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# **pyExploringCodeDOMParser**

***Release v1.1***

**Patrick Lehmann**

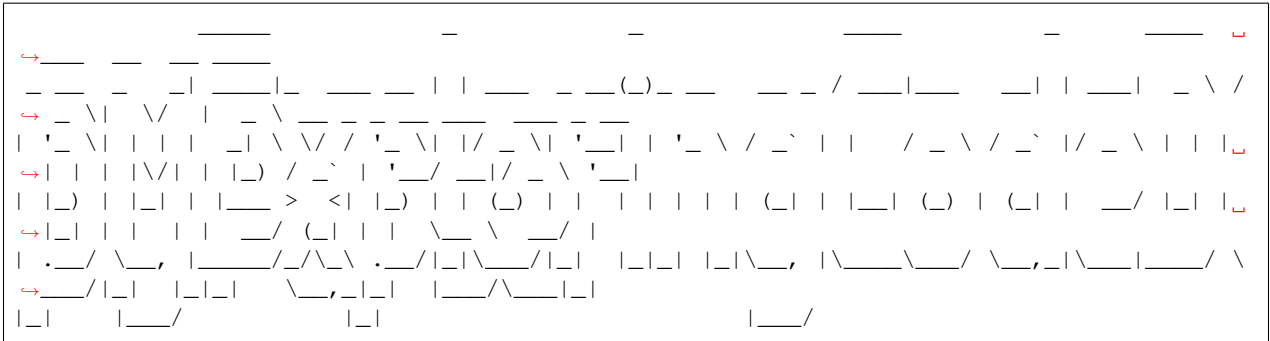
**Dec 27, 2019**



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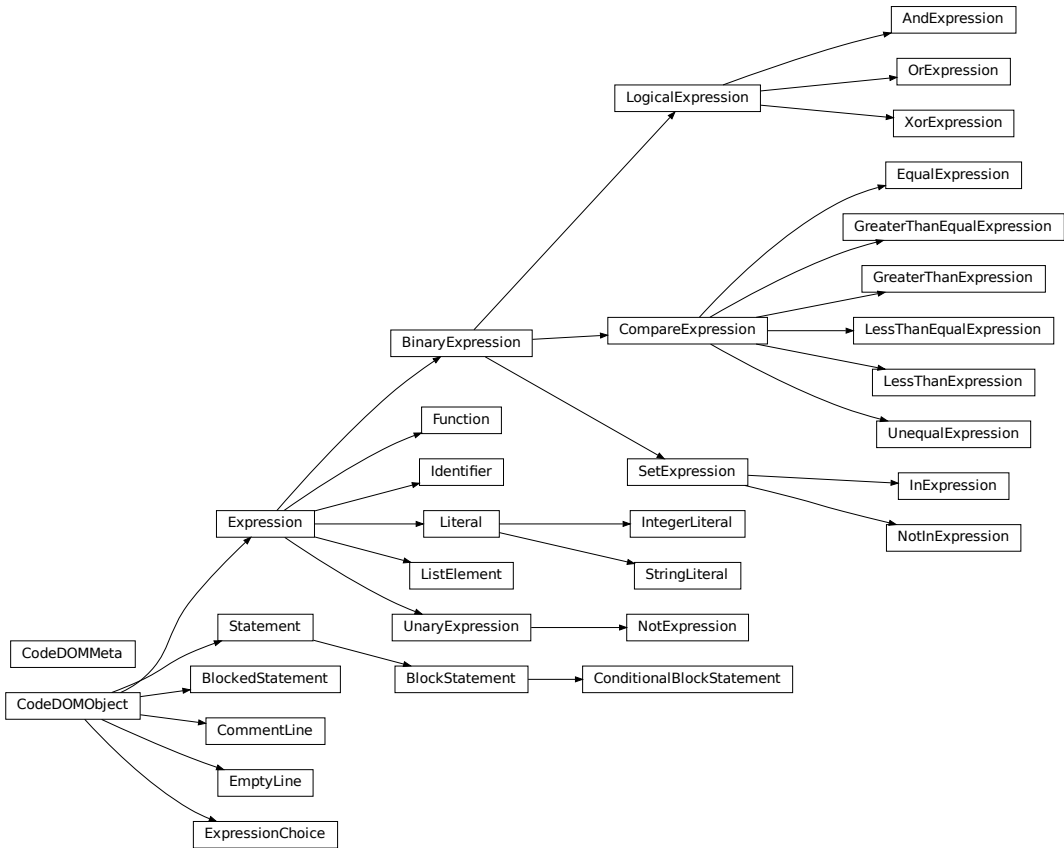




