CAT Architecture

Regular Expressions, Transition diagrams, Context free Grammar etc. of language being modeled.

CAT Modeler → Generate Model file (.mdc) → CAT Model File (.mdc) → CAT Compiler

(Source Code)

Generate Compiled Code and show intermediate processing results

Statistic Data

CAT Statistic Studio → CAT Statistic Data File (.stc)

Programming Environment

Java

NetBeans IDE 7.2.1
Java SE Development Kit 6

Special thanks to java libraries

iText (1.3)

JavaMail API (1.4.7)

Jcommon (1.0.17)

JFreeChart (1.0.14)

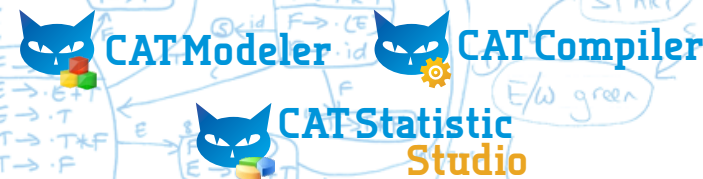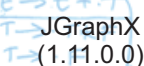JGraphX (1.11.0.0)

Sigar (1.6.4)

Compiler Automation Tool abbreviated as CAT, is a java based application, a tool for automating the task of compilation. With CAT, one can model any programming language using user-friendly graphical interface, by specifying regular expressions, transition diagram, context free grammar and various compiler specifications to generate a compiler model. This model is then used to compile various source code, displaying intermediate processing results during each phase such as stream of tokens generated by lexical phase, parsing decisions etc. inorder to obtain an insight view of compilation process.

Such a tool provides the designer a bright light over the language being designed and helps to make strategic decisions on how the compilation process must take place. CAT is a compiler field specific tool with the aim of promoting compiler learning and research.

A blend of three different applications that makes compiler modeling possible :

CAT Modeler   CAT Compiler

CAT Statistic Studio

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Compatible with Windows

Compiler Automation Tool

Pile of sheets now just a click away

BETA

- User Friendly Graphical Interface
- Graphical representation of automata
- Model wider set of programming languages
- Cross platform - model once compile anywhere
- No coding required - just think, model, generate
- Record compiler performance and obtain statistics

GHAH