# **Model Report**

# Návrhová dokumentace (Design)

Version 1.0 • Proposed



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# **Class Diagram**

Package in package 'Parser'

Class Diagram
Version 1.0 Phase 1.0 Proposed
Jan created on 14.03.2016. Last modified 14.03.2016

# **Interface-AST View diagram**

Class diagram in package 'Class Diagram'

Interface-AST View Version 1.0 Luis created on 26.03.2016. Last modified 15.04.2016

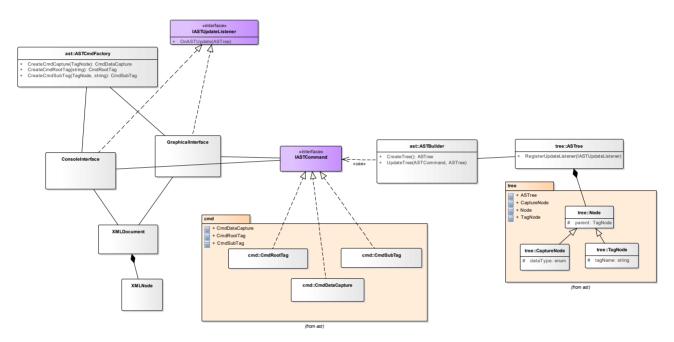


Figure 1: Interface-AST View

#### **ASTBuilder**

Class in package 'ast'

(AbstractSyntaxTree)Builder

Podle prijatých ASTCommand generuje ASTree.

ASTBuilder Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016





#### ASSOCIATIONS

Source: Public (Class) ASTBuilder

Target: Public (Class) ASTree

#### **OPERATIONS**



CreateTree () : ASTree Public

Vytvorí prázdný ASTree. Ten poté muže být použit jako parametr UpdateTree().

Properties:

ea\_guid = {EBB3B716-EE0C-4587-BF62-FD292CE8572E}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]



UpdateTree (command : ASTCommand , tree : ASTree ) : Public

Pridá ASTCommand do fronty commandu co se aplikují na zadaný ASTree.

Properties:

ea\_guid = {7C76E95A-EA72-45bb-A942-45807B0D23BF}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# **ASTCmdFactory**

Class in package 'ast'

ASTCmdFactory Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Class) GraphicalInterface

Target: Public (Class) ASTCmdFactory



Association (direction: Unspecified)

Source: Public (Class) ConsoleInterface

Target: Public (Class) ASTCmdFactory

#### **OPERATIONS**



CreateCmdCapture (parent : TagNode ) : CmdDataCapture Public

 $ea\_guid = \{623CFF27\text{-}128A\text{-}4efa\text{-}93F5\text{-}4386D9F43C3F}\}$ 

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

CreateCmdRootTag (tagName : string ) : CmdRootTag Public

ea\_guid = {D9C920A3-558A-4fe4-9506-7F5145A16BF7}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

CreateCmdSubTag (parent : TagNode , tagName : string ) : CmdSubTag Public

ea\_guid = {85750627-4D9E-4e89-A5FA-3ECF1C53BC79}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### cmd

Package in package 'ast'

Balícek obsahující príkazdy zpracovávané ASTBuilderem. Všechny implementují IASTCommand rozhraní.

Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### tree

Package in package 'ast'

tree
Version 1.0 Phase 1.0 Proposed
Luis created on 26.03.2016. Last modified 26.03.2016

# **CmdDataCapture**

Class in package 'cmd'

Do tagu pridá informaci, že obsahuje data která mají být parsována, a jejich formát. (Prípadne príslušnost do urcité trídy kolekce)

CmdDataCapture Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from CmdDataCapture to IASTCommand

[ Direction is 'Source -> Destination'. ]

# **CmdRootTag**

Class in package 'cmd'

Do AST pridá záznam o tom že <tag> je zajímávy a že v míste jeho výskytu má zarínat prohledávání.

Root tagu v ASTree muže být víc.

Typicky root tagem muže být treba , pokud je cílem parsovat všechny! tabulky, nezávisle na tom jak hluboko v hierarchii jsou.

V obecném príklade muže být root tagem prímo <a href="html">html</a>> nebo <b doty> a všechna parsované data budou umístena pod serií **ASTCmdSubTag**.

CmdRootTag
Version 1.0 Phase 1.0 Proposed
Luis created on 26.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from CmdRootTag to IASTCommand

[ Direction is 'Source -> Destination'. ]

# **CmdSubTag**

Class in package 'cmd'

Do AST pridá tag pod nejaký root tag/jiný subTag.