An exploring Code-DOM parser.

**Note:** Write the documentation

**Inheritance diagram:**





## CONTRIBUTORS

- Patrick Lehmann (Maintainer)
- Martin Zabel





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## 2.1 Installation/Updates

### 2.1.1 Using PIP

#### Installation using PIP

```
pip3 install pyExploringCodeDOMParser
```

#### Updating using PIP

```
pip3 install -U pyExploringCodeDOMParser
```

## 2.2 Dependencies

- pyTokenizer

## 2.3 Meta-Classes

### 2.3.1 CodeDOMMeta

```
class pyExploringCodeDOMParser.CodeDOMMeta
    Bases: type
```

A meta-class, that implements a base set of methods in every class definition.

```
static GetChoiceParser (choices)
```

Returns a generator object that implements multiple choices.

```
static GetRepeatParser (callback, generator)
```

Returns a generator object that implements repetitions.

## 2.4 Base-Classes

### 2.4.1 CodeDOMObject

```
class pyExploringCodeDOMParser.CodeDOMObject
    Bases: object

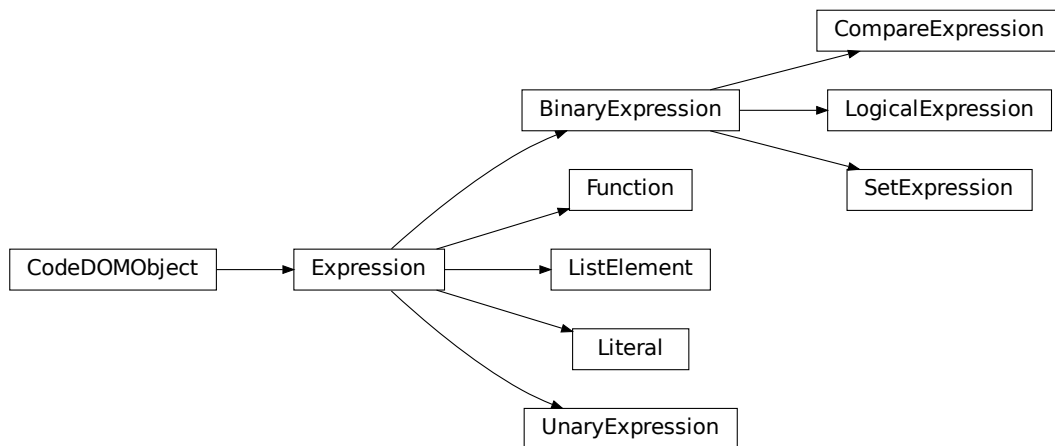
    Base-class for all CodeDOM objects.

    __init__()
        Initialize self. See help(type(self)) for accurate signature.

    classmethod Parse(string, printChar)
        Parse a given token.
```

## 2.5 Expressions

Inheritance diagram:

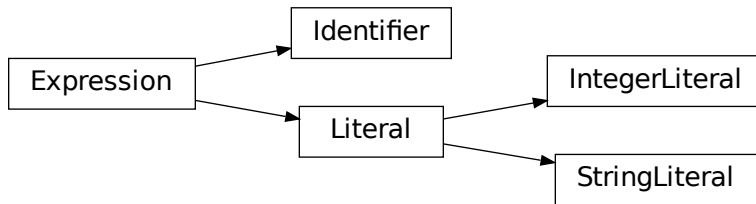


```
class pyExploringCodeDOMParser.Expression
    Bases: pyExploringCodeDOMParser.CodeDOMObject

    Base-class for all expressions.
```

