

# graph-serializer

0.0.0

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# Chapter 1

## Namespace Index

### 1.1 Namespace List

Here is a list of all documented namespaces with brief descriptions:

[common::opt](#)

Options for graph This enumeration represents options that graph supports and that alter its API calls behaviour . . . . .

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## Chapter 5

# Namespace Documentation

### 5.1 common::opt Namespace Reference

Options for graph This enumeration represents options that graph supports and that alter its API calls behaviour.

#### Variables

- constexpr std::uint8\_t **drc** = 0x01  
*is graph directional?*
- constexpr std::uint8\_t **wgh** = 0x02  
*is graph weighted?*

#### 5.1.1 Detailed Description

Options for graph This enumeration represents options that graph supports and that alter its API calls behaviour.



# Chapter 6

## Class Documentation

### 6.1 common::ActionQueue Class Reference

Queue for actions Stores actions and then allows to dump them when needed.

```
#include <action-queue.hpp>
```

#### Public Member Functions

- void **dumpAllActions** ()  
*Dump all actions till queue is empty.*
- void **dumpAction** ()  
*Dump single action from queue.*
- void **query** (std::shared\_ptr< [IAction](#) > action)  
*Add action to queue.*

#### 6.1.1 Detailed Description

Queue for actions Stores actions and then allows to dump them when needed.

#### 6.1.2 Member Function Documentation

##### 6.1.2.1 query()

```
void ActionQueue::query (  
    std::shared_ptr< IAction > action )
```

Add action to queue.

#### Parameters

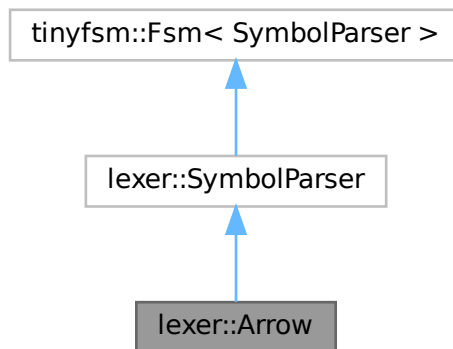
<i>action</i>	action to add
---------------	---------------

The documentation for this class was generated from the following files:

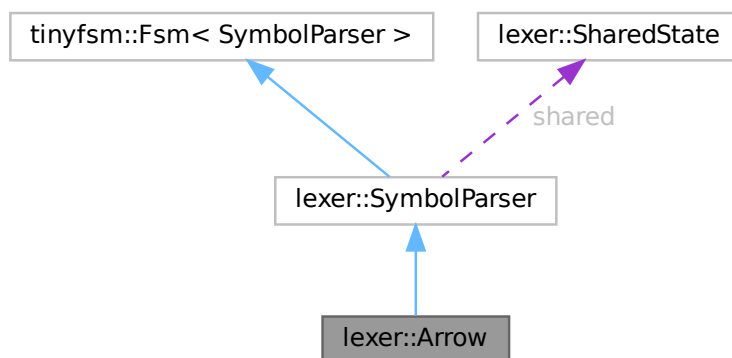
- `src/common/action-queue.hpp`
- `src/common/action-queue.cpp`

## 6.2 `lexer::Arrow` Class Reference

Inheritance diagram for `lexer::Arrow`:



Collaboration diagram for `lexer::Arrow`:





## Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)
- virtual void **react** (`InputWeight_i` const &)
- virtual void **react** (`InputWeight_g` const &)
- virtual void **react** (`InputWeight_h` const &)
- virtual void **react** (`InputWeight_tt` const &)
- virtual void **react** (`InputEqualLabel` const &)
- virtual void **react** (`InputStringValue` const &)
- virtual void **react** (`InputIntValue` const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from `lexer::SymbolParser`

- static void **reset** ()

### Static Public Attributes inherited from `lexer::SymbolParser`

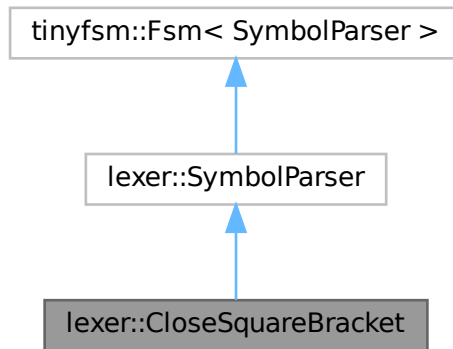
- static `SharedState` **shared** {}

The documentation for this class was generated from the following files:

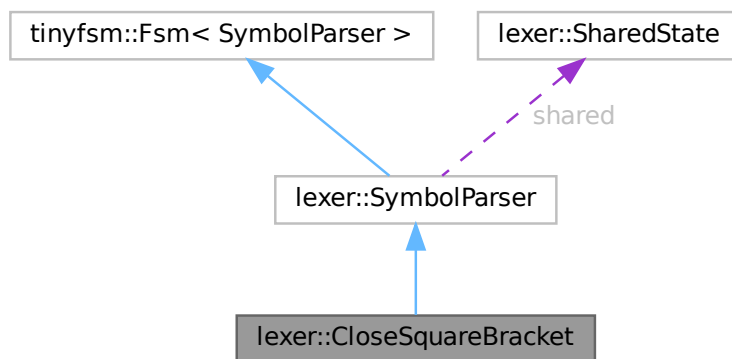
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

### 6.3 `lexer::CloseSquareBracket` Class Reference

Inheritance diagram for `lexer::CloseSquareBracket`:



Collaboration diagram for `lexer::CloseSquareBracket`:



#### Additional Inherited Members

#### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.4 common::Connection Struct Reference

Edge Represents edge without source node.

```
#include <common.hpp>
```

### Public Member Functions

- **Connection** (std::string peer, std::optional< int > weight=std::nullopt, std::optional< std::string > label=std::nullopt) noexcept
- bool **operator==** (const [Connection](#) &other) const

### Public Attributes

- std::optional< int > **weight**
- std::optional< std::string > **label**
- std::string **peer**

## 6.4.1 Detailed Description

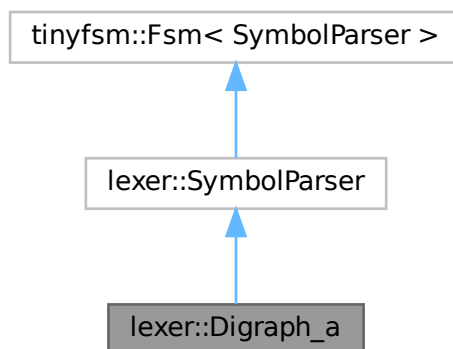
Edge Represents edge without source node.

