

Class name:

## Scanner

Package: metaLang

Documentation:

Meta-language token recognition.

External Documents:

Export Control: Public

Cardinality: n

Hierarchy:

Superclasses: none

Associations:

<no rolename> : Parser in association <unnamed>

Public Interface:

Operations:

getNextToken

Private Interface:

Attributes:

token : int

Last token recognised.

input : string

Source code to be analysed.

charPos : int

Text index in the current position.

text : string

Text recognised by the parser, once skip tokens have been eliminated.

lineNumber : int

Source-code line number being analysed.

State machine: No

Concurrency: Sequential

Persistence: Transient

Operation name:

## getNextToken

Public member of: Scanner

Return Class: int

Documentation:

The next token is recognised, saved in the token attribute and returned.

Concurrency: Sequential

State machine: No

Class name:

## Parser

Package: metaLang

Documentation:

LL1-grammar meta-language parser. Each non-terminal has its method representation. Except "start", these has been omitted.

External Documents:

Export Control: Public

Cardinality: n

Hierarchy:

Superclasses: none

Associations:

scanner : Scanner in association <unnamed>

ogc : ObjectGrammarCreator in association <unnamed>

Public Interface:

Operations:

start

Private Interface:

Attributes:

scanner : Scanner

The scanner object reference.

ogc : ObjectGrammarCreator

A object whose aim is the object grammar construction.

State machine: No

Concurrency: Sequential

Persistence: Transient

Operation name:

## start

Public member of: Parser

Documentation:

Recognise the grammar and creates its object representation.

Concurrency: Sequential

State machine: No

Class name:

## Language

*Package:* langSpec

*Documentation:*

Language Definition Class; defines each application's language.

*External Documents:*

*Export Control:* Public

*Cardinality:* n

*Hierarchy:*

*Superclasses:* none

*Associations:*

<no rolename> : ObjectGrammarCreator in association <unnamed>

lexicalSpec : NonTerminal in association <unnamed>

<no rolename> : NonTerminal in association <unnamed>

<no rolename> : NonTerminal in association <unnamed>

syntacticSpec : NonTerminal in association <unnamed>

notSkipSpec : Terminal in association <unnamed>

skipSpec : Terminal in association <unnamed>

skipSpec : Terminal in association <unnamed>

<no rolename> : AppWindow in association <unnamed>

*Public Interface:*

*Operations:*

describe

*Private Interface:*

*Attributes:*

name : string

Language's unique identification.

start : GrammarSymbol

Language non-terminal start symbol.

lexicalSpec

Dictionary of non-terminal objects that recognises tokens.

syntacticSpec

Dictionary of syntactic non-terminal objects.

skipSpec

List of tokens to skip (not recognise) automatically.

notSkipSpec

List of tokens not to skip automatically.

*State machine:*

No

*Concurrency:*

Sequential

*Space complexity:*

pepe

*Persistence:*

Transient

*Operation name:*

**describe**

*Public member of:* Language  
*Return Class:* string  
*Documentation:*  
Gives us information related to the Language at runtime.

*Concurrency:* Sequential  
*State machine:* No

*Class name:*

## ObjectGrammarCreator

*Package:* metaLang

*Documentation:*  
Class that helps in the object grammar construction. In its used at parsing time in order to create a language.

*External Documents:*

*Export Control:* Public

*Cardinality:* n

*Hierarchy:*

*Superclasses:* none

*Associations:*

<no rolename> : Parser in association <unnamed>  
language : Language in association <unnamed>

*Private Interface:*

*Attributes:*

language : Language  
The language created.

*State machine:* No  
*Concurrency:* Sequential  
*Persistence:* Transient

*Association:*

*Derived:* No  
*Direction:* <non-directional>  
*Association Class:* none

*Role:* scanner

*Class:* Scanner

*Cardinality / Multiplicity:* 1

*Navigable:* Yes

*Aggregate:* No

*Static:* No

*Friend:* No

*Access:* Implementation

Containment: Unspecified

*Role:*

Class: Parser  
Cardinality / Multiplicity:  
Navigable: No  
Aggregate: Yes  
Static: No  
Friend: No  
Access: Public  
Containment: Unspecified

*Association:*

Derived: No  
Direction: <non-directional>  
Association Class: none

*Role:* ogc

Class: ObjectGrammarCreator  
Cardinality / Multiplicity: 1  
Navigable: Yes  
Aggregate: No  
Static: No  
Friend: No  
Access: Implementation  
Containment: Unspecified

*Role:*

Class: Parser  
Cardinality / Multiplicity:  
Navigable: No  
Aggregate: Yes  
Static: No  
Friend: No  
Access: Public  
Containment: Unspecified

*Association:*

Derived: No  
Direction: <non-directional>  
Association Class: none

*Role:* language

Class: Language  
Cardinality / Multiplicity: 1  
Navigable: Yes  
Aggregate: No

*Static:* No  
*Friend:* No  
*Access:* Implementation  
*Containment:* Unspecified

*Role:*

*Class:* ObjectGrammarCreator  
*Cardinality / Multiplicity:*  
*Navigable:* No  
*Aggregate:* Yes  
*Static:* No  
*Friend:* No  
*Access:* Public  
*Containment:* Unspecified