## 2.5.1 Literals and Identifiers

Inheritance diagram:



```

class pyExploringCodeDOMParser.Literal
    Bases: pyExploringCodeDOMParser.Expression
    Base-class for all literals.

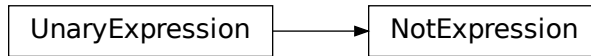
class pyExploringCodeDOMParser.StringLiteral(value)
    Bases: pyExploringCodeDOMParser.Literal
    __init__(value)
        Initialize self. See help(type(self)) for accurate signature.
    __str__()
        Return str(self).

class pyExploringCodeDOMParser.IntegerLiteral(value)
    Bases: pyExploringCodeDOMParser.Literal
    __init__(value)
        Initialize self. See help(type(self)) for accurate signature.
    __str__()
        Return str(self).

class pyExploringCodeDOMParser.Identifier(name)
    Bases: pyExploringCodeDOMParser.Expression
    __init__(name)
        Initialize self. See help(type(self)) for accurate signature.
    __str__()
        Return str(self).
  
```

## 2.5.2 Unary Expressions

Inheritance diagram:



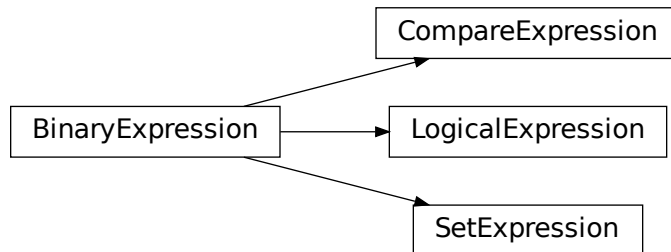
```
class pyExploringCodeDOMParser.UnaryExpression (child)  
    Bases: pyExploringCodeDOMParser.Expression  
    Base-class for all unary expressions.  
    __init__ (child)  
        Initialize self. See help(type(self)) for accurate signature.  
    _child = None  
        sub-element in the parser tree  
    property Child  
        Returns the sub-element in the parser tree.
```

### Logical Expressions

```
class pyExploringCodeDOMParser.NotExpression (child)  
    Bases: pyExploringCodeDOMParser.UnaryExpression  
    Unary expression for operator not.  
    __init__ (child)  
        Initialize self. See help(type(self)) for accurate signature.  
    __str__ ()  
        Return str(self).
```

### 2.5.3 Binary Expressions

Inheritance diagram:



```
class pyExploringCodeDOMParser.BinaryExpression (leftChild, rightChild)
```

Bases: *pyExploringCodeDOMParser.Expression*

Base-class for all binary expressions.

```
__init__ (leftChild, rightChild)
```

Initialize self. See help(type(self)) for accurate signature.

```
__leftChild = None
```

left sub-element in the parser tree

```
__rightChild = None
```

right sub-element in the parser tree

```
property LeftChild
```

Returns the left sub-element in the parser tree.

```
property RightChild
```

Returns the right sub-element in the parser tree.

```
__str__ ()
```

Return str(self).

```
class pyExploringCodeDOMParser.CompareExpression (leftChild, rightChild)
```

Bases: *pyExploringCodeDOMParser.BinaryExpression*

Base-class for all comparison expressions.

```
class pyExploringCodeDOMParser.LogicalExpression (leftChild, rightChild)
```

Bases: *pyExploringCodeDOMParser.BinaryExpression*

Base-class for all logical expressions.

```
class pyExploringCodeDOMParser.SetExpression (leftChild, rightChild)
```

Bases: *pyExploringCodeDOMParser.BinaryExpression*

Base-class for all set expressions.