The documentation for this struct was generated from the following files:

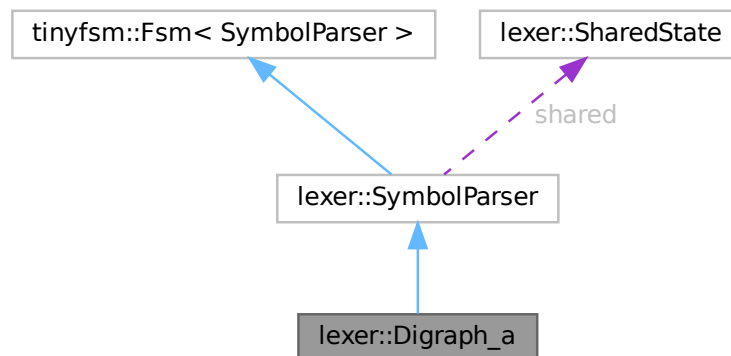
- src/common/common.hpp
- src/common/common.cpp

## 6.5 lexer::Digraph\_a Class Reference

Inheritance diagram for lexer::Digraph\_a:



Collaboration diagram for lexer::Digraph\_a:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

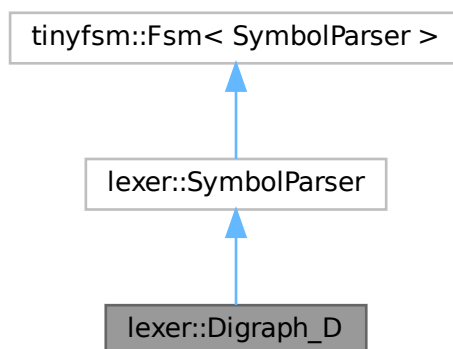
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

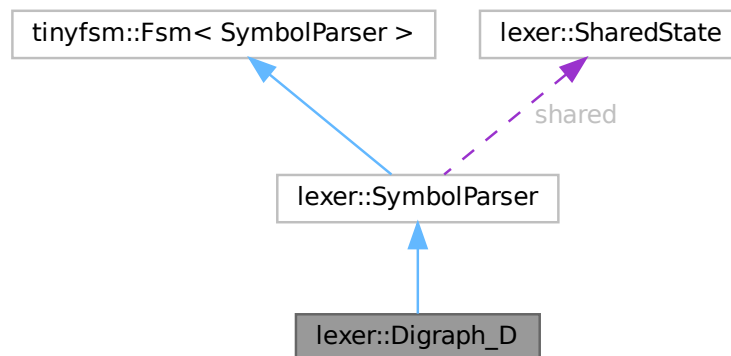
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.6 [lexer::Digraph\\_D](#) Class Reference

Inheritance diagram for [lexer::Digraph\\_D](#):



Collaboration diagram for lexer::Digraph\_D:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

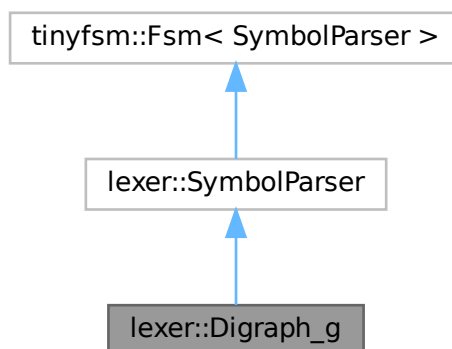
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

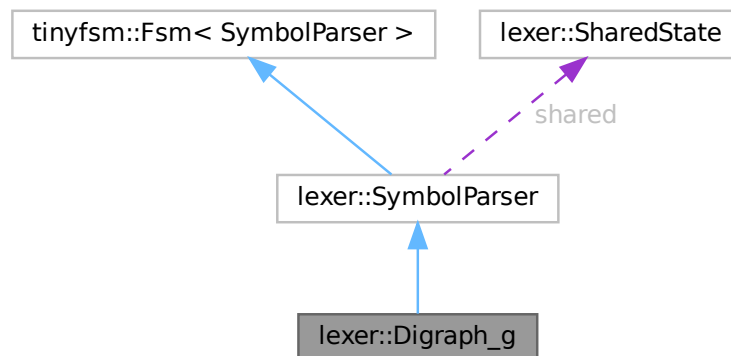
## 6.7 [lexer::Digraph\\_g](#) Class Reference

Inheritance diagram for [lexer::Digraph\\_g](#):





Collaboration diagram for lexer::Digraph\_g:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

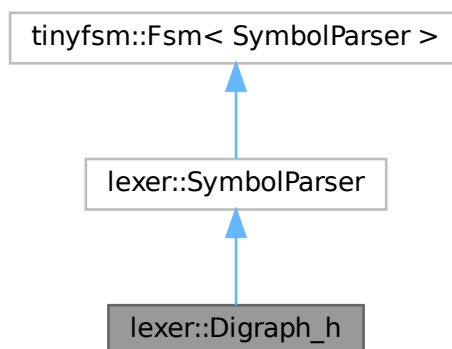
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

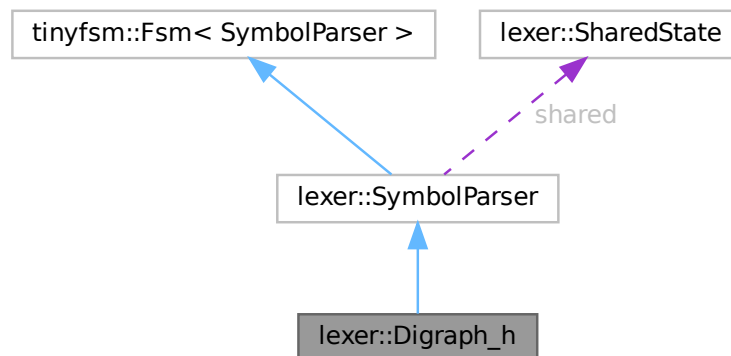
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.8 [lexer::Digraph\\_h](#) Class Reference

Inheritance diagram for [lexer::Digraph\\_h](#):



Collaboration diagram for lexer::Digraph\_h:



#### Additional Inherited Members

#### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)

- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

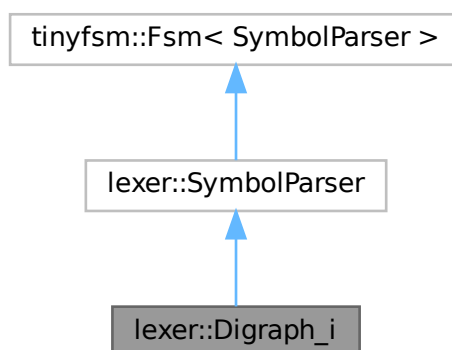
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

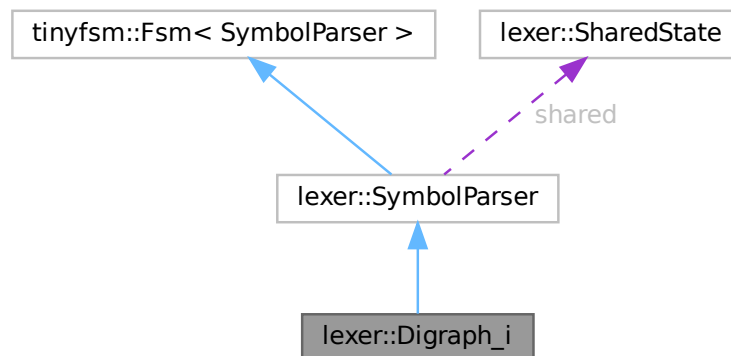
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.9 [lexer::Digraph\\_i](#) Class Reference

Inheritance diagram for [lexer::Digraph\\_i](#):



Collaboration diagram for lexer::Digraph\_i:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

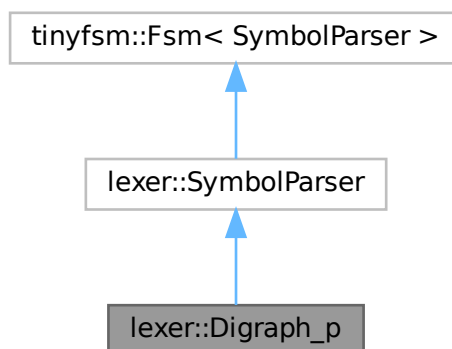
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

