ChessTask* window you can see the three "areas" **Pieces**, **Color** and **Selected**. **Pieces** contains all the normal chess pieces. I added two symbols, a cross and a circle, that can be used for marking special points on the board. These could be: "weak points", "entry points for the king", "the correct square for a checkmate" a.s.o.

You can select a piece by clicking on it with the left mouse button. Then it gets displayed in the field **Selected**.

Color offers the two colors "Black" and "White". If you change the color by clicking on it with the left mouse button, the selected piece is altered accordingly in the **Selected** area. The cross marker and the circle always look the same, regardless of their color.

Selected displays the currently selected chess piece.

You can set this piece onto the board by pointing to a square and clicking the left mouse button (If you do not see a chess board to the left, insert a new task by using the leftmost toolbutton **Insert Task**). Nonempty squares get overwritten. The right and middle mouse button erase a square.

6 Editing title, task and solution

If you want to edit one of the text fields **Title of the task**, **Task** or **Solution** you have to "activate" it first by clicking on it with the left mouse button. The cursor keys, "Backspace", "Delete" and "Return" work as expected. If a field already contains some text you can also use the mouse to position the cursor.

While entering your text, remember the following rules, please:

1. Several connected "spaces" or "blanks" are treated as **one** blank only. This means that you can not insert additional space between words.
2. (Only for the multiline text fields **Task** and **Solution**) You can start a new paragraph in your text by inserting an empty line. As for the blanks, several connected newlines are treated as **one**. Thus, you can not insert additional space between paragraphs.
3. The following characters should not be used in your text because they have a special meaning, either in *LaTeX* or in HTML: "#\$&~_`%{}|\>|" (This restriction will be loosened somewhat in 10 (Advanced text options) and 11 (Informator symbols))

4. Another special character is the double quote (""). You should use single quotes instead, like in the following example:

```
This is an “example”.
```

It is allowed to leave empty some or all text inputs of a chess problem. Sometimes, you just want to describe something, using a chess diagram. So you put up a problem, but leave the **Solution** empty. You might perhaps want to leave out the **Title of the task** and the **Solution** in order to create a series of diagrams with only text between them. If you additionally provide no **Task** you get only the diagram.

If you did not specify a **Title of the task** the equivalent link in the HTML output gets named "No title", such that you have something to select in the index...

Another interesting—and useful—feature is the checkbox **Output Diagram** in the middle of the *ChessTask* window. This option is "checked" by default for every task. If you want to write a short introduction to your tasks—like I did in the file *example.tsk* <.../examples/example.tsk> (see the *examples* <.../examples/example.html>)—you can "uncheck" this box and no diagram is output.

7 Export to HTML

Before you export your *ChessTask* file into HTML format, make sure that the correct options are set.

If you select "**Export**"/"**Options**" you get a small window with the available **HTML** options:

- **Export to single file:** If this box is "checked" all tasks of your list are written into a single HTML file ‘index.html’ and the solutions likewise to ‘sol.html’. If "unchecked" (the default), *ChessTask* generates an own HTML page for each task and each solution. These pages get linked, such that you can step from one task to another.
- **Use TrueType font:** This box is "checked" by default and you can leave it like that for now. The option behind it is important in connection to the 10 (Advanced text options) and gets explained in 12 (The DBChess fonts).
- **Informator symbols in plain text:** Is "unchecked" by default and "disabled" as long as the option "Use TrueType font" is selected. Both are closely related, so refer to 10 (Advanced text options), 12 (The DBChess fonts) and 11 (Informator symbols) for further explanations if you plan to use the "extended" text options of *ChessTask*. Otherwise, do not care about this checkbox.
- **Levels to graphics directory:** This is the most important HTML option, so read carefully!

ChessTask uses ‘PNG’ images for the display of the board diagrams, the links (from one task to another and to the index) and sometimes also for some special symbols like "capture"—depending on the options you selected. These graphic files are all kept in the directory named ‘graphics’, which you can find in the *ChessTask* directory. Now, let us say you created a directory named ‘html’ on your disk, where you want to put all the HTML files with your tasks. Further, we assume that this directory is situated at ‘C:/data/chesstask’ so its complete path is ‘C:/data/chesstask/html’.

The first requirement is: The ‘graphics’ directory (or a copy of it) and the "top directory" of your tasks, which is the directory ‘html’ in this case, have to be in the same directory. So, for the given situation you would have to create a copy of the complete ‘graphics’ directory at ‘C:/data/chesstask/graphics’ if it does not already exist.

