SOURCE

Tutorial

Language

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Tutorial	Actifsource Tutorial – Language						
Required Time	• 15 Minutes						
Prerequisites	Actifsource Tutorial – Installing Actifsource						
	Actifsource Tutorial – Simple Service						
Goal	Enabling syntax highlighting for any programming language						
Topics covered	Create a new Language						
	Use the new Language						
Notation	🏷 To do						
	① Information						
	Bold: Terms from actifsource or other technologies and tools						
	Bold underlined: actifsource Resources						
	<u>Underlined</u> : User Resources						
	<u>UnderlinedItalics</u> : Resource Functions						
	 Monospaced: User input 						
	Italics: Important terms in current situation						
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	should be used rather as a guide and starting point.						
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Compatibility	Created with actifsource Version 5.10.0						
compatibility	Created with actisource version 3.10.0						

Overview

- Preparation
- Create a new Language
- Using the Language

Part I:

Preparation



Prepare a new actifsource Project named com.actifsource.language as seen in the Actifsource Tutorial – Simple Service

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Part II:

- ① Instances of Language describe the following language elements
 - o Keywords
 - o Single Line Comments
 - o Multi Line Comment
 - o Color and font type
- ① Let's create an new Language instance for a fictitious math language

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- ♦ Select the package language
- ♥ Use the New Resource Tool to create a <u>Resource</u> of type <u>Language</u>

New Resource				
Actifsource Resource Creates a new actifsource resource of some type in the specified location.				
Resource Path:	/com.actifsource.language/asrc		Browse	
Namespace:	com.actifsource.language		Browse	
OwnRelation:			Browse	
Туре:	ch.actifsource.template.language.generic.Language		Browse	
Name:	Math			
Modifiers:	Abstract Final			
SuperClass:	ch.actifsource.core.NamedResource		Browse	
?	Finish		Cancel	

- ♦ Name the Language Math
- ♥ Click Finish

typeOf name fileNameExtension	Language Math math				
keywordStyle	typeOf style	KeywordStyl typeOf color fontModifier	e SyntaxStyle DarkRed Bold		
	keyword[1] keyword[2] keyword[3] keyword[4] keyword[5]	var add sub mul div			
stringStyle					
singleLineComment	typeOf	SingleLineComment			
	🖻 style	typeOf color fontModifier	SyntaxStyle DarkGreen Italic		
	tag	#			
multiLineComment					

- Define the file name extension for the new language
- befine your keyword style: color DarkRed, fontModifier Bold
- ♦ Define your keywords: var, add, sub, mul, div
- 🏷 Define your single line comment style: color DarkGreen, fontModifier Italic
- ♥ Define your single line comment tag: #
- ① Use a StringStyle to define string coloring

- ① The actifsource template editor is now supporting the new Languagefor the specific file extensions
- Let's test the new syntax highlighting

actifsource - Eclipse								• ×
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⅍ Create a new <u>Template</u> in the Package language

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New Template		
Template Mo build confi If no Base Type	g selected. e is selected, a singleton template will be created.	T
Resource Path	/com.actifsource.language/asrc	Browse
Package Template Name:	com.actifsource.language Test	Browse
BuildConfig:		Browse
MetaModel	Actifsource	•
Base Type:		Browse
?	Finish	Cancel

- ♦ Name the <u>Template</u> Test
- ♦ Click Finish
- Ignore the warning "No build config selected."

Test 🕱	
Build ▷ ♦ Build.once@BuiltIn:Void	
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Test.math	*
Math	
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[]] .math* [™] +	

- $\,\, {\ensuremath{{\diamondsuit}}} \,$ In the file line, choose the file extension . math
- ✤ The Language is Math selected automatically
- (i) Use Content Assist (Ctrl+Space) to select the language manually (i.e. if there is no file extension)
- (i) Use Ctrl+Click on the Language to open the Language Resource

Test 🕱		
Euild ▷ ♦ Build.once@BuiltIn:Void		
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• •		
Test.math		*
🗋 Math		
1 var a, b, c, d; # declaring some variables		
<pre>2 a := (b add c) mul d; # doing some math</pre>		
		-
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- ♦ Add some Code using the new keywords
- \clubsuit Try to write some comments



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