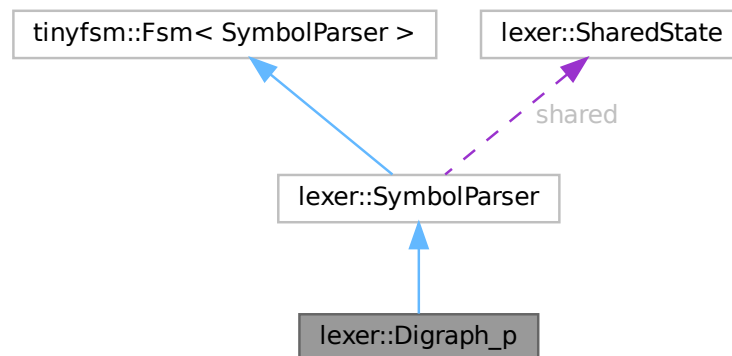
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.10 [lexer::Digraph\\_p](#) Class Reference

Inheritance diagram for [lexer::Digraph\\_p](#):



Collaboration diagram for lexer::Digraph\_p:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

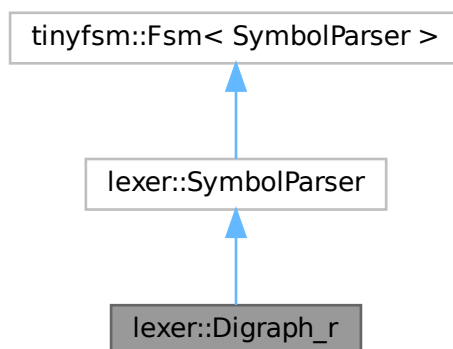
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

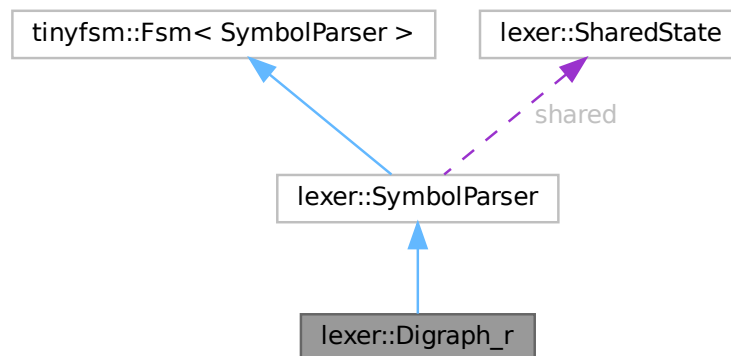
## 6.11 [lexer::Digraph\\_r](#) Class Reference

Inheritance diagram for [lexer::Digraph\\_r](#):





Collaboration diagram for lexer::Digraph\_r:



#### Additional Inherited Members

#### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

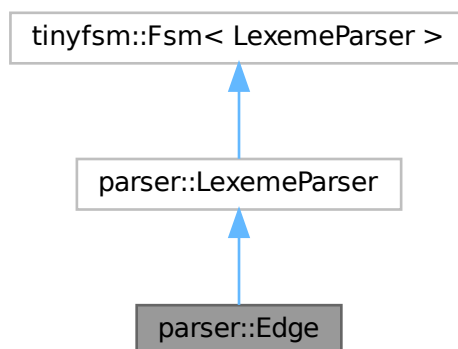
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

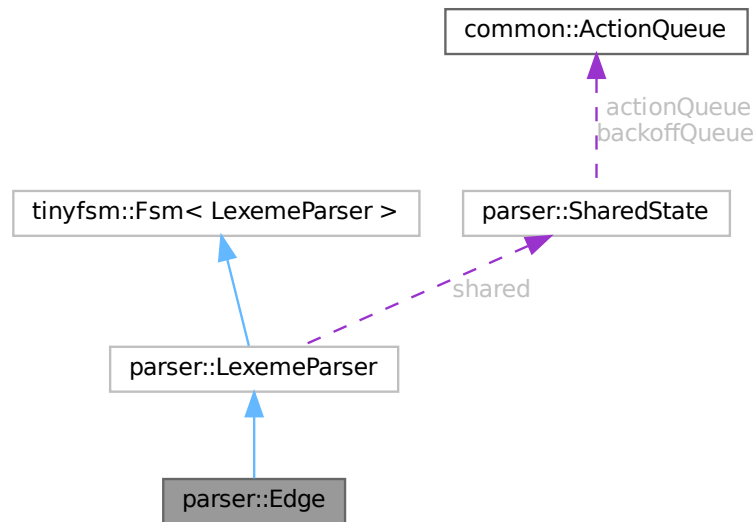
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.12 parser::Edge Class Reference

Inheritance diagram for parser::Edge:



Collaboration diagram for parser::Edge:



#### Additional Inherited Members

#### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

#### Static Protected Attributes inherited from [parser::LexemeParser](#)

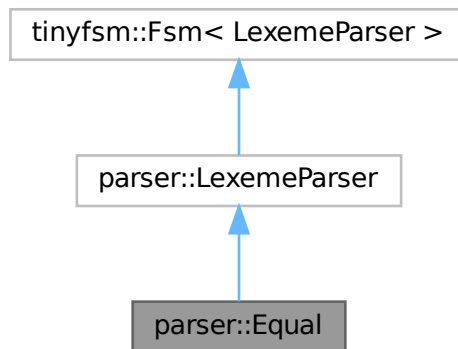
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

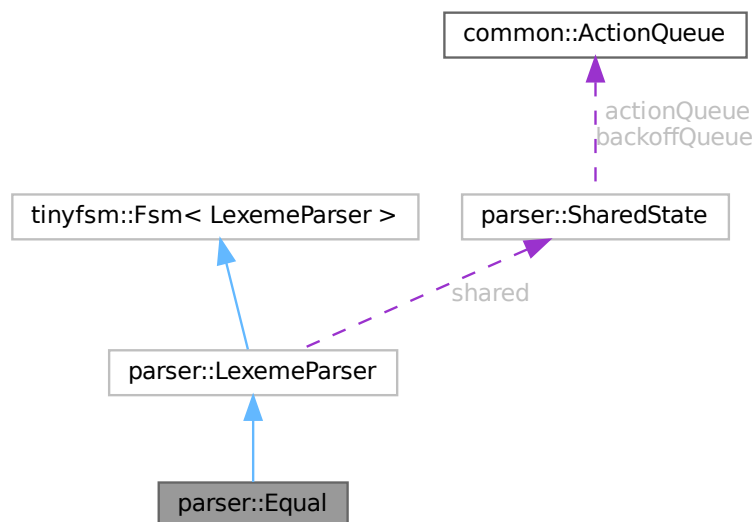
- `src/parser/parser.hpp`
- `src/parser/parser.cpp`

## 6.13 parser::Equal Class Reference

Inheritance diagram for parser::Equal:



Collaboration diagram for parser::Equal:



### Additional Inherited Members

### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)

- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

#### Static Protected Attributes inherited from [parser::LexemeParser](#)

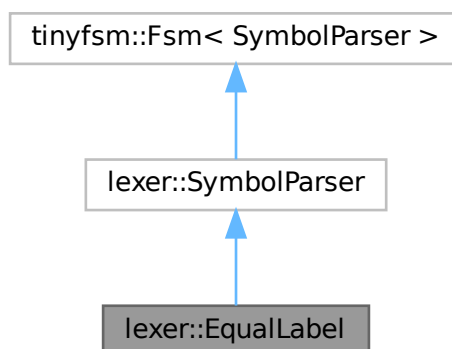
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

