IDE CHOICE AT TIVO

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Outline

- TiVo's evaluation of IDE choices
- IDEA's Haxe plugin development
- Snapshot of features implemented
- What is the landscape today?
- Roadmap for IDEA's Haxe plugin
- Q & A

Evaluation

IDE Feature	IntelliJ IDEA	Flash Develop	Sublime Text	Powerflasher FDT	IDE Feature	IntelliJ IDEA	Flash Develop	Sublime Text	Powerflasher FDT
Multi-OS	✓		✓	✓	Multi-build projects	✓			
Multi-lingual promise	✓	✓	✓	✓	Package explorer	✓	✓		
Free		✓		✓	Go to declaration	✓	✓		✓
Open sourced		✓	✓	✓	Find usages	✓	✓	✓	
Syntax, Live parsing	✓	✓	✓	✓	Code generation	✓	✓	✓	✓
Code outline	✓	✓		✓	Refactoring	✓	✓		✓
Code completion	✓	✓			Advanced Refactoring	✓	✓		
Code analysis / hints	✓		✓		NME builds	✓	✓		
Organize imports					hxcpp debugger	✓	✓		
Error navigation		✓			Flash debugger	✓	✓		✓
Hierarchy Views					Unit test integration				

IDEA's Haxe plugin development

- PSI elements for classes, methods, fields, properties. For improved:
  - Code analysis
  - Code completion
  - Structure views
  - Reference resolution
- AST based PSI tree (not stub based)
- allows injecting Compiler generated AST
- Issues tracked, fixed; Unit tests fixed; CI enabled

Snapshot of features implemented

- Structure views:
  - Type hierarchy,
  - Method & Call hierarchies
- Code inspections, analysis
- Code hints intentions
- Advanced Refactoring
- Code generation
- Reference resolution

- Code completion (with compiler)
- Improved indexing, find usages
- hxcpp-debugger integration
- OpenFL/lime toolchain integration
- IDEA 13.1.5, 13.1.6, 14.0.4, 14.1.1, 14.1.3 supported
- MUnit (partial) integration

How it was then?

IDE Feature	IntelliJ IDEA	Flash Develop	Sublime Text	Powerflasher FDT	IDE Feature	IntelliJ IDEA	Flash Develop	Sublime Text	Powerflasher FDT
Multi-OS	✓		✓	✓	Multi-build projects	✓			
Multi-lingual promise	✓	✓	✓	✓	Package explorer	✓	✓		
Free		✓		✓	Go to declaration	✓	✓		✓
Open sourced		✓	✓		Find usages	✓	✓	✓	
Syntax, Live parsing	✓	✓	✓	✓	Code generation	✓	✓	✓	✓
Code outline	✓	✓		✓	Refactoring	✓	✓		✓
Code completion	✓	✓			Advanced Refactoring	✓	✓		
Code analysis / hints	✓		✓		NME builds	✓	✓		
Organize imports					hxcpp debugger	✓	✓		
Error navigation		✓			Flash debugger	✓	✓		✓
Hierarchy Views					Unit test integration				

How it is today?

IDE Feature	IntelliJ IDEA	Flash Develop	Sublime Text	Powerflasher FDT
Multi-OS	✓		✓	✓
Multi-lingual promise	✓	✓	✓	✓
Free	✓	✓		✓
Open sourced	✓	✓	✓	
Syntax, Live parsing	✓	✓	✓	✓
Code outline	✓	✓		✓
Code completion	✓	✓	✓	✓
Code analysis / hints	✓		✓	
Organize imports	✓		✓	
Error navigation	✓	✓	✓	
Hierarchy Views	✓			

IDE Feature	IntelliJ IDEA	Flash Develop	Sublime Text	Powerflasher FDT
Multi-build projects	✓		✓	
Package explorer	✓	✓		✓
Go to declaration	✓	✓	✓	✓
Find usages	✓	✓	✓	✓
Code generation	✓	✓	✓	✓
Refactoring	✓	✓	✓	✓
Advanced Refactoring	✓	✓	✓	✓
NME builds	✓	✓	✓	✓
hxcpp debugger	✓	✓		
Flash debugger	✓	✓		✓
Unit test integration	✓			

Roadmap for IDEA Haxe plugin

- Compiler generated AST
- Compiler assisted live parsing, error checking
- Completeness in build targets
- Functionally complete to language spec

- HaxeDoc and tooltips
- MUnit integration for test generation, running
- Mcover integration for coverage
- Improved robustness
- Issues fixed

Reference

- Roadmap for IntelliJ IDEA plugin

  https://github.com/TiVo/intellij-haxe/wiki/Roadmap--(Master-TODO)

- Comparison of IDEs available for Haxe

  https://en.wikipedia.org/wiki/Comparison_of_IDE_choices_for_HaXe_programmers

Q & A