



## Other Project Resources

A list of other resources that you might find helpful:

- **C++ and UNIX:**

- Thomas Anderson's [Quick Introduction to C++](#) may be useful if you know C but are not familiar with all of the C++ subset we use in the programming projects.
- A more thorough guide to using the version of Gnu C++ installed on our Linux machines is [here](#).
- Quick guide to [UNIX development tools](#) (one of the many useful documents available in Nick Parlante's ever-growing [CS library](#))

- **Help with the gdb debugger:**

- GNU's online [gdb users guide](#)
- Printable quick reference: [gdbref.ps](#)
- A GDB article that Julie Zelenski wrote a few years ago for a programming journal: [GDB breakpoint tricks](#)

- **References on lex & yacc:**

Lex is the original lexical scanner developed by Lesk and Schmidt; Paxson's improved version is `flex`. Similarly, `yacc` is Johnson and Sethi's original parser; `bison` is the GNU-equivalent written by Corbett and Stallman. Both are designed to be upward-compatible with the original while adding extensions and improvements.

- Original documentation by the authors of the tools themselves. These papers are quite readable and serve as an excellent introduction for familiarizing yourself with the tools.
- [Lesk and Schmidt on lex](#)

- [Johnson on yacc](#)
- Man pages are available from command line, e.g., `man lex`. We've also put up browsable versions of the Solaris man pages for [lex](#), [flex](#), [yacc](#), and [bison](#).
- GNU's online documentation (full manuals, long, but very complete)
  - [flex](#)
  - [bison](#)
- The [lex & yacc page](#) from Combo.org.
- An [article](#) from the Linux Journal singing the praises of lex & yacc.
- **References on JLex and Java\_cup:**
  - Manual for [JLex](#), [Java CUP](#).
  - [JLex](#).
  - [Java CUP](#).
  - [Cool Trees](#) (Start with class `TreeNode`).
- **References on MIPS & SPIM:**
  - A PDF version of the [SPIM Manual](#) (appendix from Hennessy & Patterson's architecture book)
  - The [SPIM home page](#) (downloadable versions, more docs).

Just for fun:

- A list of [funny error messages](#) from the old MPW C compiler.
- A translator for [Latin to Perl](#) (and you thought there was no practical use for what you learned in 143!)