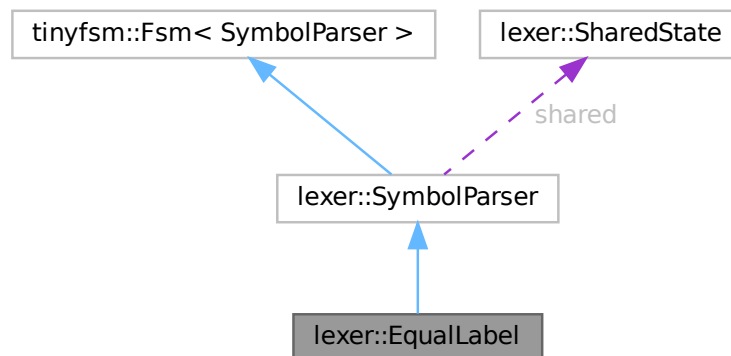
- [src/parser/parser.hpp](#)
- [src/parser/parser.cpp](#)

## 6.14 lexer::EqualLabel Class Reference

Inheritance diagram for lexer::EqualLabel:



Collaboration diagram for `lexer::EqualLabel`:



#### Additional Inherited Members

#### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

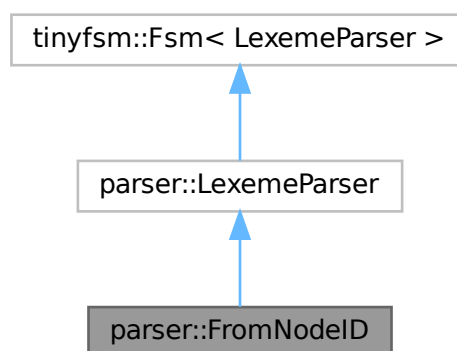
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

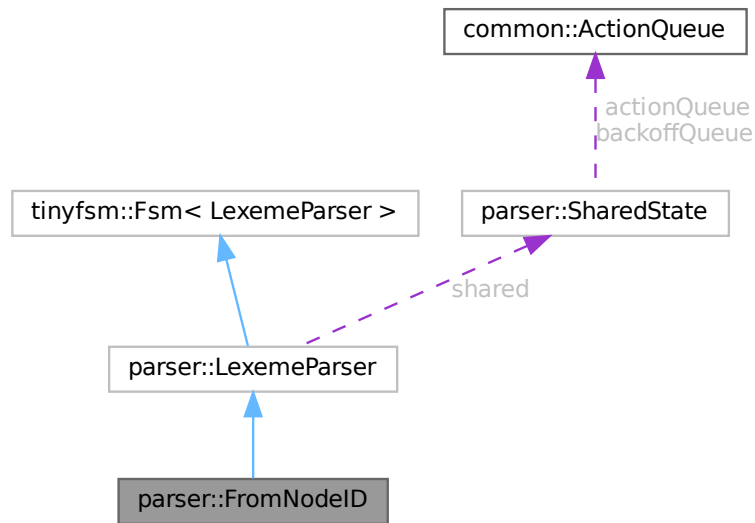
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.15 parser::FromNodeID Class Reference

Inheritance diagram for parser::FromNodeID:



Collaboration diagram for parser::FromNodeID:



#### Additional Inherited Members

#### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

#### Static Protected Attributes inherited from [parser::LexemeParser](#)

- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/parser/parser.hpp](#)
- [src/parser/parser.cpp](#)

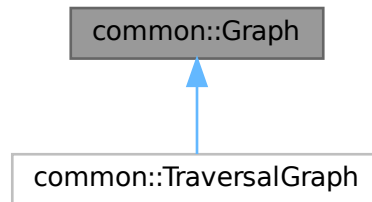


## 6.16 common::Graph Class Reference

[Graph](#) Represents graph object as lists of connections. Supports some API calls to make life easier.

```
#include <common.hpp>
```

Inheritance diagram for common::Graph:



### Public Types

- using **graph\_flags\_t** = std::uint8\_t
- using **connections\_t** = std::vector< [Connection](#) >
- using **label\_container\_t** = std::unordered\_map< std::string, std::string >
- using **container\_t** = std::unordered\_map< std::string, connections\_t >
- using **container\_value\_t** = std::pair< std::string, connections\_t >

### Public Member Functions

- virtual **~Graph** ()=default  
*Object destructor.*
- **Graph** () noexcept  
*Construct a new [Graph](#) object Constructs object and puts it into non-initialized state.*
- void **init** (graph\_flags\_t flags=0x0) noexcept  
*Init's graph object Sets flags and puts object into active mode.*
- bool **isDirectional** () const noexcept  
*Checks for drc flag.*
- bool **isWeighted** () const noexcept  
*Checks for wgh flag.*
- void **pushNode** (std::string name)  
*Adds new node to graph.*
- void **pushEdge** (std::string source, [Connection](#) edge)  
*Adds new edge to graph.*
- void **setLabel** (std::string source, std::string label)  
*Sets label for node.*
- void **removeLabel** (const std::string &source)  
*Removes label for node.*
- bool **areConnected** (std::string\_view source, std::string\_view target) const

*Checks for connection between nodes.*

- `std::optional< int > getWeight (std::string_view source, std::string_view target) const`

*Gets weight of edge.*

- `std::optional< std::string > getLabel (std::string source) const`

*Gets label of node.*

- `std::string dumpGraphState () const`

*Dump graph state to a string.*

- `std::vector< std::string > getNodes () const`

*Gets nodes ID.*

## Public Attributes

- friend **GraphDumpingFactory**

## Protected Attributes

- `std::uint8_t flags_`
- `std::unique_ptr< container_t > connections_`
- `std::unique_ptr< label_container_t > labels_`

## Friends

- `std::ostream & operator<< (std::ostream &os, const Graph &graph)`

## 6.16.1 Detailed Description

[Graph](#) Represents graph object as lists of connections. Supports some API calls to make life easier.

## 6.16.2 Member Function Documentation

### 6.16.2.1 `areConnected()`

```
bool Graph::areConnected (
    std::string_view source,
    std::string_view target ) const
```

Checks for connection between nodes.

#### Parameters

<i>source</i>	first node ID
<i>target</i>	second node ID

#### Returns

true if connection exists  
false otherwise

### 6.16.2.2 dumpGraphState()

```
std::string Graph::dumpGraphState ( ) const
```

Dump graph state to a string.

#### Returns

std::string graph state

### 6.16.2.3 getLabel()

```
std::optional< std::string > Graph::getLabel (
    std::string source ) const
```

Gets label of node.

#### Parameters

<i>source</i>	node ID
---------------	---------

#### Returns

std::optional<std::string> label if exists

### 6.16.2.4 getNodes()

```
std::vector< std::string > Graph::getNodes ( ) const
```

Gets nodes ID.

#### Returns

std::vector<std::string> graph nodes vector

### 6.16.2.5 getWeight()

```
std::optional< int > Graph::getWeight (
    std::string_view source,
    std::string_view target ) const
```

Gets weight of edge.

