Typesetting Chess in LaTeXwith the skak Package

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Abstract

This user guide will show how to use an enhancement to the existing package for typesetting chess in LaTeX(skak). The primary improvement over the old package is that it has become easier to typeset chess games with this new package.

1 Terms of Usage

This package is distributed under the terms described in the Latex Project Public Licence, i.e.,

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2 Acknowledgements

I would like to thank the creator of the lambda package, Alan Jeffrey, for making a splendid package that made this package possible.

For discussions and alpha-testing I send my thanks to Guido Governatori— some of his ideas have allready been implemented; the rest? Time will show.

Thanks to Harri Haanpaafor finding a nasty bug in the castling routine.

3 The Old chess Package Versus the New skak Package

The main reason for considering an improvement of the chess package that Piet Tutelaers made back in 1991 is the cumbersome user interface the package has when one wants to write about a chess game and display a diagram every now and then. Typesetting the two opening moves where white and black moves their kingside knights is done as follows in the chess package:

```
\move g1f3 g8f6
```

The package then produces a nice typesetting of these moves in figurine notation, but it is hard to keep track of what is going on because the one usually uses the SAN (Short Algebraic Notation, used in the PGN standard for typing the moves) to write down the moves of a chess game. The SAN version of the two moves above is: `1. Nf3 Nf6`, which is much clearer to most chess players. In the skak package the author of a chess article is allowed to use the SAN notation as input to the command that updates the chess board. In addition to making it easier for the author to write about chess using a familiar notation it also provides an easy way to include moves generated by a chess program such as xboard in the document—most other chess programs can also output a PGN version of a chess game and from that you can extract the SAN recording of the moves.

The skak can also input chess board positions given in the FEN notation (also used in the PGN standard), which is also quite standard in the domain of chess programs.

Besides a better user interface the chess font the skak package uses is three small modifications of the font created by Piet Tutelaers: the knight now looks a bit more "youthfull", the contur of the queen has been smoothened and all the chess pieces has been shrunk such that they do not fill as much of a square as before. I find this font nicer to look at, but your milage may vary.

4 How to use the skak Package

Writing about a chess game is straightforward:

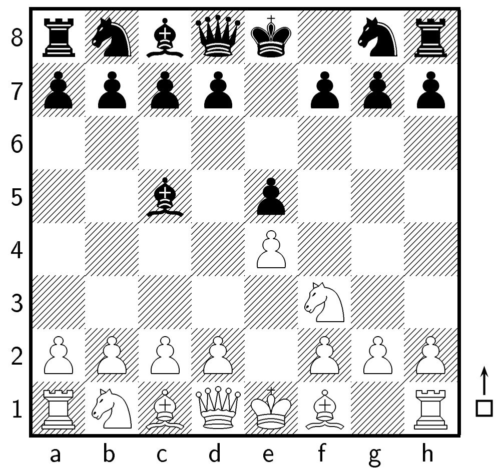
```
\newgame

\mainline{1. e4 e5 2. Nf3 Bc5}
```

starts a new game and produces the following in your document:

1 e4 e5 2 ♘f3 ♗c5

So far, so good. If you want to show the current position you just type `\[\showboard\]` in your document to get:



(the use of math `\[...\]` is just to make sure the board is centered.)

This is the basic functionality of the skak package, but the package offers many different ways in which one can talk about chess games. I think that a good way to show how the skak package can be used is to typeset the Fischer–Tal game from the old chess package. The result is in the file named `tuggame.ps`.

Further information about all the bells and whistles the skak package provides can be found in the *Reference Manual* where all commands of relevance are described.

5 Installing the skak Package

I could not get the makefile to do the job, so if someone could help me out on this I would be very glad indeed.

Basically all you have to do is to follow the guidelines in the makefile. First you create all the required directories (stated in the `install` section of the makefile) and then you run the `make install` command. Remember to run `texhash` after you have updated your texmf tree.

Sorry that is not working 100%— I just do not have the time for it right now.

If you cannot get the things working just put the files where TEXand the other tools can find them and you will be just fine.

5.1 Using the lambda Package

The skak package uses the lambda package to do some of the hard processing necessary to allow the PGN notation as input — since it is not standard in LATEXdistributions it is included in the distribution of the skak package.

6 Future Additions

It would be nice if one could choose the language for the `mainline`, `variation` and `\hidemoves` for each invocation as it allows for easier inclusion of analysis from chess programs when using a non-english language.

Ingo Sanderhas suggested that the output of the typesetting should be the old algebraic notation where the from and to squares always are given. This requires a modification to the game engine: after each move has been made you should store the algebraic notation of the move since you have the to and from squares calculated at that moment. Changing the game engine is a bit hairy — even for me — so I'll postpone this.