NAME

mewa - compiler compiler

SYNOPSIS

mewa [OPTION]... INPUTFILE

DESCRIPTION

mewa is a compiler compiler that builds a **Lua** module implementing a compiler described as a LALR(1) grammar in the file *INPUTFILE* attributed with **Lua** calls implementing the type system and the code generation.

-h, --help

Print this usage.

-v, --version

Print the current version of mewa

-V, --verbose

Verbose debug output to stderr.

-g, --generate-compiler

Generate a compiler as a Lua module described by the grammar in the input file.

-s, --generate-template

Generate a template for your **Lua** module implementing the type system. Extract all **Lua** function calls from the grammar and prints their empty implementation stubs to the output. No debug output is provided. Be careful using this option. It is only useful after the initial definition of the grammar of your language. It overwrites previous definitions without merging with your edits in a previously generated version.

-l, --generate-language

Generate a **Lua** table with the language description parsed for **Lua** scripts generating descriptions for interfacing with other tools.

−o, **−-output**= *file*

Write the output (parsing tables) to file instead of stdout.

−b, **−-luabin**= *luapath*

Specify *luapath* as path of the **Lua** interpreter in the header of generated scripts. Default is "/usr/bin/lua".

-d, --dbgout= file

Write the verbose debug output (productions, states, functions, etc.) to file instead of stdout.

-t, --template= file

Use *file* content as template for the generated **Lua** module (option -g/--generate-compiler). The template contains the substitutes *%typesystem%* (name of the module implementing the type system), *%automaton%* (Lua table with the generated automaton of the compiler), *%language%* (name of the language), *%luabin%* (path of the lua program executing the script, specified by option -b/--luabin) and *%cmdline%* (name of the module implementing the command-line parser).

AUTHOR

Written by Patrick P. Frey (patrickpfrey@yahoo.com)

REPORTING BUGS

Report bugs on https://github.com/patrickfrey/mewa/issues

COPYRIGHT

Copyright © 2020 Patrick P. Frey.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the

Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

SEE ALSO

lua(1)

Full documentation and examples at: https://github.com/patrickfrey/mewa/blob/master/README.md