

## **Topic 09: flex & bison - Advanced Features (Tomáš Životský, Michal Židek)**

This presentation will cover some aspects of GNU tools flex and bison, that were not covered in VYPE course lectures.

In the part about flex tool, we will talk about differences between %pointer and %array definition of yytext variable, advantages and disadvantages of both, as well as performance implications, followed by short introduction into default memory management and minimal memory usage. Reentrant C Scanners, possibilities of paralelism and another interensting topics are mentioned in the end of this part.

In the part dedicated to bison we will take a look at differences between default LR parser mode and GLR mode, advantages and disadvantages of LAC (Lookahead Correction), some error recovery mechanisms and useful hints for debugging the generated parser.