Of course, you want to create further subdirectories for dividing up your tasks into categories like ‘endings’ or ‘openings’. Within the ‘endings’ directory you want to separate ‘pawn’ endings from

'rook' endings a.s.o. Within your directory 'html' you can set up the directory structure according to your personal needs.

Now, we get to the option itself. If you want to export your tasks to a subdirectory of 'C:/data/chesstask/html' you have to set **Levels to graphics directory** to the number of directory levels upwards to the directory 'graphics'. So, for a directory 'C:/data/chesstask/html/endings/bishops' the correct value would be "3". For the directory 'C:/data/chesstask/html/checkmates/intwo/novar/simple' the value should be "5".

Finally, I would like to recommend that you simply use the already existing directory 'html', in the *ChessTask* directory to store your tasks in HTML format.

- **Export with solutions:** This "general" option affects both, *LaTeX* and HTML export. If it is "checked" (default) the solutions and the corresponding links are output. If "unchecked" no links appear on the "task pages" and no HTML files with solutions are generated.

Now, you can select "**Export**"/"**HTML files**", choose a directory with the help of the file dialog and create the HTML files. If you did everything right, you can inspect the result with your browser immediately.

If *ChessTask* did not create any files, this can have mainly two reasons:

1. You aborted the export by cancelling the file dialog.
2. The files could not be opened for writing, either because the disk is full or because you do not have permission to write to the specified directory.

8 Export to LaTeX (++)

8.1 LaTeX files

Exporting your *ChessTask* file to *LaTeX* format is not as "tricky" as for HTML. You do not really have to check the *LaTeX* options every time, because no paths have to be "adjusted". You simply select "**Export**"/"**LaTeX file**", enter a file name (and choose a directory if necessary) and write the new *LaTeX* file.

However, if you dislike the default layout (10pt font size, tiny diagrams and output in two columns) you can always change it by evoking the options window "**Export**"/"**Options**".

The five *LaTeX* options are:

- **Paper size:** You can select between the two formats "US letter" (8.5x11 inches) and "ISO A4" (210x297 mm). For the latter, *ChessTask* includes the "a4paper" option to the *LaTeX* output.
- **Output in two columns:** If this option is "checked" (the default) the text is output in two columns per page. If "unchecked", the single column layout is selected. While using the "twocolumn" option you can not select the "Large" font for the diagrams!
- **Diagram size:** The size of the board diagrams can be set to four different levels
 - **Tiny** uses a 10pt font for the squares of the board and results in 80x80pt diagrams.
 - **Small** uses a 15pt font and results in 120x120pt diagrams.
 - **Normal** selects the 20pt font and you get 160x160pt diagrams.
 - **Large** uses a 30pt font and provides 240x240pt diagrams. This font size can not be used if the option "Output in two columns" is checked!

- **Font size:** The font size can be set to 10pt (the default), 11pt or 12pt. This setting affects the size of
 - the normal text,
 - the chess symbols for the moves and
 - the *Informator* symbols.
- **Export with solutions:** This "general" option affects both, *LaTeX* and HTML export. If it is "checked" (default) the solutions are output, too. If "unchecked" the *LaTeX* file ends right after the last task.

You can skip the next subsection if you are not interested in creating "ChessCards", but then read on at 8.3 (No files created?), please.

8.2 "ChessCards" files

Starting with version 2.0, *ChessTask* knows another output format called "ChessCards". The tasks are arranged in a 2x4 grid on each page and after each page with tasks the solutions follow immediately. So if you print them doublesided and cut out the single cards you can train your chess everywhere.

As you can see in the *examples* <.../examples/example.html> each card gets a small header with the "main title" of the *ChessTask* file and a running number. The titles of the single tasks are not displayed!

The format of the "ChessCards" is fixed and does **not** get affected by any of the *LaTeX* export options! It always uses the 10pt font, tiny diagrams and the 2x4 grid. Only the left and right margins are shifted a bit, changing from the "US letter" paper size to "ISO A4" or back.

There is not much space left on the front of the cards, so keep your tasks/questions tight. The answers can be a little bit longer...

Believe it or not, the "ChessCards" are **exactly centered** on the resulting *PostScript* page. The big problem is: "How exact can your printer retract the paper?"