Tím lze specifikovat hierarchii tagu.

CmdSubTag Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### OUTGOING STRUCTURAL RELATIONSHIPS

Realization from CmdSubTag to IASTCommand

[ Direction is 'Source -> Destination'. ]

#### **ASTree**

Class in package 'tree'

(AbstractSyntax)Tree

Reprezentuje strukturu XML elementu která se má vyhledávat, a které její cásti obsahují data k uložení.

ASTree Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Node to ASTree

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Usage Source -> Destination SourceGenerator : Class, Public From: ASTree: Class, Public

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Class) ASTBuilder Target: Public (Class) ASTree

#### **OPERATIONS**

RegisterUpdateListener (listener : IASTUpdateListener ) : Public

ea\_guid = {1F4E8D42-536F-4113-BF89-32A1028000DA}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# **CaptureNode**

Class in package 'tree'

Uzel oznacující místo, kde se nachází parsovaná data.

CaptureNode Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016 Extends Node

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from CaptureNode to Node

[ Direction is 'Source -> Destination'. ]

#### ATTRIBUTES



dataType : enum Protected

Budto enum, nebo lepší Java typ oznacujíci konkrétní datový typ.

[ Is static False. Containment is Not Specified. ]

#### Node

Class in package 'tree'

Uzel AST stromu. Všechny uzly krome root uzlu mají rodice. Rodicem musí být nejaký TagNode.

Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Node to ASTree

[ Direction is 'Source -> Destination'. ]

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from TagNode to Node

[ Direction is 'Source -> Destination'. ]

→ Generalization from CaptureNode to Node

[ Direction is 'Source -> Destination'. ]

#### ATTRIBUTES



parent : TagNode Protected

[ Is static False. Containment is Not Specified. ]

# **TagNode**

Class in package 'tree'

Uzel AST stromu reprezentující XHTML Tag.

TagNode
Version 1.0 Phase 1.0 Proposed
Luis created on 26.03.2016. Last modified 26.03.2016
Extends Node



# **Overview diagram**

Class diagram in package 'Class Diagram'

Overview Version 1.0 Luis created on 16.03.2016. Last modified 15.04.2016

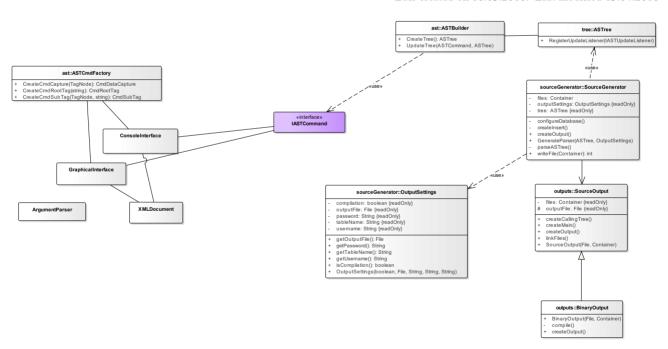


Figure 2: Overview

# **ASTBuilder**

Class in package 'ast'

(AbstractSyntaxTree)Builder

Podle prijatých ASTCommand generuje ASTree.

> ASTBuilder Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016

#### CONNECTORS

Usage Source -> Destination ASTBuilder: Class, Public From: IASTCommand : Interface, Public To.

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Class) ASTBuilder Target: Public (Class) ASTree

#### OPERATIONS

CreateTree () : ASTree Public

Vytvorí prázdný ASTree. Ten poté muže být použit jako parametr UpdateTree().

Properties:

ea\_guid = {EBB3B716-EE0C-4587-BF62-FD292CE8572E}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

UpdateTree (command : ASTCommand , tree : ASTree ) : Public

Pridá ASTCommand do fronty commandu co se aplikují na zadaný ASTree.

Properties:

ea guid = {7C76E95A-EA72-45bb-A942-45807B0D23BF}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# **ASTCmdFactory**

Class in package 'ast'

ASTCmdFactory Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Class) GraphicalInterface Target: Public (Class) ASTCmdFactory

Association (direction: Unspecified)

Source: Public (Class) ConsoleInterface

Target: Public (Class) ASTCmdFactory

#### **OPERATIONS**



CreateCmdCapture (parent : TagNode ) : CmdDataCapture Public

ea\_guid = {623CFF27-128A-4efa-93F5-4386D9F43C3F}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### **OPERATIONS**

CreateCmdRootTag (tagName : string ) : CmdRootTag Public

Properties:

ea guid = {D9C920A3-558A-4fe4-9506-7F5145A16BF7}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

CreateCmdSubTag (parent : TagNode , tagName : string ) : CmdSubTag Public

Properties:

ea guid = {85750627-4D9E-4e89-A5FA-3ECF1C53BC79}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### **ASTree**

Class in package 'tree'

(AbstractSyntax)Tree

Reprezentuje strukturu XML elementu která se má vyhledávat, a které její cásti obsahují data k uložení.

