

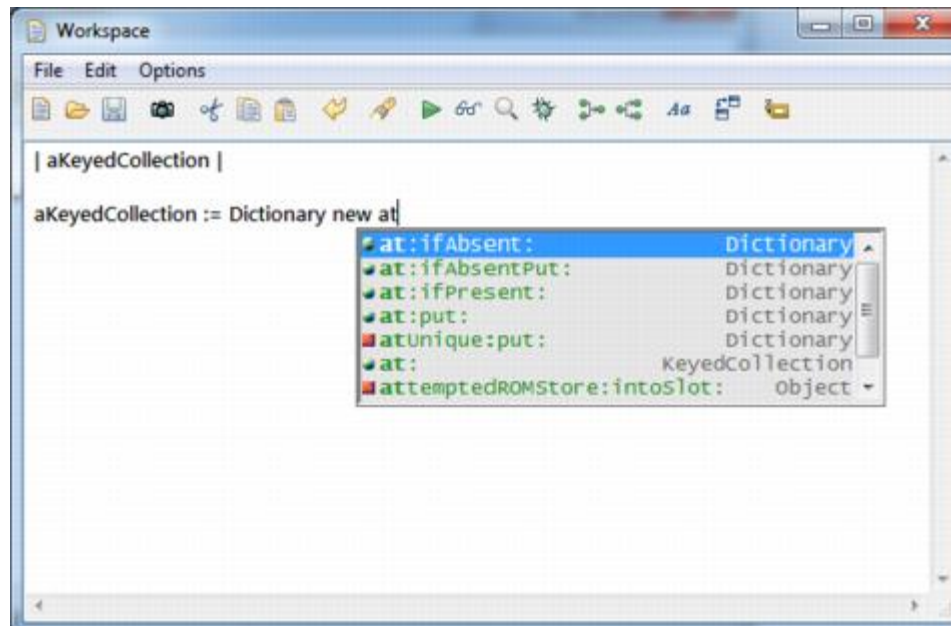


# VA Smalltalk Code Completion

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# Code Completion Introduction

- **Problem:** Our ability to recall names is limited
- **Solution:** Use the computer's calculating capabilities to predict names as they are being entered in the text editor



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# Code Completion Release History

- **V8.5 (August 2011)**
  - First Release
  - Requirements derived from community discussion
  - Additional requirements based on IDE experiences
  - Lots of Research
- **V8.5.1 (March 2012)**
  - Architectural improvements
  - New search capabilities
  - Emphasis on configurability
- **V8.5.2 (Upcoming Release)**
  - Added code completion to Inspectors
  - Small UI enhancements

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# Code Completion

## What's New?

- Redesigned Configuration UI
- Supporting Inspectors, Debuggers, Browsers and Workspaces
- Theme & Match Highlighting
- CamelCase Matching
- Live-Filtering
- Block Argument Detection
- Prereq Chain Visibility
- Drag-N-Drop Support
- New Completion Types

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# Code Completion - Contexts

- Code completion is available in 4 contexts
  - Browsers
  - Inspectors
  - Debuggers
  - Workspaces
- Context information is used to help resolve types
- Contexts help define what classes/methods are visible

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# Code Completion - Suggestions

- Variables
  - Local
  - Instance/Class/Class Instance
  - Pseudo
  - Pool
  - Global
- Classes
- Methods
- Symbols/Atoms
- Pool Dictionaries
- Character Literals

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# Code Completion – Work Flow

On activation, have @150ms to...

1. Prepare the text from the cursor to the top of source
2. Create parse tree
3. Identify context
4. Perform static analysis
5. Identify candidate completions (match algorithms)
6. Draw suggestions in the popup

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# Code Completion Demo

# DEMO TIME