I tested the "ChessCards" feature on "ISO A4" paper with the following printers

- HP DeskJet 500
- HP LaserJet 4100dtn
- HP LaserJet 4000N
- Lexmark Optra W810
- Lexmark Optra S1250

which all gave satisfying results.

Lars Jensen was so kind as to check the margins for the "US letter" format and reported them to work properly. Thanks a lot Lars!

8.3 No files created?

If *ChessTask* did not create a file, the reasons are the same as for the HTML export:

1. You aborted the export by cancelling the file dialog.

2. The file could not be opened for writing, either because the disk is full or because you do not have the permissions to write to the specified directory.

Otherwise, you can now call *LaTeX* with your new input file. This requires that you have *TeX/LaTeX* properly installed, of course. Another prerequisite is that you also installed the *LaTeX* style file ‘*skak.sty*’ and the fonts it needs, as described in the next section.

9 Installing the LaTeX style and the fonts (++)

The *LaTeX* files created by *ChessTask* rely on a special style file ‘*skak.sty*’ and its font files. The *skak* package was written by Torben Hoffmann and offers a lot of useful features for writing about chess, in fact *ChessTask* uses only some of them ... so check it out!

The required files have to be added manually to your *TeX/LaTeX* installation. You can find a copy of the *skak* distribution v1.3 in the directory ‘*rsc/skak/*’ of the *ChessTask* directory. However, it might be a good idea to scan the *CTAN* <<http://www.ctan.org/find.html>> for a newer version of the *skak* package. There you can also find *skaknew*, a true Type1 Postscript font replacing and extending the font files of *skak*. It was beautifully arranged by Ulrich Dirr, a professional designer, and is definitely worth a try. But now back to the installation itself...

- The first step is to determine where your *TeX/LaTeX* installation stores its style files. A good approach is to search for the file ‘*article.cls*’. In my *teTeX* the directory is ‘*/usr/share/texmf/tex/latex/base/*’, so ‘*/usr/share/texmf/tex/latex/*’ (one up) is where all style files are kept.

In *MikTeX* the directory ‘*C:/texmf/tex/latex/*’ should be right if ‘*C:/texmf*’ was your base directory during the installation.

- Create a subdirectory ‘*skak*’ in this style files directory.
- Copy all the files from ‘*rsc/skak/tex/*’ to this new directory.
- In the next step, copy all files from ‘*rsc/skak/mf/*’ to the proper font directory. You can try to search for the file ‘*cmr10.mf*’. In my *teTeX* distribution ‘*/usr/share/texmf/fonts/source/public/cm/*’ is the directory where this font is kept. Thus, I created the directory ‘*skak*’ in ‘*/usr/share/texmf/fonts/source/*’ (two up) and copied the fonts into it. In *MikTeX*, still assuming that ‘*C:/texmf*’ is your base directory, you should create a new directory like ‘*C:/texmf/fonts/source/public/skak*’. Please, also refer to the *MikTeX* manual for the installation of additional fonts and packages.

- The last thing you have to do is to update *LaTeX*s file database. Most *LaTeX* distributions do not simply rely on the "PATH" variable but keep track of which files (styles, fonts, ...) are stored where, by itself. After adding new files this database has to be reconfigured.

For *teTeX* you have to call the script ‘*texhash*’ which does the job. *MikTeX* 2.1 provides an entry in "Start"/"Programs"/"MikTeX"/"MikTeX Options" for this, called "Refresh Now". If you are working with another *TeX/LaTeX* distribution, please refer to its manual and issue the correct command(s).

Now *TeX/LaTeX* is able to find the style ‘*skak.sty*’ and the fonts and should process the files created by *ChessTask* without any problems.

10 Advanced text options (+)

Sometimes, you may want to set a piece of text in bold face. Or you want to emphasize it by using an italic font. In *TeX/LaTeX* a general concept named "grouping" is used. A "group" consists of an opening brace “{”, arbitrary text and the closing brace “}”. So in the input sentence

```
This is {a small} example.
```

the text "a small" is "grouped" now. For changing the font style you have to use the appropriate *TeX/LaTeX* command. All commands begin with the backslash "\", immediately followed by the name of the command. This is "**bf**" for "bold face" and "**em**" for "emphasize", i.e. an italic face font. If you wanted to set the "grouped" text in bold face you would have to enter

```
This is {\bf a small} example.
```

as input. Using "\em" as command yields the text in italic face. These kind of font changes are "local", i.e. they affect only the inner group. That is why the word "example" is not set to bold or italic face anymore, the "group" stops right after the word "small" with the closing brace "}". If this brace would not be there, all the rest of the input text would be set to bold or italic face, respectively. Thus, it is important that you provide a closing brace "}" for each opening brace "{" in the input.