**ASTree** Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016

#### INCOMING STRUCTURAL RELATIONSHIPS



→ Aggregation from Node to ASTree

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS



Usage

Source -> Destination

SourceGenerator: Class, Public From: ASTree: Class, Public

#### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Class) ASTBuilder

Target: Public (Class) ASTree

#### **OPERATIONS**



RegisterUpdateListener (listener : IASTUpdateListener ) : Public

Properties:

ea\_guid = {1F4E8D42-536F-4113-BF89-32A1028000DA}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# **BinaryOutput**

Class in package 'outputs'

Zkompilovaný zdrojový kód z predchozího stupne.

> BinaryOutput Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 01.04.2016 Extends SourceOutput

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from BinaryOutput to SourceOutput

[ Direction is 'Source -> Destination'. ]

#### **OPERATIONS**

BinaryOutput (outputFile : File , files : Container ) : Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

ompile (): Private

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

createOutput (): Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# **SourceOutput**

Class in package 'outputs'

Zdrojový kod vygenerovaný v SourceGenerator.

SourceOutput Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 01.04.2016

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from BinaryOutput to SourceOutput

[ Direction is 'Source -> Destination'. ]

#### **ATTRIBUTES**

files: Container Private Const

[ Is static False. Containment is Not Specified. ]

outputFile: File Protected Const

[ Is static False. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Class) SourceGenerator

Target: Public (Class) SourceOutput

#### **OPERATIONS**



createCallingTree (): Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

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static False. Is abstract False. Is return array False. Is query False. Is synchronized False.	
static False. Is abstract False. Is return array False. Is query False. Is synchronized False.	
SourceOutput (outputFile : File , files : Container ) : Public	

# **OutputSettings**

Class in package 'sourceGenerator'

Nastavení požadovaného výstupu programu. (Binární / Textový).

V prípade požadavku na uložení do databáze muže obsahovat prístupové informace k databázi.

OutputSettings Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 01.04.2016

#### 

ATTRIBUTES	
compilation: boolean Private Const	[ Is static False. Containment is Not Specified. ]
outputFile : File Private Const	[ Is static False. Containment is Not Specified. ]
password : String Private Const	[ Is static False. Containment is Not Specified. ]
✓ tableName : String Private Const	[ Is static False. Containment is Not Specified. ]
wusername : String Private Const	[ Is static False. Containment is Not Specified. ]

OPERATIONS	
	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
getPassword (): String Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

OPERATIONS	
getTableName () : String Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
♦ getUsername () : String Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
isCompilation (): boolean Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
OutputSettings (compilation : boolean , outputFile : File , username : String , password : String , tableName : String ) : Public  [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	

# **SourceGenerator**

Class in package 'sourceGenerator'

Na základe zadaného **ASTree** a **OutputSettings** generuje zdrojový kód parseru.

SourceGenerator Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 01.04.2016

#### 

ATTRIBUTES	
illes : Container Private	[ Is static False. Containment is Not Specified. ]
outputSettings : OutputSettings Private Const	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

ASSOCIATIONS	
Association (direction: Source -> Destination)	
Source: Public (Class) SourceGenerator	Target: Public (Class) SourceOutput

OPERATIONS	
onfigureDatabase (): Private	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

OPERATIONS	
createInsert (): Private	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
createOutput (): Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
GenerateParser (tree : ASTree , settings :	OutputSettings ): Public
Properties: ea_guid = {C6AF1BC9-A6AF-4419-9	68D-5A0D31E89044} [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
parseASTree (): Private	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
writeFile (data : Container ) : int Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### ast

Package in package 'Class Diagram'

Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### cmd

Package in package 'ast'

Balícek obsahující príkazdy zpracovávané ASTBuilderem. Všechny implementují IASTCommand rozhraní.

cmd
Version 1.0 Phase 1.0 Proposed
Luis created on 26.03.2016. Last modified 26.03.2016

#### **CmdDataCapture**

Class in package 'cmd'

Do tagu pridá informaci, že obsahuje data která mají být parsována, a jejich formát. (Prípadne príslušnost do urcité trídy kolekce)

CmdDataCapture Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### OUTGOING STRUCTURAL RELATIONSHIPS

Realization from CmdDataCapture to IASTCommand

[ Direction is 'Source -> Destination'. ]

#### **CmdRootTag**

Class in package 'cmd'

Do AST pridá záznam o tom že <tag> je zajímávy a že v míste jeho výskytu má zarínat prohledávání.

