

EasyCODE(JAVA) V6.8

Software Engineering in JAVA made easy

*One Tool –
a Variety of Applications*

Module Design

Programming

Documentation

Program Maintenance

Enhancement

Design Recovery

Code Reviews

Cross Development

Reverse Engineering

Roundtrip Engineering

Standardization

*Structure, Transfer,
Know How Delivery*

Process Optimization

Re-Purposing

Clarity

*Software Engineering
has never been more
professional*

EasyCODE(JAVA) is used for simple, computer-aided development, maintenance, enhancement and documentation of JAVA programs using a structure chart method.

Structure charts offer:

- ?? structured programming with graphical objects,
- ?? object oriented enhancements,
- ?? modeling of complete programs, including any program parts,
- ?? a three-dimensional hierarchy,
- ?? precise support of JAVA.

Based on structure chart technique, EasyCODE(JAVA) offers:

- ?? an easy-to-use graphical structure chart editor which allows no structural errors,
- ?? an integrated inplace text editor,
- ?? a source code generator,
- ?? a source code analyzer,
- ?? specific documentation features,
- ?? open interfaces to third-party products,
and much more.

Program Development

Start your program development with EasyCODE(JAVA) using one of the following techniques:

- ?? start with a new structure chart, or
- ?? use a design structure chart which you have designed using EasyCODE(SPX) or
- ?? visualize a code frame you have generated using the EasyCODE(SD) analysis and design tool or
- ?? open an existing source code to continue working on it.

Use this option to automatically customize a design structure chart to JAVA structures.

Save time and money with the option to reuse each source code. Use the refinement method to resolve design formulations step by step into the structures of the program language, automatically documenting the creation history in a clear manner.

Use the graphical structure chart editor to add, copy, move, delete, include or extract language structures using menu instructions or a toolbox, with mouse or keyboard, context menus or icon bars.

Enjoy the integrated inplace text editor, for more clarity and ease of use is not possible.

Combine the structures developed to condensed units, and visualize them in multiple windows, using, the crossfile editing feature, for example drag&drop . Create JAVA source code from the structure chart by saving the structure chart – with one click of the mouse – that's all.

Automate your editing compiler cycle to get more freedom for the creative part in your program development cycle.

Initiate a build process from EasyCODE(JAVA). EasyCODE(JAVA) directly leads you to remaining errors.

Use a debugger in combination with EasyCODE(JAVA), which allows debugging on the structure chart. Don't hesitate to directly modify your source code with any text editor. EasyCODE(JAVA) can recognize any change with no exceptions. Your structure chart will always be up to date. You can feel that you reach your goals faster, that you get good results, and that software engineering using EasyCODE(JAVA) is fun.

Maintenance and Enhancement

Updating existing software often fails due to lack of source code clarity. EasyCODE(JAVA) can solve this problem.

Open an existing JAVA code and see at one glance the basic structure, existing functions, classes or interfaces and how their member functions are arranged.

Zoom into the portion you find particularly interesting. Hide what you are not interested in short or long term, such as, for example, a specific program branch, or even the complete program code with only structures and comments remaining, as you do not always need all details to obtain know how.

You are looking for a specific variable, a string or a function?

Use a highly sophisticated search engine that allows you to examine your structure chart using a number of different criteria.

EasyCODE(JAVA) will reliably lead you to the proper positions even if you have formulated your search only vaguely, and it memorizes your search criteria in case you need them again, so you can, for example, perform replacement operations with a few mouse clicks. Position the cursor somewhere in the structure chart on a variable, a function, a macro, an Include file or others.

EasyCODE(JAVA) leads you to the definition point and to other references, everything on structure level, with multi-window technique, if required. Obtain details on the meaning of library functions, keyboards, class definitions and other things from the help system of your compiler by activating the related context sensitive help function.

Include your changes in the same way as when programming a new application. Don't be dismayed at carrying out maintenance and enhancement tasks as they are much easier using EasyCODE(JAVA).

Program Documentation

The quality of the software engineering process and therefore the quality of the software created using this process depend to a large extent on complete and currently valid documentation. The source code, however, is often the only valid documentation material.