ChessTask can help you with this. If you have activated one of the text fields **Title of the task**, **Task** or **Solution** you can click on one of the "**text command**" buttons **Bold Face** or **Italic Face**. Then, a pair of braces "{}" is automatically inserted into the selected text field, together with the correct command (either "\bf" or "\em"). Additionally, the cursor is positioned right before the closing brace "}", such that you can immediately type the words you want to set to bold or italic face. Afterwards, you have to reposition the cursor to the end of the text—or outside of the group, at least—in order to continue with entering "normal" text.

Another "group" that is provided by the *TeX* style file 'skak.sty' looks a bit different because it starts with a command and then the grouping characters "{}" follow. Any text between an opening "\movecomment{" and a "}" for closing the group, is interpreted as a list of chess moves. If you click on the **Move** button these delimiters are inserted into the currently active text field. Within this environment certain characters get a new and special meaning:

- The letter "x" results in the symbol for a "capture" in both, *TeX/LaTeX* and HTML.
- In the output all the uppercase characters for chess pieces—these are "KDLST" for the german and "KQBNR" for the english version—appear as symbols. In HTML this only works if you export the files with the "TrueType" font enabled (see 7 (Export to HTML), 11 (Informator symbols) and 12 (The DBChess fonts)).

If you would like to see an example for "move" groups, have a look at the file *example.tsk* <.../examples/example.tsk> from the *examples* <.../examples/example.html>.

You can also mix the "move" environment with the usage of bold or italic faced fonts like I did in the *test* <.../examples/example.html> of the *Informator* symbols. Then you have to obey the following rule: You can not include a "bf" or "em" font face selection within a "movecomment" but have to do it the other way round.

For the first moves of the "symbol test" I entered

```
{\bf \movecomment{1. e4 e5 2. Sf3 Sc6 3. d4 exd4 4. Sxd4 Lc5
5. Le3 Df6 6. c3 Se7 7. Lc4 Se5 8. Le2 Dg6 9. 0-0 d6 10. f3}}
\movecomment{[10. Tfd1 \see{} 23.4]} {\bf \movecomment{0-0 11. Kh1}}
\movecomment{[11. Td8 Sd8 12. Td1 Lb7 13. Sd2 Sc6 \see{} 24.1;
13. ..., Se6!?\equal]}
```

using *ChessTask* switched to "German".

From now on, you are allowed to use the characters "{}\" in your input texts because you (hopefully) know their meaning.

11 Informator symbols (+)

We already introduced the *LaTeX* commands "\bf" and "\em" in the preceding section. All *Informator* symbols also have to be entered as commands, starting with a "\" followed by the name of the command, which can be a little bit cryptic sometimes. Instead of remembering "\bdecisive" for "black has a decisive advantage" you should use the list box to the right of the *ChessTask* window as follows:

- Select the symbol you want to enter, by clicking on its description with the left mouse button. The list entry should now be highlighted.
- Click into one of the text fields **Title of the task**, **Task** or **Solution** and position the cursor to where you want to insert the symbol.
- Use the button **Insert** below the list box to insert the appropriate command.

Like this, *Informator* symbol commands can be entered anywhere in the input text. As default, the symbols are inserted without a space after them (Remark: The blank that you see in the input text does not appear in the output! It marks the end of the command, so do not delete it!). If you really want to have a blank between the symbol and the following text, set the box **With trailing space** to "checked". Now, the commands for the *Informator* symbols look a little bit different and a blank is appended in the output.

Starting with version 2.0 of *ChessTask* the *Informator* symbols are visible in the *LaTeX* and HTML output. The HTML version requires the export option **Use TrueType font** (see 7 (Export to HTML)) and the user will have to install the 12 (DBChess font), unfortunately.

If you dislike this you can still switch back to the "old style" of displaying *Informator* symbols by "unchecked" the options **Use TrueType font** and **Informator symbols in plain text**: As mentioned in 7 (Export to HTML), *ChessTask* uses PNG graphic files to display the HTML board diagram. This works fine because these PNG files have a size of 29x29, so the pieces can be distinguished well. For the *Informator* symbols and the chess piece symbols within the "move" environment (see 10 (Advanced text options)) the PNGs would need to have a size of 13x13 pixels because they are embedded in the normal text. This is definitely too small, you can not tell one symbol from the other.