Root tagu v ASTree muže být víc.

Typicky root tagem muže být treba , pokud je cílem parsovat všechny! tabulky, nezávisle na tom jak hluboko v hierarchii jsou.

V obecném príklade muže být root tagem prímo <a href="html">html</a>> nebo <b dy> a všechna parsované data budou umístena pod serií ASTCmdSubTag.

> CmdRootTag Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from CmdRootTag to IASTCommand

[ Direction is 'Source -> Destination'. ]

#### **CmdSubTag**

Class in package 'cmd'

Do AST pridá tag pod nejaký root tag/jiný subTag.

Tím lze specifikovat hierarchii tagu.

CmdSubTag Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**



Realization from CmdSubTag to IASTCommand

[ Direction is 'Source -> Destination'. ]

#### tree

Package in package 'ast'

tree

Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### **ASTree**

Class in package 'tree'

(AbstractSyntax)Tree

Reprezentuje strukturu XML elementu která se má vyhledávat, a které její cásti obsahují data k uložení.

ASTree Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from Node to ASTree

[ Direction is 'Source -> Destination'. ]

#### CONNECTORS

Z. Usage Source -> Destination SourceGenerator: Class, Public From: To: ASTree: Class, Public

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Class) ASTBuilder Target: Public (Class) ASTree

#### **OPERATIONS**

RegisterUpdateListener (listener : IASTUpdateListener ) : Public

Properties:

ea\_guid = {1F4E8D42-536F-4113-BF89-32A1028000DA}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### **CaptureNode**

Class in package 'tree'

Uzel oznacující místo, kde se nachází parsovaná data.

CaptureNode Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016 Extends Node

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

#### OUTGOING STRUCTURAL RELATIONSHIPS

Generalization from CaptureNode to Node

[ Direction is 'Source -> Destination'. ]

#### ATTRIBUTES



dataType : enum Protected

Budto enum, nebo lepší Java typ oznacujíci konkrétní datový typ.

[ Is static False. Containment is Not Specified. ]

#### Node

Class in package 'tree'

Uzel AST stromu. Všechny uzly krome root uzlu mají rodice. Rodicem musí být nejaký TagNode.

Node Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Aggregation from Node to ASTree

[ Direction is 'Source -> Destination'. ]

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from TagNode to Node

[ Direction is 'Source -> Destination'. ]

→ Generalization from CaptureNode to Node

[ Direction is 'Source -> Destination'. ]

#### ATTRIBUTES



parent : TagNode Protected

[ Is static False. Containment is Not Specified. ]

#### **TagNode**

Class in package 'tree'

Uzel AST stromu reprezentující XHTML Tag.

TagNode Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016 Extends Node

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

#### OUTGOING STRUCTURAL RELATIONSHIPS

Generalization from TagNode to Node

[ Direction is 'Source -> Destination'. ]

#### ATTRIBUTES



tagName : string Protected

[ Is static False. Containment is Not Specified. ]

#### **ASTBuilder**

Class in package 'ast'

(AbstractSyntaxTree)Builder

Podle prijatých ASTCommand generuje ASTree.

ASTBuilder Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016

#### CONNECTORS

Z. Usage From: To:

Source -> Destination ASTBuilder: Class, Public IASTCommand: Interface, Public

#### ASSOCIATIONS



Association (direction: Unspecified)

Source: Public (Class) ASTBuilder

Target: Public (Class) ASTree

#### **OPERATIONS**



CreateTree () : ASTree Public

Vytvorí prázdný ASTree. Ten poté muže být použit jako parametr UpdateTree().

ea\_guid = {EBB3B716-EE0C-4587-BF62-FD292CE8572E}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

UpdateTree (command : ASTCommand , tree : ASTree ) : Public

Pridá ASTCommand do fronty commandu co se aplikují na zadaný ASTree.

ea\_guid = {7C76E95A-EA72-45bb-A942-45807B0D23BF}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

### **ASTCmdFactory**

Class in package 'ast'

ASTCmdFactory

22 May, 2016 Model Report

> Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Class) GraphicalInterface

Target: Public (Class) ASTCmdFactory

Association (direction: Unspecified)