#### Parameters

<i>source</i>	first node ID
<i>target</i>	second node ID

**Returns**

std::optional<int> weight if exists

**6.16.2.6 init()**

```
void Graph::init (
    graph_flags_t flags = 0x0 ) [noexcept]
```

Init's graph object Sets flags and puts object into active mode.

**Parameters**

<i>flags</i>	flags to set
--------------	--------------

**6.16.2.7 isDirectional()**

```
bool Graph::isDirectional ( ) const [noexcept]
```

Checks for drc flag.

**Returns**

true if graph is directional  
false otherwise

**6.16.2.8 isWeighted()**

```
bool Graph::isWeighted ( ) const [noexcept]
```

Checks for wgh flag.

**Returns**

true if graph is weighted  
false otherwise

**6.16.2.9 pushEdge()**

```
void Graph::pushEdge (
    std::string source,
    Connection edge )
```

Adds new edge to graph.

## Parameters

<i>source</i>	source node ID
<i>edge</i>	edge to add

**6.16.2.10 pushNode()**

```
void Graph::pushNode (
    std::string name )
```

Adds new node to graph.

## Parameters

<i>name</i>	node ID
-------------	---------

**6.16.2.11 removeLabel()**

```
void Graph::removeLabel (
    const std::string & source )
```

Removes label for node.

## Parameters

<i>source</i>	node ID
---------------	---------

**6.16.2.12 setLabel()**

```
void Graph::setLabel (
    std::string source,
    std::string label )
```

Sets label for node.

## Parameters

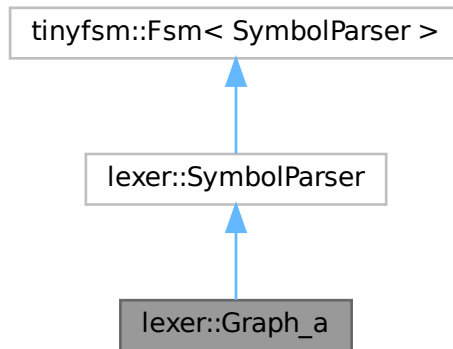
<i>source</i>	node ID
<i>label</i>	label string

The documentation for this class was generated from the following files:

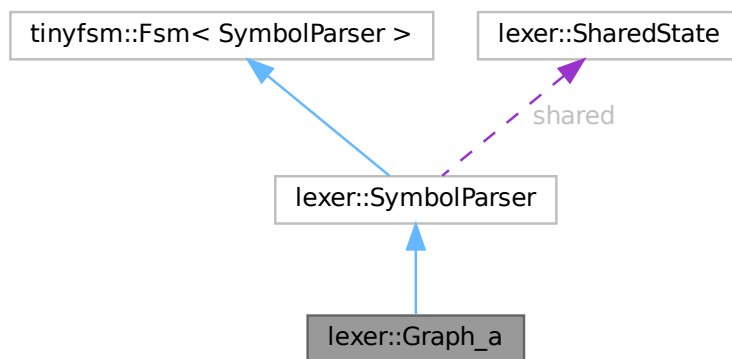
- src/common/common.hpp
- src/common/common.cpp

## 6.17 lexer::Graph\_a Class Reference

Inheritance diagram for lexer::Graph\_a:



Collaboration diagram for lexer::Graph\_a:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

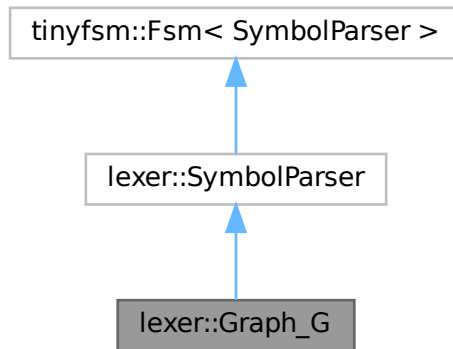
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

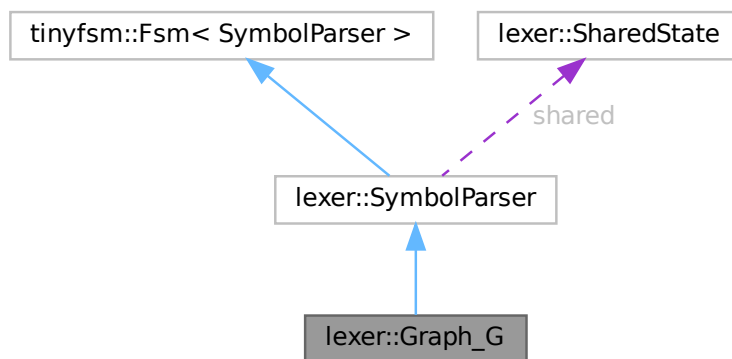
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.18 lexer::Graph\_G Class Reference

Inheritance diagram for lexer::Graph\_G:



Collaboration diagram for lexer::Graph\_G:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)



- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

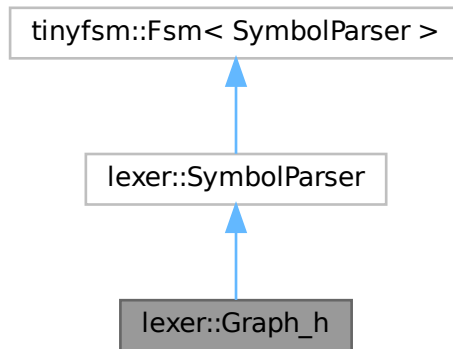
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

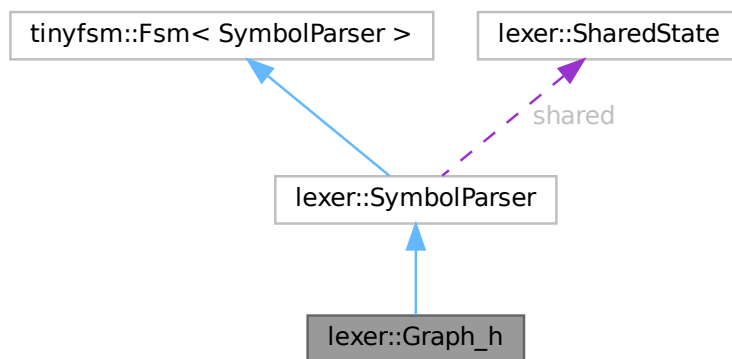
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.19 lexer::Graph\_h Class Reference

Inheritance diagram for lexer::Graph\_h:



Collaboration diagram for lexer::Graph\_h:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

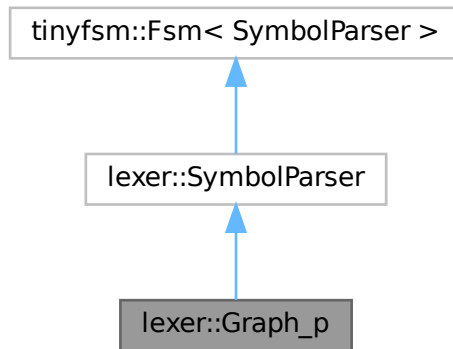
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

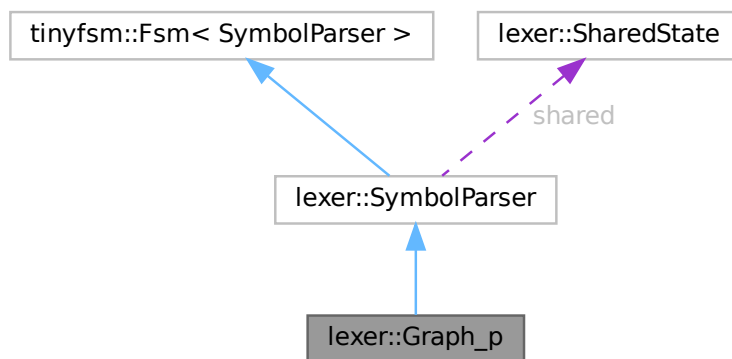
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.20 lexer::Graph\_p Class Reference