So, back in earlier versions 1.x, I had to think of another way to represent the *Informator* commands in HTML and this is what I came up with: I created a special symbol—a circle with a cross inside—with the needed size of 13x13 pixels that represents **all** *Informator* symbols at once. The meaning of the actual symbol is shown if you point to it with the mouse! (I am using the HTML parameters "ALT" and "TITLE" for this.)

If you dislike this as well—perhaps because you want to print the tasks from your HTML browser directly—you can set **Informator symbols in plain text** in "**Export**"/"**Options**" to "checked" (see also 7 (Export to HTML)). All *Informator* symbols are then output as plain text, enclosed in parentheses.

As always, there are exceptions from the rules:

- The symbols "Marker A" and "Marker B" are no *Informator* symbols of course. You can use them in your input texts to refer to the cross and circle marker for the board diagram. They appear as graphic in the HTML output.
- Because they are probably used very often, I decided to convert the two *Informator* symbols "mate" and "equal" to "#" and "=", respectively. Please, remember that you should not use "#" in the input text (see 6 (Editing title, task and solution)). It is a special character for *TeX/LaTeX* and may lead to unexpected results!

12 The DBChess fonts (+)

Starting with version 2.0, *ChessTask* supports figurine and *Informator* symbols in the HTML output, too. This is achieved by a special TrueType font and the usage of a HTML feature called "Cascaded Style Sheets" (CSS). The font is called 'DBChess' and is available in normal and bold face.

The DBChess fonts are based on the 'FigurineSymbol' font by Armando Hernandez Marroquin (available at <http://www.enpassant.dk> <<http://www.enpassant.dk>>). All credits for this nice font should go to him, since I did not change anything but the mapping of codes to characters. The symbols are rearranged such that:

1. all symbols have a code < 128 and
2. often used symbols like 'x' or '#' are displayed correctly, even if the user did not install the DBChess fonts.

The file 'rsc/dbchess/doc/chartab.pdf' contains a table with the used mapping.

For installing the DBChess font files from 'rsc/dbchess/fonts' (TrueType and Type1) in Unix/Linux you normally need root access. Under Windows 2000 and Windows NT this is not required. Setting up the fonts may involve several actions, specific to your operating system, font server and their versions. Please, refer to the corresponding manuals for the correct steps. Additionally, the "Font HOWTO" and "Font De-Uglification HOWTO" proved to be very informative to me. In my Linux installation (SuSE 8.0, KDE) the proper menu entry can be found at "Preferences/System/Font-Installer".

Unix/Linux offer a workaround for users that do not have the superuser password. Via the commands

```
xset fp+ <font-dir>
xset fp rehash
```

the directory containing the DBChess fonts can be temporarily made known to the XFree86 server. The "<font-dir>" has to be replaced by the full path to the fonts, e.g. "/home/dirk/ChessTask/rsc/dbchess/fonts". If you add the first command to the file '.xinitrc' in your home directory, it is executed at every restart of X automatically.

13 For the experienced LaTeX user (++)

13.1 Some words about compatibility

If you are familiar with *TeX/LaTeX*, you certainly noticed that I did not always tell the total truth in the preceding sections. You know that

- "groups" do not necessarily have to start with "{" and end with "}",
- "\em" does not always switch to italic face,
- the blank after an *Informator* command can be deleted, e.g. if another command follows immediately.

But sometimes, a little inaccuracy saves tons of explanations ;-).

As mentioned in the introduction to *ChessTask*, it is a frontend for *LaTeX*. Everything you enter in one of the text fields is directly passed to the generated *LaTeX* file without any changes! So if you want, you can use all the commands that *TeX/LaTeX* offers, including mathematical formulas, tables, graphics a.s.o.

Unfortunately, these constructs will not be visible in the HTML output. *ChessTask* is not *LaTeX2HTML* <<http://www.ctan.org/tex-archive/support/latex2html/>> and it will never be! Thus, if you intend to produce *LaTeX* **and** HTML output from a single *ChessTask* file, you should only use the commands described in this manual.

13.2 The `\latexhrml{}{}` command

Another option is the command ‘`\latexhrml{}{}`’. It can be entered in any of the text fields and takes two arguments. The first argument—within the leading pair of braces—is directly passed to the *LaTeX* output only, the second argument to the HTML output likewise.