Source: Public (Class) ConsoleInterface

Target: Public (Class) ASTCmdFactory

#### **OPERATIONS**



CreateCmdCapture (parent : TagNode ) : CmdDataCapture Public

ea\_guid = {623CFF27-128A-4efa-93F5-4386D9F43C3F}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

CreateCmdRootTag (tagName : string ) : CmdRootTag Public

Properties:

 $ea\_guid = \{D9C920A3-558A-4fe4-9506-7F5145A16BF7\}$ 

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

CreateCmdSubTag (parent : TagNode , tagName : string ) : CmdSubTag Public

Properties:

ea guid = {85750627-4D9E-4e89-A5FA-3ECF1C53BC79}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# outputs

Package in package 'Class Diagram'

outputs

Version 1.0 Phase 1.0 Proposed
smidfil3 created on 01.04.2016. Last modified 01.04.2016

#### **BinaryOutput**

Class in package 'outputs'

Zkompilovaný zdrojový kód z predchozího stupne.

BinaryOutput
Version 1.0 Phase 1.0 Proposed
Luis created on 16.03.2016. Last modified 01.04.2016
Extends SourceOutput

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Generalization from BinaryOutput to SourceOutput

[ Direction is 'Source -> Destination'. ]

#### **OPERATIONS**

BinaryOutput (outputFile : File , files : Container ) : Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

ompile (): Private

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

createOutput (): Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### **SourceOutput**

Class in package 'outputs'

Zdrojový kod vygenerovaný v SourceGenerator.

SourceOutput
Version 1.0 Phase 1.0 Proposed
Luis created on 16.03.2016. Last modified 01.04.2016

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Generalization from BinaryOutput to SourceOutput

[ Direction is 'Source -> Destination'. ]

#### ATTRIBUTES

files : Container Private Const

[ Is static False. Containment is Not Specified. ]

outputFile : File Protected Const

#### ATTRIBUTES

[ Is static False. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Class) SourceGenerator

Target: Public (Class) SourceOutput

OPERATIONS	
createCallingTree (): Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
createMain (): Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
createOutput (): Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
♦ linkFiles (): Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
SourceOutput (outputFile : File , files : Co	ontainer): Public [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### sourceGenerator

Package in package 'Class Diagram'

sourceGenerator Version 1.0 Phase 1.0 Proposed smidfil3 created on 01.04.2016. Last modified 01.04.2016

# **OutputSettings**

Class in package 'sourceGenerator'

Nastavení požadovaného výstupu programu. (Binární / Textový).

V prípade požadavku na uložení do databáze muže obsahovat prístupové informace k databázi.

OutputSettings Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 01.04.2016

#### CONNECTORS

Vsage
 From:
 To:
 Source -> Destination
 SourceGenerator: Class, Public
 OutputSettings: Class, Public

ATTRIBUTES	
compilation: boolean Private Const	[ Is static False. Containment is Not Specified. ]
outputFile : File Private Const	[ Is static False. Containment is Not Specified. ]
password : String Private Const	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]
	[ Is static False. Containment is Not Specified. ]

OPERATIONS	
getOutputFile (): File Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
getPassword () : String Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
getTableName () : String Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
getUsername () : String Public	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
isCompilation (): boolean Public	

#### **OPERATIONS**

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

OutputSettings (compilation : boolean , outputFile : File , username : String , password : String , tableName : String ) : Public [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

#### **SourceGenerator**

Class in package 'sourceGenerator'

Na základe zadaného ASTree a OutputSettings generuje zdrojový kód parseru.

SourceGenerator Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 01.04.2016

#### CONNECTORS

Usage Source -> Destination SourceGenerator : Class, Public From: OutputSettings: Class, Public

Usage To:

Source -> Destination

SourceGenerator: Class, Public ASTree : Class, Public

#### ATTRIBUTES

files: Container Private

[ Is static False. Containment is Not Specified. ]

outputSettings : OutputSettings Private Const

[ Is static False. Containment is Not Specified. ]

v tree : ASTree Private Const

[ Is static False. Containment is Not Specified. ]

#### ASSOCIATIONS

Association (direction: Source -> Destination)

Source: Public (Class) SourceGenerator

Target: Public (Class) SourceOutput

#### **OPERATIONS**

onfigureDatabase (): Private

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

createInsert (): Private

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

createOutput (): Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

GenerateParser (tree : ASTree , settings : OutputSettings ) : Public

# Properties: ea\_guid = {C6AF1BC9-A6AF-4419-968D-5A0D31E89044} [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] parseASTree (): Private [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.] writeFile (data: Container): int Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

# **ArgumentParser**

Class in package 'Class Diagram'

Zpracuje argumenty programu pri spuštení. Ty slouží napríklad k rozhodnutí jestli spustit grafické nebo konzolové rozhraní.

