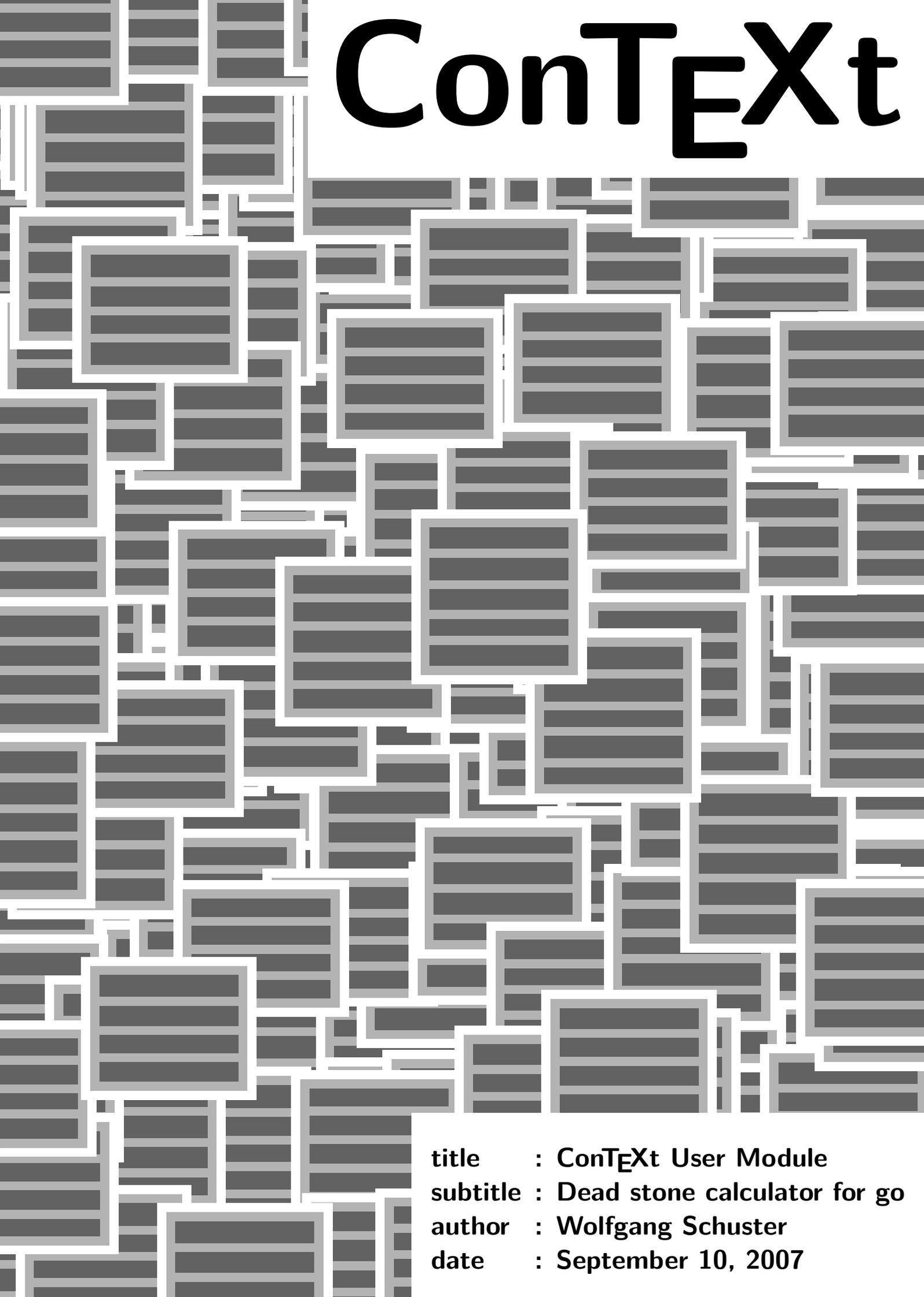# ConTeXt

title   : ConTeXt User Module
subtitle : Dead stone calculator for go
author   : Wolfgang Schuster
date   : September 10, 2007

1 `\unprotect`

This is the MKIV part of the dead stone calculator, it was written to get rid of tex TEX workarounds used in the MKII version. If you want to understand how the algoritm works you should use the LUA implementation.

The functions to calculate the current state of the stones are saved in a seperate LUA file, loading this file is the first thing we do here.

2 `\ctxlua{environment.loadlucfile("go-deadstone.lua")}`

The `\clearboard` command is only a call to the LUA implementation and no longer a TEX loop as in the first version.

3 `\def\clearboard{\ctxlua{clearboard()}}`

4 `\def\processstones{\ctxlua{processstones()}}`

`\addstone`   The `\addstone` macro is shorter as in the MKII version because I can now use `\doifelse` and can avoid the low level `\ifx` test as needed before. I can now also pass laststone as argument for `\ctxlua` and prevent a extra `\ifx` as before.

5 `\def\addstone(#1:#2:#3)%`
      `{\global\advance\stonecount\plusone`
       `\doifelse{#3}{B}`
         `{\ctxlua{field[#1][#2] = { 1, tex.count.stonecount }; laststone = 1}}`
         `{\doif{#3}{W}`
            `{\ctxlua{field[#1][#2] = { 2, tex.count.stonecount }; laststone = 2}}}}`

6 `\def\currentstone`
      `{\ctxlua{tex.print(field[\boardrow][\boardcolumn][1])}}`

7 `\def\currentstonenumber`
      `{\ctxlua{tex.print(field[\boardrow][\boardcolumn][2])}}`

`\cleardead..`   This is the only pure TEX command I use in this module, all other commands are only wrappers for the LUA part but I need this because the two commands `\deadblackstones` and `\deadwhitestones` can be used by other macros and this seems to be the best solution I found for the moment.

8 `\def\cleardeadstonelist`
      `{\let\deadblackstones\empty`
       `\let\deadwhitestones\empty}`

9 `\protect`

Dead stone calculator for go

\addstone *1*   \cleardeadstonelist *1*