After substituting the ‘`\latexhrml{}{}`’ command, the HTML text is parsed in the normal way, i.e. the used *LaTeX* commands are replaced by their HTML equivalents as far as *ChessTask* knows them. If you export to *LaTeX*, the rest of the text is left untouched and written to the output immediately.

So if you write

```
in\latexhrml{describabl}{dependenc}e
```

you get ‘`indescribable`’ in the *LaTeX* output and ‘`independence`’ in the exported HTML file.

Since *ChessTask* looks for the “matching” brace while scanning the first or second argument of ‘`\latexhrml{}{}`’ you can also use braces within them, e.g.

```
\latexhrml{\begin{itemize}
\item one
\item two
\end{itemize}}{
<UL>
<LI> one
<LI> two
</UL>}
```

Please, regard the following rules:

- The string ‘`\latexhrml{`’ may not be separated! It has to be written as **one** word in a line.
- The “ending brace” of the first and the “starting brace” of the second argument may not be separated!
Do not split the string ‘`}{}{`’ by inserting a space or a newline between the braces.
- Both arguments, i.e. brace pairs, have to be provided, even if they are empty!

13.3 Special German characters and inter-word spaces

However, if you only want to enter special German characters like “ä” you do not have to use complicated constructions. *ChessTask*—if switched to “German”—uses the package

```
\usepackage[latin1]{inputenc}
```

in the exported *LaTeX* file, such that the user can enter these characters (äöüÄÖÜß) directly in the text fields.

Additionally, the *LaTeX* inter-word space commands

\-, _, \~, \/, _, \@, \,

are recognized and automatically replaced by an appropriate equivalent during the HTML output.

13.4 Nested text environments

Back in version 1.3 of *ChessTask* it was not possible to "nest" text environments like in:

```
From normal {\em to italic, {\bf to bold text}}.
```

The *LaTeX* output would have been correct, of course, but in HTML the words 'to bold text' would still have been printed in "italic".

Now, *ChessTask* can handle arbitrarily nested text environments and always delivers the correct HTML output. *ChessTask* even recognizes the text environments '{\it}' and '{\rm}', although they are not accessible via a "text command" button like the others.

So you can write:

```
The generation {\it of random {\it numbers is\ {\bf too important
{\em to be}\}/} {\em left} to chance}}.
```

and get

The generation *of random numbers is too important to be left to chance*.

in HTML although you will never need this, probably.

14 Import of FEN/EPD files

In the menu "**Import**" you can import a file—either in FEN or EPD format—that contains various chess positions. After selecting "**Import FEN**" or "**Import EPD**" a file dialog appears and you can select a filename and directory. *ChessTask* then adds the single entries to the current list of tasks.

FEN (Forsyth Edwards Notation) and EPD (Extended Position Description) are standard formats for the exchange of positions between chess programs and many programs are able to export them.

For FEN files only the position (Field #1) and the active color (Field #2) are regarded. If White is to move the "**Task**" is set to '1. ?', and to '1. ..., ?' if it is Blacks move.

The function for importing an EPD file additionally reads the operations at the end of the line and recognizes the following EPD "commands":

- **bm** (Best move)
- **pm** (Predicted move)
- **pv** (Predicted variation)
- **am** (Avoid move)

If a "**bm**" operation was found, it is preferred over an additional "**pm**" or "**pv**" and accepted as "**Solution**" for the task. In the same way a "**pv**" overrules a "**pm**" if no "**bm**" command is present.

For an "**am**" operation the string '(**Avoid:** the-given-move)' is added to the "**Solution**".

15 Directory tree export to HTML/LaTeX

This can be a very helpful feature, especially if you already created some ‘*.tsk’ *ChessTask* files in several directories. Now you can export all those files at once!

If you select "**LaTeX directory**", "**ChessCards directory**" or "**HTML directory**" from the "**Export**" menu, the first thing you have to do is to select the "source" directory, containing your *ChessTask* files. Please, regard that the extension ‘*.tsk’ is mandatory here!

After this, you get a small dialog that informs you about your next task, which is to select the "destination" directory where all exported files (*LaTeX* or *HTML*) are put to.