--nogui

#### Platné jen pro ConsoleInterface:

- --export-database (Generovaný parser bude ukládat do databáze)
- --export-collection (Generovaný parser bude exportovat jako Java kolekci, platný formát jen source)
- --out-format-binary (Výstupem bude binární podoba parseru)
- --out-format-source (Výstupem bude zdrojový kód parseru)

ArgumentParser
Version 1.0 Phase 1.0 Proposed
Luis created on 16.03.2016. Last modified 26.03.2016

#### ConsoleInterface

Class in package 'Class Diagram'

Konzolové rozhraní programu. Podle pokynu uživatele zadává príkazy pro ASTBuilder, který podle nich staví ASTree.

Vstupem bude XML s vyznacenými zajímavými cástmi, podle techto cástí bude generován ASTree.

ConsoleInterface Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 26.03.2016

# OUTGOING STRUCTURAL RELATIONSHIPS Realization from ConsoleInterface to IASTUpdateListener [ Direction is 'Source -> Destination'. ]

ASSOCIATIONS	
Association (direction: Unspecified)	
Source: Public (Class) ConsoleInterface	Target: Public (Interface) IASTCommand
Association (direction: Unspecified)	
Source: Public (Class) ConsoleInterface	Target: Public (Class) ASTCmdFactory

#### ASSOCIATIONS

Association (direction: Unspecified)

Source: Public (Class) XMLDocument Target: Public (Class) ConsoleInterface

# GraphicalInterface

Class in package 'Class Diagram'

Grafické rozhraní programu. Podle pokynu uživatele zadává príkazy pro ASTBuilder, který podle nich staví ASTree.

GraphicalInterface
Version 1.0 Phase 1.0 Proposed
Luis created on 16.03.2016. Last modified 26.03.2016

#### **OUTGOING STRUCTURAL RELATIONSHIPS**

Realization from GraphicalInterface to IASTUpdateListener

[ Direction is 'Source -> Destination'. ]

# ASSOCIATIONS Association (direction: Unspecified) Source: Public (Class) GraphicalInterface Target: Public (Class) ASTCmdFactory Association (direction: Unspecified) Source: Public (Class) GraphicalInterface Target: Public (Interface) IASTCommand Association (direction: Unspecified)

# XMLDocument

Class in package 'Class Diagram'

Source: Public (Class) XMLDocument

Syntaktický strom XML dokumentu, který byl vstupem. (Muže obsahovat "zajímavé cásti" které lze zpracovat a vytvorit z nich sérii IASTCommand -> ASTree.

Nebo to muže být obycejný XTML dokument na kterém uživatel vybírá zajímavé prvky rucne, a dostává na nem preview.

XMLDocument Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

Target: Public (Class) GraphicalInterface

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Aggregation from XMLNode to XMLDocument

[ Direction is 'Source -> Destination'. ]

#### ASSOCIATIONS

Association (direction: Unspecified)

ASSOCIATIONS	
Source: Public (Class) XMLDocument	Target: Public (Class) ConsoleInterface
Association (direction: Unspecified)	
Source: Public (Class) XMLDocument	Target: Public (Class) GraphicalInterface

#### **XMLNode**

Class in package 'Class Diagram'

XMLNode Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

# OUTGOING STRUCTURAL RELATIONSHIPS Aggregation from XMLNode to XMLDocument [ Direction is 'Source -> Destination'. ]

#### **IASTCommand**

Interface in package 'Class Diagram'

IASTCommand
Version 1.0 Phase 1.0 Proposed
Luis created on 16.03.2016. Last modified 26.03.2016

NCOMING STRUCTURAL RELATIONSHIPS	
→ Realization from CmdDataCapture to IASTCommand	[ Direction is 'Source -> Destination'.
→ Realization from CmdRootTag to IASTCommand	[ Direction is 'Source -> Destination'.
→ Realization from CmdSubTag to IASTCommand	[ Direction is 'Source -> Destination'.

#### 

ASSOCIATIONS	
Association (direction: Unspecified)  Source: Public (Class) ConsoleInterface	Target: Public (Interface) IASTCommand
. Association (direction: Unspecified)	
Source: Public (Class) GraphicalInterface	Target: Public (Interface) IASTCommand

# **IASTUpdateListener**

Interface in package 'Class Diagram'

Rozhraní reprezentující trídu, která reaguje na update ASTree.