## Compare Expressions

**class** pyExploringCodeDOMParser.**EqualExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.CompareExpression*

An *equal* expression.

**class** pyExploringCodeDOMParser.**UnequalExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.CompareExpression*

An *unequal* expression.

**class** pyExploringCodeDOMParser.**LessThanExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.CompareExpression*

A *less than* expression.

**class** pyExploringCodeDOMParser.**LessThanEqualExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.CompareExpression*

A *less than or equal* expression.

**class** pyExploringCodeDOMParser.**GreaterThanExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.CompareExpression*

A *greater than* expression.

**class** pyExploringCodeDOMParser.**GreaterThanEqualExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.CompareExpression*

A *greater than or equal* expression.

## Logical Expressions

**class** pyExploringCodeDOMParser.**AndExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.LogicalExpression*

An *and* expression.

**class** pyExploringCodeDOMParser.**OrExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.LogicalExpression*

An *or* expression.

**class** pyExploringCodeDOMParser.**XorExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.LogicalExpression*

An *xor* expression.

## Set Expressions

**class** pyExploringCodeDOMParser.**InExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.SetExpression*

An *in* expression.

**class** pyExploringCodeDOMParser.**NotInExpression** (*leftChild, rightChild*)  
Bases: *pyExploringCodeDOMParser.SetExpression*

A *not in* expression.

## 2.5.4 Misc Expressions

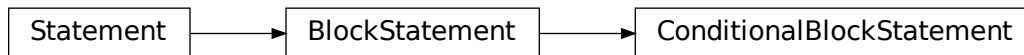
```
class pyExploringCodeDOMParser.Function
    Bases: pyExploringCodeDOMParser.Expression

class pyExploringCodeDOMParser.ListElement
    Bases: pyExploringCodeDOMParser.Expression

    __init__()
        Initialize self. See help(type(self)) for accurate signature.
```

## 2.6 Statements

Inheritance diagram:



```
class pyExploringCodeDOMParser.Statement (commentText="")
    Bases: pyExploringCodeDOMParser.CodeDOMObject

    Base-class for all statements.

    __init__ (commentText="")
        Initialize self. See help(type(self)) for accurate signature.

class pyExploringCodeDOMParser.BlockStatement (commentText="")
    Bases: pyExploringCodeDOMParser.Statement

    __init__ (commentText="")
        Initialize self. See help(type(self)) for accurate signature.

    __str__ (indent=0)
        Return str(self).

class pyExploringCodeDOMParser.ConditionalBlockStatement (expression, comment-
                                                            Text="")
    Bases: pyExploringCodeDOMParser.BlockStatement

    __init__ (expression, commentText="")
        Initialize self. See help(type(self)) for accurate signature.

    __str__ (indent=0)
        Return str(self).
```

## 2.7 Miscellaneous

**class** pyExploringCodeDOMParser.**EmptyLine**  
Bases: *pyExploringCodeDOMParser.CodeDOMObject*

Represents an empty line in the document.

**\_\_init\_\_**()  
Initialize self. See help(type(self)) for accurate signature.

**\_\_str\_\_**(indent=0)  
Return str(self).

**class** pyExploringCodeDOMParser.**CommentLine**(commentText)  
Bases: *pyExploringCodeDOMParser.CodeDOMObject*

Represents a comment line in the document.

**\_\_init\_\_**(commentText)  
Initialize self. See help(type(self)) for accurate signature.

**\_\_str\_\_**(indent=0)  
Return str(self).

### 2.7.1 Forward Declarations

**class** pyExploringCodeDOMParser.**BlockedStatement**  
Bases: *pyExploringCodeDOMParser.CodeDOMObject*

**class** pyExploringCodeDOMParser.**ExpressionChoice**  
Bases: *pyExploringCodeDOMParser.CodeDOMObject*

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Version 2.0, January 2004

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```

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