Then *ChessTask* starts to search the "source" directory and its subdirectories for ‘*.tsk’ files and exports them. If a subdirectory does not exist within the "destination" directory, it is created, which means that the complete directory structure is duplicated. Since this all can take some time, a progress dialog is showing you how much of the "export work" is already done.

All the options described in 7 (Export to *HTML*) and 8 (Export to *LaTeX*) are regarded as for the export of a single file, with one exception:

The value for the "**Levels to graphics directory**" is set to "1" during the *HTML* export!

ChessTask assumes that the selected "source" and "destination" directories represent the "root" of your directory structure for the task files. So if you exported your files to ‘C:/data/chesstask/html’ you have to make sure that ‘C:/data/chesstask/graphics’ also exists and contains the needed PNG files.

Once again, I would like to recommend that you use the already existing "tasks" directory to store your tasks and the "latex" and "html" directories for the export. The "graphics" directory has the correct location then.

In addition to writing the *LaTeX* files, *ChessTask* also creates a ‘*Makefile*’ in each directory. If you start ‘*make*’, all ‘*.tex’ files in the subdirectories are compiled and ‘*.ps’ *PostScript* files are generated automatically. Users that prefer PDF may issue the command ‘*make pdf*’.

If "**Export**"/"**HTML directory**" was selected, *ChessTask* supplies an ‘*index.html*’ file—listing all sub-directories and task collections—in each directory. All these “index” files are linked and can be traversed via the "Yahoo-style" link list at the top of the generated *HTML* files.

16 Keyboard shortcuts (+)

The more text you write, the more often you have to take one hand from the keyboard to insert a "special" command with the mouse. After a while this can get pretty annoying and for all keyboard enthusiasts like myself, I added the following shortcuts to *ChessTask*:

General shortcuts:

- **CTRL+B**: Inserts the "bold face" command.
- **CTRL+I**: Inserts the "italic face" command.
- **CTRL+M**: Inserts the "move" command.
- **CTRL+L**: Inserts the "latexhtml" command.
- **CTRL+S**: Inserts the currently selected *Informator* symbol.

Skak-specific accelerators:

- CTRL+A: Inserts the "printarrow" command.
- CTRL+H: Inserts the "highlight" command.
- CTRL+K: Inserts the "printknightmove" command.

These will insert special commands for highlighting board squares or moves. Their output is not visible in the HTML files. Please, refer to the "skak" manual for further information about their usage.

17 Changes in v2.0

17.1 General remarks

ChessTask is now based on the *LaTeX* package "skak" by Torben Hoffmann, which provides much more features than my own style "dbchess". A lot of internal changes were necessary but for you the user almost everything stays the same. Same handling, same buttons, same menu entries...unfortunately some of the old commands from "dbchess" are not available anymore.

- A capture was a '*' and is now a 'x'.
- The ':' is not an active character anymore, so you have to write '...,' all by yourself during text input.
- The old move environment '||' is replaced by the macro '\movecomment{}'.

However, *ChessTask* is fully compatible to older versions. While reading files that stem from a 1.x version the mentioned deprecated expressions are replaced automatically.

So all that is left for you to do now is to install the "skak" files as described in 9 (Installing the *LaTeX* style and the fonts) and try some of the old or...

17.2 New features

- The new *LaTeX* output format *ChessCards* was added (see also 8.2 (ChessCards files)).
- The paper size for the *LaTeX* output can be set to either "US letter" or "ISO A4" (see also 8.1 (Options/Paper size)).
- The HTML export now uses its own TrueType font for displaying figurines and *Informator* symbols via CSS (see also 12 (The DBChess fonts)).
- The current board position can now be pasted to the clipboard in either *LaTeX* (see 3 (Copy *LaTeX* Position)) or HTML (see 3 (Copy HTML Position)) format.
- Several key accelerators ("shortcuts") have been added (see also 16 (Keyboard shortcuts)).

17.3 Other changes

- The *LaTeX* inter-word spaces ‘\-, \ , \~, \/, _, \@, \,,’ are recognized and replaced automatically during HTML output.
- PNG files are now used instead of the GIF format throughout *ChessTask*.
- The **Makefiles** in exported *LaTeX* directories get an additional target **pdf** for automatically creating PDF files (assuming that *ps2pdf* is installed).
- PDF and PS files are now created with a resolution of 600dpi.
- Compiling *ChessTask* has become much simpler by the use of *Qt's qmake*. For further information read the file ‘**README**’.
- The translation files are now created/released using *Qt's Linguist*.