Reakcí muže být napríklad aktualizace preview v uživatelském rozhraní.

IASTUpdateListener Version 1.0 Phase 1.0 Proposed Luis created on 26.03.2016. Last modified 26.03.2016

#### INCOMING STRUCTURAL RELATIONSHIPS

→ Realization from ConsoleInterface to IASTUpdateListener

[ Direction is 'Source -> Destination'. ]

→ Realization from GraphicalInterface to IASTUpdateListener

[ Direction is 'Source -> Destination'. ]

#### OPERATIONS

OnASTUpdate (caller : ASTree ) : Public

Po registraci této interface k ASTree je tato fce volána z ASTree pokaždé když dojde k jeho zmene.

Properties:

ea\_guid = {08F2D33E-4044-4a50-B185-5C4F810AE0F1}

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

# **IProgramInterface**

Interface in package 'Class Diagram'

**IProgramInterface** Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 16.03.2016

#### **GeneratorParams**

DataType in package 'Class Diagram'

GeneratorParams Version 1.0 Phase 1.0 Proposed Luis created on 16.03.2016. Last modified 16.03.2016

# Sequence diagram

Package in package 'Parser'

Sequence diagram Version 1.0 Phase 1.0 Proposed SiRonnie created on 15.04.2016. Last modified 15.04.2016

# Sequence diagram diagram

Interaction diagram in package 'Sequence diagram'

Sequence diagram
Version 1.0
SiRonnie created on 15.04.2016. Last modified 20.04.2016

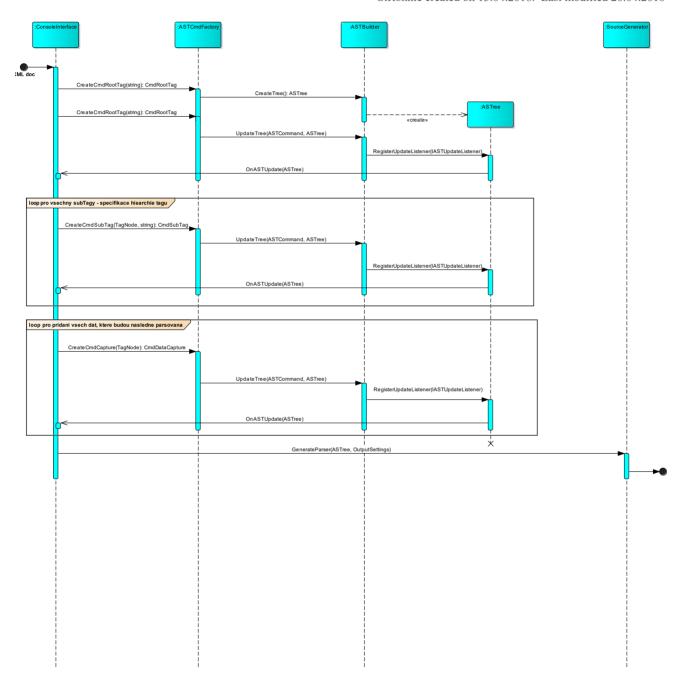


Figure 3: Sequence diagram

#### INTERACTION MESSAGES

2 1.0 " from 'XML doc' sent to ':ConsoleInterface'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

