ex6 UML - Simplified java Compiler.

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main

Parser

+ reservedKeywords : String[]
- savedPatterns : java.util.regex.Pattern[]
- currentLineNum : int
- currentLine : String
- scopes : ArrayList<Scope>

- codeFile : File

+Parser(codeFile : File)
+getScopeArray : return ArrayList<Scope>

Sjavac

main(args : String[])

java.lang.Exception

extended by

IOException

IOException()

extended by

UnableToOpenException

UnableToOpenException()

extended by

IllegalInputException

IllegalInputException()

extended by

IllegalFileNameException

IllegalFileNameException()

extended by

FileNotFoundException

FileNotFoundException()

Variable

**<<Interface>>
Variable**

-type : String
-name : String
value : String

+getType : return String
SetType (name : String)
getName : return String
setName (name : String)
getValue : return String
setValue (name : String)

implemented by

Double

-type : String
-name : String
value : String

+getType : return String
SetType (name : String)
getName : return String
setName (name : String)
getValue : return String
setValue (name : String)

Boolean

-type : String
-name : String
-value : String

+getType : return String
SetType (name : String)
getName : return String
setName (name : String)
getValue : return String
setValue (name : String)

Char

-type : String
-name : String
value : String

+getType : return String
SetType (name : String)
getName : return String
setName (name : String)
getValue : return String
setValue (name : String)

String

-type : String
-name : String
value : String

+getType : return String
SetType (name : String)
getName : return String
setName (name : String)
getValue : return String
setValue (name : String)

Int

-type : String
-name : String
value : String

+getType : return String
SetType (name : String)
getName : return String
setName (name : String)
getValue : return String
setValue (name : String)

VariableFactory

variable_Names: String

+variableGenerator(name:String)

IllegalVariableException

IllegalVariableException()

extended by **java.lang.Exception**

Scope

Scope abstract

localVariables : ArrayList<Variable>

Scope ()
getVariables : return ArrayList<Variable>
+isVariableInScope (variable : Variable) : return boolean
setVariable (variable : Variable)

extended by

Comments

comment : String

Comment (commrnt : String)

extended by

SingleComment

comment : String

Comment (commrnt : String)

extended by

**<<Interface>>
ConditionalStatements**

condition : Condition

getCondition() : return condition
setCondition(condition : String)

implemented by

If

condition : Condition

getCondition() : return condition
setCondition(condition : String)

Has a

Method

localVariables : ArrayList<Variable>
parameters : HashMap<String, type>

getType(): return Method
setType(method: String)
isParmeter():return Boolean
setParameter(parameter: string)

extended by

VoidMethod

localVariables : ArrayList<Variable>
parameters : HashMap<String, type>

getType(): return Method
setType(method: String)
isParmeter():return Boolean
setParameter(parameter: string)

Has a

**<<Interface>>
Loop**

localVariables : ArrayList<Variable>
condition : Condition

getType():return Condition
setType(condition: String)

implemented by

While

condition : Condition
localVariables : ArrayList<Variable>

getType():return Condition
setType(condition: String)

**<<Interface>>
Modifier**

influencedVariable: Variable

getType(): return Modifier
setType(type : String)

implemented by

Final

influencedVariable: Variable

getType(): return Modifier
setType(type : String)

**<<Interface>>
Conditions**

AND : String/Pattern
OR : String/Pattern
conditionLine : String

getType() : return String
setType(type : String)
getCondition() : return Condition
setCondition(condition:String)
isConditionValid(condition: Condition) :
return Boolean

implemnted by

Or

conditionLine : String

getType() : return String
setType(type : String)
getCondition() : return Condition
setCondition(condition:String)
isConditionValid(condition: Condition) :
return Boolean

And

conditionLine : String

getType() : return String
setType(type : String)
getCondition() : return Condition
setCondition(condition:String)
isConditionValid(condition: Condition) :
return Boolean

ConditionsFactory

conditionGenerator

java.lang.Exception

extended by

IllegalReservedNameUsageException

IllegalReservedNameUsageException()

extended by

IllegalScopeException

IllegalScopeException()

extended by

IllegalMethodParameterException

IllegalMethodParameterException()

extended by

IllegalModiferException

IllegalModiferException()

extended by

WhiteSpaceInVariableNameException

WhiteSpaceInVariableNameException()

extended by

UnclosedScopeException

WhiteSpaceInVariableNameException()

ConditionStatmentOutsideMethodException

ConditionStatment OutsideMethodException()

IllegalNamingException

IllegalNamingException()

VariableIsNotDefiendException

VariableIsNotDefiendException()

IllegalAssignmentToFinalException

IllegalAssignmentToFinalException()

DuplicatedVariableNameException

DuplicatedVariableNameException()

extended by

LoopOutsideMethodException

LoopOutsideMethodException()

extended by

IllegalLineException

IllegalLineException()

extended by

IllegalConditionException

IllegalConditionException()

extended by

NoRetrunStatmentException

NoRetrunStatmentException()

extended by

MethodNotExisetException

MethodNotExisetException()