EasyCODE(JAVA) makes it easy for you to create the required documentation for the old and new source code, in a structured, easy to read and globally recognized format. Open your JAVA source code and have a structure chart immediately displayed.

If required, adapt the hierarchical structure, which either EasyCODE(JAVA) has created or you have selected, to your documentation requirements. Filter the source code completely, if necessary, to document entirely at design level.

Make use of the wide range of options for print preview, size selection, page view, selective search for particularly long or wide structure charts.

Print the structure chart using the desired font and preferred layout, completely or only specific sections, with each program segment on one page, or several of them on the same page to save space and use page adjustment if a segment becomes too large.

Or even better: integrate your structure charts into text documents. Start Winword, for example, (or any other documentation tool) directly from EasyCODE(JAVA).

Add a structure chart to your text document using OLE and use all the advantages provided by this method.

- ?? Professional layout, integrated from text and graphics
- ?? Direct access to EasyCODE(JAVA) starting from documentation
- ?? Automatic consistency between Java source code, structure chart and documentation

Metrics

Monitor metrics. The following metrics are available:

- ?? McCabe – factor (cyclic number) [all programming languages]

General

- ?? Decision density (number of decisions in relation to program constructs) [all programming languages], comment density (number of real comment characters in relation to number of program characters) [C/C++, JAVA, COBOL]

The metrics are shown with your values as a traffic light and can be within three areas:

Display

Traffic Light

1. Green area -> all metrics are within the valid area
2. Yellow area -> one or more metrics have left the valid area
3. Red area -> one or more metrics are outside the valid area

The areas can be set in the INI file under the [metrics] section.

A double click on the status bar activates the display of metric values. The programmer can use this to determine the precise metric values of the various metrics and to verify metric values that have left the area of validity.

Value Display

Determines the number for defining the program code complexity. The following structure chart elements affect the McCabe factor

McCabe – Factor (cyclic number)

- functions, procedures
- branches (if-then-else, switch-case, loops)
- instruction blocks
- try-catch blocks

Decision Density

- number of all program defining chart elements
- number of decisions (if-then-else, switch-case, try-catch , AND element, OR element, NOT element)

Comment Density (C/C++, Cobol, JAVA only)

- number of characters
- number of comment characters (not **EasyCODE**– comments)

Product Key Words

ANSC method (structure), object oriented programming, graphics structure chart editor with tool box, shortcuts and context menus, complete mouse and keyboard interface expert mode, easy-to-use functions, drag & drop, inplace text editor, two step MDI management, configurable syntax coloring, structure overview, navigation functions, advanced find/replace mechanism, work environment design, command line parameter, Adding design structure charts, source code generation
source code analyze, code hiding, hierarchical code segmentation, modularity
import/export interface, hierarchical print functions, print preview, page adaptation/alteration?
paper saving print, OLE support, browser interface, access to EasyCODE(PV)- repository,
additive external text editors, DDE coupling, UNIX support, compiler integration with error feedback, integration of a built process, programmable debugger interface, configurable add- in menu, open file formats, data storage in source code format, direct call of DOS and Windows applications, interfaces to CM and release management systems, can be integrated with Oracle JDeveloper, Borland/Inprise, JBuilder, JDK, Symantec Visual Cafe, IBM Visual Age for JAVA, Sybase/Powersoft PowerJ, SUN Java Workshop, online help, networking, integrated total solution.

System Requirements

80486 processor or higher, 16 MB memory
minimum, 8 MB free hard-disk space minimum,
Microsoft Windows 95, Windows 98, Windows
2000 or Windows NT 4.0

Published by:	
BKR Softwareberatung und –entwicklung GmbH	
Löwenberger Str. 50	
D- 90475 Nürnberg	
Tel.:	+49 911 99 84 0-0
Fax:	+49 911 99 84 0-20
E-Mail:	easycode@bkr.de
WWW:	http://www.easycode.de

Windows is a registered trademark from Microsoft Corporation
EasyCODE is a registered trademark from BKR Software GmbH.