1.1 'CreateCmdRootTag(string)' from ':ConsoleInterface' sent to ':ASTCmdFactory'.				
Synchronous Call. Returns CmdRootTag.				
	[ Return is False. Iteration is False. New group is False. ]			
7 121CreateTuccOl from I.ACTC				
■ 1.2 'CreateTree()' from ':ASTCmdFactory' sent to ':ASTBuilder'.				
Synchronous Call. Returns ASTree.	[ Return is False. Iteration is False. New group is False. ]			
	[			
■ 1.3 " from ':ASTBuilder' sent to ':ASTree'.				
Synchronous Call. Returns void.				
	e. Iteration is False. New group is False. Life cycle is New. ]			
■ 1.4 'CreateCmdRootTag(string)' from ':ConsoleInterface' sent to ':ASTCmd	dFactory'.			
Synchronous Call. Returns CmdRootTag.				
	[ Return is False. Iteration is False. New group is False. ]			
≥ 1.5 'UpdateTree(ASTCommand, ASTree)' from ':ASTCmdFactory' sent to ':ASTBuilder'.				
	AST Builder.			
Synchronous Call.	[ Return is False. Iteration is False. New group is False. ]			
≥ 1.6 'RegisterUpdateListener(IASTUpdateListener)' from ':ASTBuilder' se	nt to ':ASTree'.			
Synchronous Call.				
	[ Return is False. Iteration is False. New group is False. ]			
3				
≥ 1.7 'OnASTUpdate(ASTree)' from ':ASTree' sent to ':ConsoleInterface'.				
Asynchronous Call.	[ Return is False. Iteration is False. New group is False. ]			
	t S 1 J			
≥ 1.8 'CreateCmdSubTag(TagNode, string)' from ':ConsoleInterface' sent to	':ASTCmdFactory'.			
Synchronous Call. Returns CmdSubTag.				
	[ Return is False. Iteration is False. New group is False. ]			
_				
≥ 1.9 'UpdateTree(ASTCommand, ASTree)' from ':ASTCmdFactory' sent to	':ASTBuilder'.			
Synchronous Call.	[ Return is False. Iteration is False. New group is False. ]			
	[ Return is 1 also. Retailor is 1 also. Ivew group is 1 also. ]			
≥ 1.10 'RegisterUpdateListener(IASTUpdateListener)' from ':ASTBuilder' sent to ':ASTree'.				
Synchronous Call.				
Synomonous Can.	[ Return is False. Iteration is False. New group is False. ]			
≥ 1.11 'OnASTUpdate(ASTree)' from ':ASTree' sent to ':ConsoleInterface'.				
Asynchronous Call.	[ Datum in Folco   Itarytics in Folco N			
	[ Return is False. Iteration is False. New group is False. ]			
■ 1.12 'CreateCmdCapture(TagNode)' from ':ConsoleInterface' sent to ':ASTCmdFactory'.				
Synchronous Call. Returns CmdDataCapture.	[ Return is False. Iteration is False. New group is False. ]			
2 1.13 'UpdateTree(ASTCommand, ASTree)' from ':ASTCmdFactory' sent to ':ASTBuilder'.				
Synchronous Call.				

[Return is False. Iteration is False. New group is False.]

1.14 'RegisterUpdateListener(IASTUpdateListener)' from ':ASTBuilder' sent to ':ASTree'.

Synchronous Call.

[Return is False. Iteration is False. New group is False.]

1.15 'OnASTUpdate(ASTree)' from ':ASTree' sent to ':ConsoleInterface'.

Asynchronous Call.

[Return is False. Iteration is False. New group is False.]

1.16 'GenerateParser(ASTree, OutputSettings)' from ':ConsoleInterface' sent to ':SourceGenerator'.

Synchronous Call.

[Return is False. Iteration is False. New group is False.]

1.17 " from ':SourceGenerator' sent to ".

Synchronous Call. Returns void.

[Return is False. Iteration is False. New group is False.]

#### <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

## <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

# <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

# <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

#### <anonymous>

Object in package 'Sequence diagram'

<anonymous> Version 1.0 Phase 1.0 Proposed SiRonnie created on 15.04.2016. Last modified 15.04.2016

#### <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

#### <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

#### <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

# <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 16.04.2016. Last modified 16.04.2016

# <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

# <anonymous>

Object in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 15.04.2016. Last modified 15.04.2016

#### <anonymous>

MessageEnd in package 'Sequence diagram'

<anonymous>
Version 1.0 Phase 1.0 Proposed
SiRonnie created on 16.04.2016. Last modified 16.04.2016

#### INCOMING BEHAVIORAL RELATIONSHIPS

⇒ Sequence from <anonymous> to <anonymous>

## Object1

Sequence «entity» in package 'Sequence diagram'

Object1 Version 1.0 Phase 1.0 Proposed SiRonnie created on 16.04.2016. Last modified 16.04.2016

#### XML doc

MessageEnd in package 'Sequence diagram'

XML doc Version 1.0 Phase 1.0 Proposed SiRonnie created on 16.04.2016. Last modified 16.04.2016

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Sequence from XML doc to <anonymous>

# pro pridani vsech dat, ktere budou nasledne parsovana

InteractionFragment in package 'Sequence diagram'

pro pridani vsech dat, ktere budou nasledne parsovana Version 1.0 Phase 1.0 Proposed SiRonnie created on 20.04.2016. Last modified 20.04.2016

# pro vsechny subTagy - specifikace hiearchie tagu

InteractionFragment in package 'Sequence diagram'

Pro vsechny zajimave tagy.

pro vsechny subTagy - specifikace hiearchie tagu Version 1.0 Phase 1.0 Proposed SiRonnie created on 16.04.2016. Last modified 20.04.2016