Inheritance diagram for lexer::Graph\_p:



Collaboration diagram for lexer::Graph\_p:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

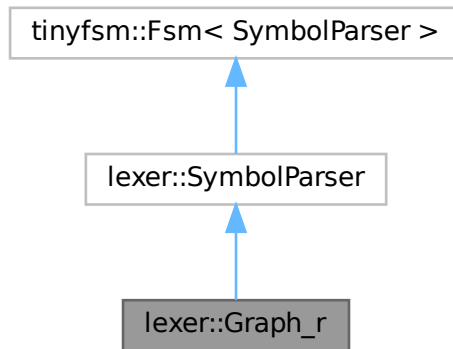
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

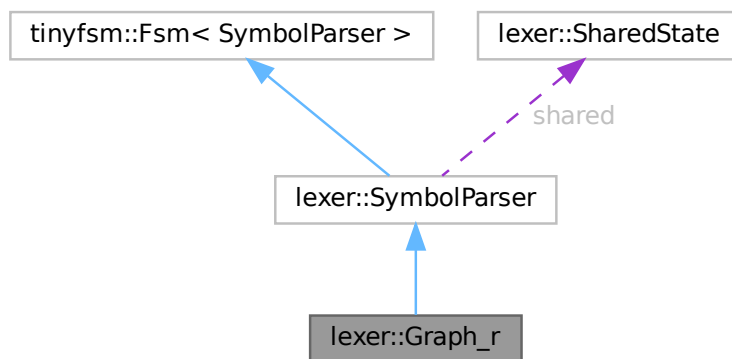
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.21 lexer::Graph\_r Class Reference

Inheritance diagram for lexer::Graph\_r:



Collaboration diagram for lexer::Graph\_r:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.22 common::GraphDumpingFactory Class Reference

### Classes

- struct [Settings](#)

## Public Member Functions

- [GraphDumpingFactory](#) ([Settings](#) settings) noexcept  
*Construct a new graph dumping factory.*
- **GraphDumpingFactory** ([GraphDumpingFactory](#) &&) noexcept=default
- **GraphDumpingFactory** (const [GraphDumpingFactory](#) &)=delete
- void [dumpOne](#) (const [Graph](#) &one, std::string\_view filename)  
*Dumps single graph to a file.*

## 6.22.1 Constructor & Destructor Documentation

### 6.22.1.1 GraphDumpingFactory()

```
GraphDumpingFactory::GraphDumpingFactory (
    Settings settings ) [noexcept]
```

Construct a new graph dumping factory.

#### Parameters

<i>settings</i>	settings for this factory
-----------------	---------------------------

## 6.22.2 Member Function Documentation

### 6.22.2.1 dumpOne()

```
void GraphDumpingFactory::dumpOne (
    const Graph & one,
    std::string_view filename )
```

Dumps single graph to a file.

#### Parameters

<i>one</i>	target graph object
<i>filename</i>	file to dump to

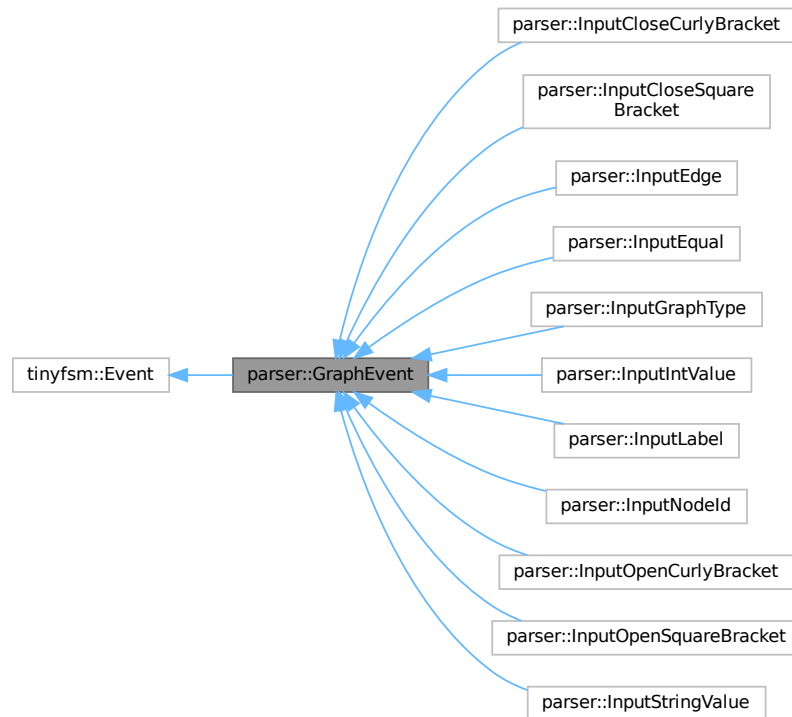
The documentation for this class was generated from the following files:

- src/common/reverted.hpp
- src/common/reverted.cpp

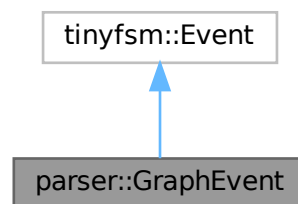


## 6.23 parser::GraphEvent Struct Reference

Inheritance diagram for parser::GraphEvent:



Collaboration diagram for parser::GraphEvent:

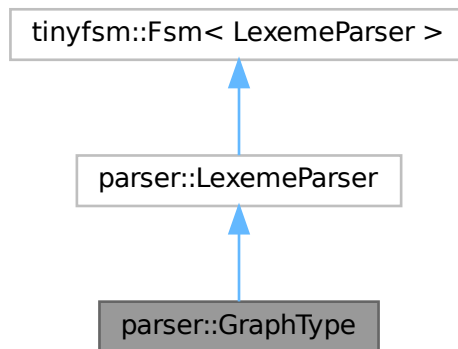


The documentation for this struct was generated from the following file:

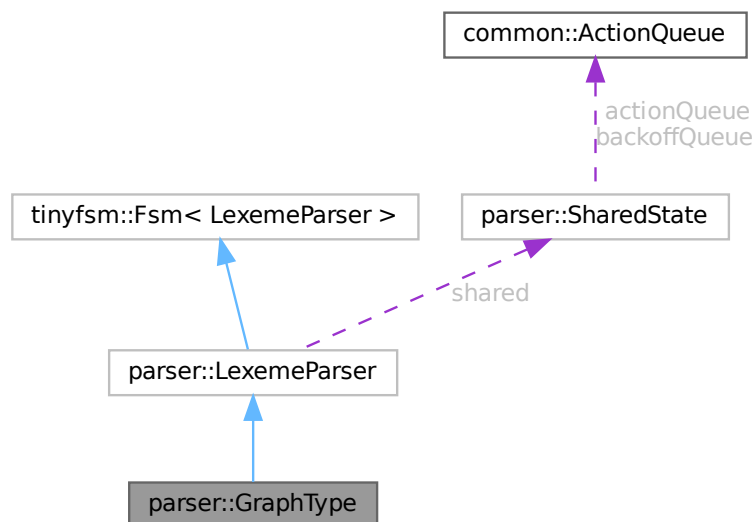
- `src/parser/parser.hpp`

## 6.24 parser::GraphType Class Reference

Inheritance diagram for parser::GraphType:



Collaboration diagram for parser::GraphType:



### Additional Inherited Members

### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)

- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

### Static Protected Attributes inherited from [parser::LexemeParser](#)

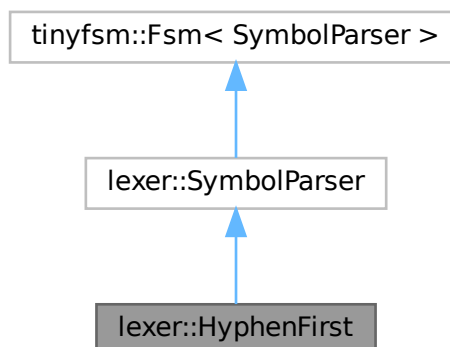
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

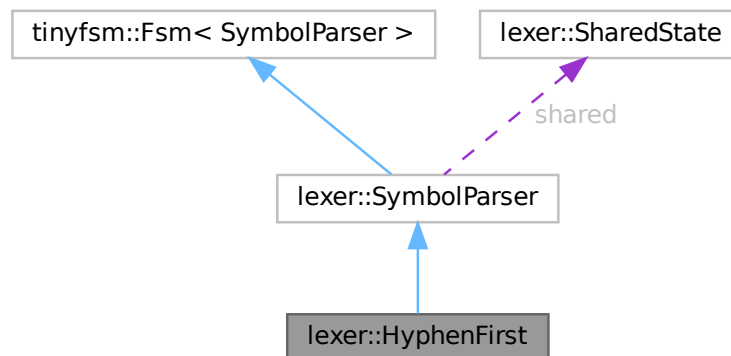
- src/parser/parser.hpp
- src/parser/parser.cpp

## 6.25 lexer::HyphenFirst Class Reference

Inheritance diagram for lexer::HyphenFirst:



Collaboration diagram for `lexer::HyphenFirst`:



#### Additional Inherited Members

#### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputSpace` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)
- virtual void **react** (`InputWeight_i` const &)

- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

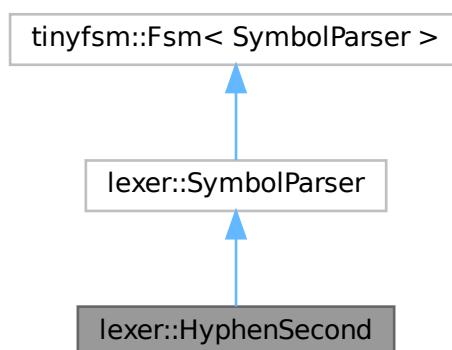
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

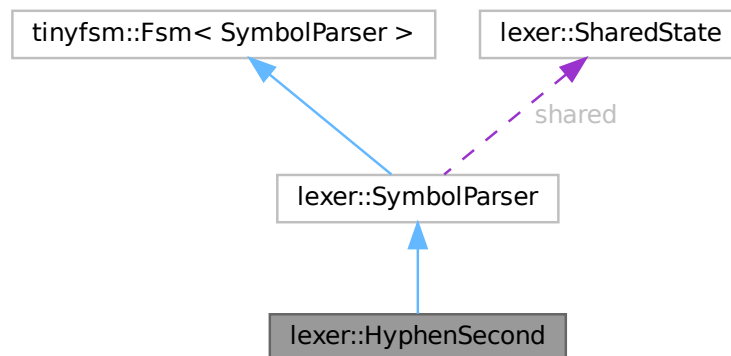
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.26 `lexer::HyphenSecond` Class Reference

Inheritance diagram for `lexer::HyphenSecond`:



Collaboration diagram for `lexer::HyphenSecond`:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)
- virtual void **react** (`InputWeight_i` const &)

- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

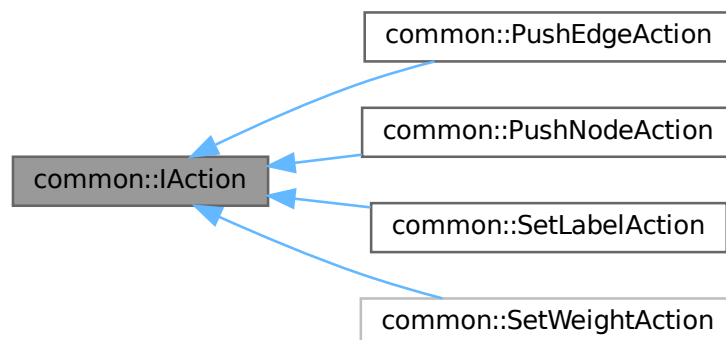
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.27 common::IAction Class Reference

Callback Interface.

```
#include <action-queue.hpp>
```

Inheritance diagram for common::IAction:



## Public Member Functions

- virtual void [make](#) ()=0  
*call to action*

### 6.27.1 Detailed Description

Callback Interface.

### 6.27.2 Member Function Documentation

#### 6.27.2.1 [make\(\)](#)

```
virtual void common::IAction::make ( ) [pure virtual]
```

call to action

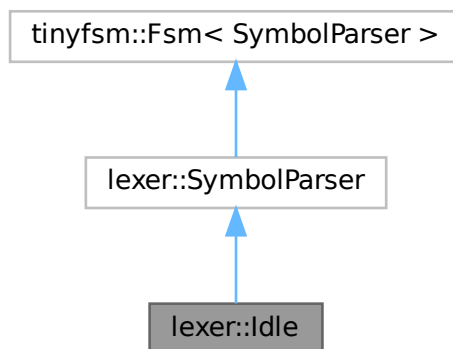
Implemented in [common::PushNodeAction](#), [common::SetLabelAction](#), [common::PushEdgeAction](#), and [common::SetWeightAction](#).

The documentation for this class was generated from the following file:

- [src/common/action-queue.hpp](#)

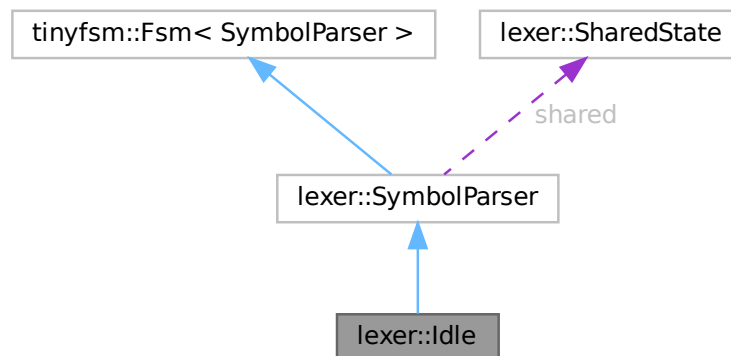
## 6.28 [lexer::Idle](#) Class Reference

Inheritance diagram for [lexer::Idle](#):





Collaboration diagram for lexer::Idle:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)

- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

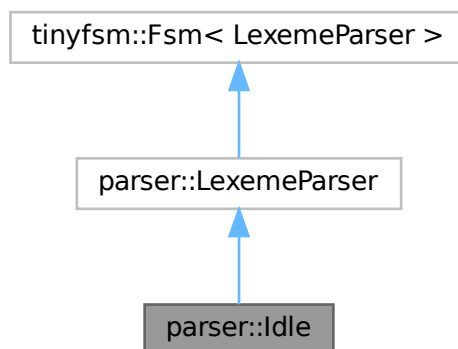
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

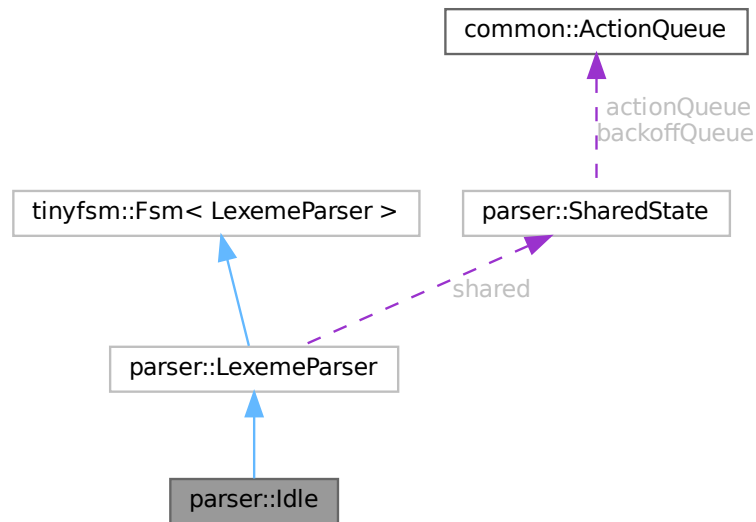
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.29 parser::Idle Class Reference

Inheritance diagram for parser::Idle:



Collaboration diagram for parser::Idle:



#### Additional Inherited Members

#### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

#### Static Protected Attributes inherited from [parser::LexemeParser](#)

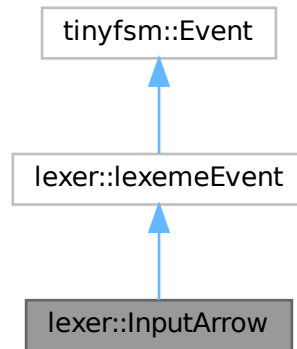
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

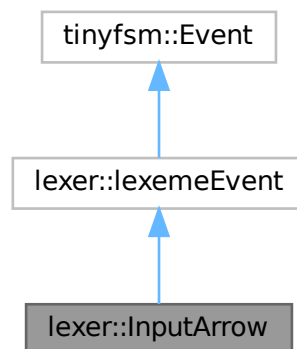
- `src/parser/parser.hpp`
- `src/parser/parser.cpp`

## 6.30 lexer::InputArrow Struct Reference

Inheritance diagram for lexer::InputArrow:



Collaboration diagram for lexer::InputArrow:

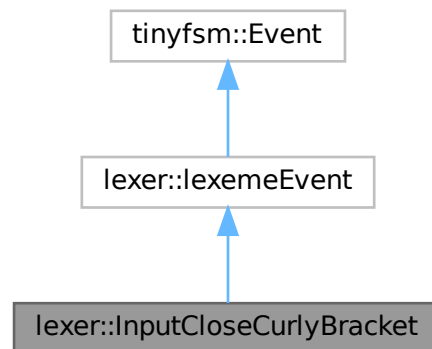


The documentation for this struct was generated from the following file:

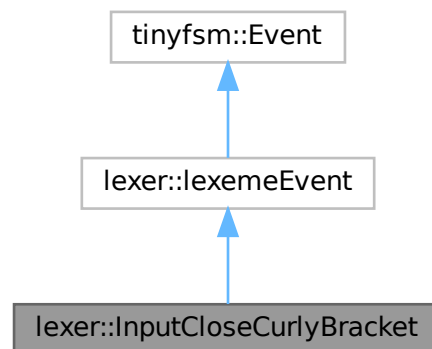
- `src/lexer/lexer.hpp`

## 6.31 lexer::InputCloseCurlyBracket Struct Reference

Inheritance diagram for lexer::InputCloseCurlyBracket:



Collaboration diagram for lexer::InputCloseCurlyBracket:

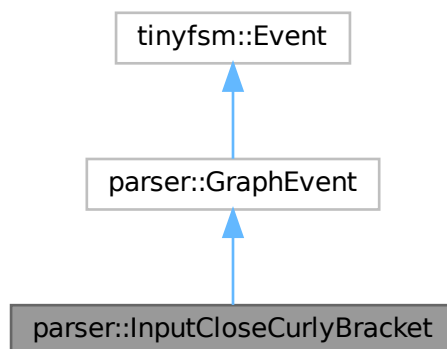


The documentation for this struct was generated from the following file:

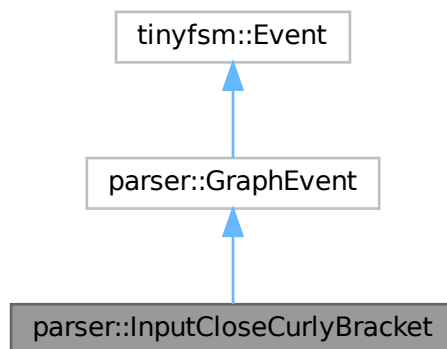
- src/lexer/lexer.hpp

## 6.32 parser::InputCloseCurlyBracket Struct Reference

Inheritance diagram for parser::InputCloseCurlyBracket:



Collaboration diagram for parser::InputCloseCurlyBracket:

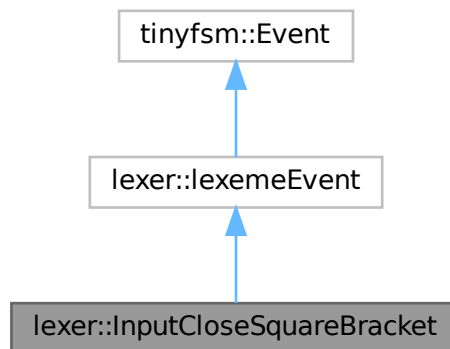


The documentation for this struct was generated from the following file:

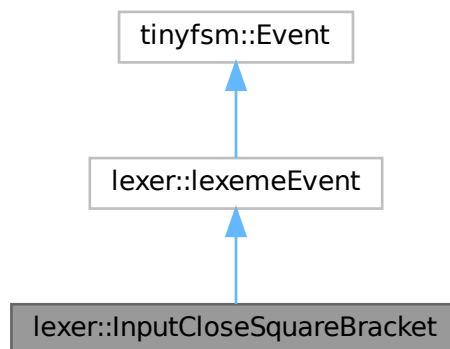
- `src/parser/parser.hpp`

## 6.33 lexer::InputCloseSquareBracket Struct Reference

Inheritance diagram for lexer::InputCloseSquareBracket:



Collaboration diagram for lexer::InputCloseSquareBracket:

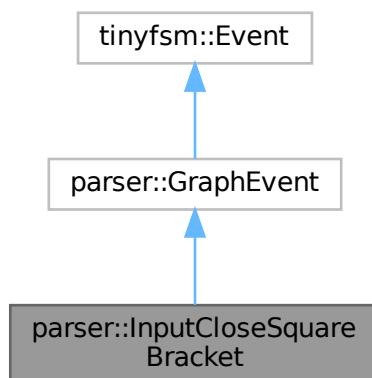


The documentation for this struct was generated from the following file:

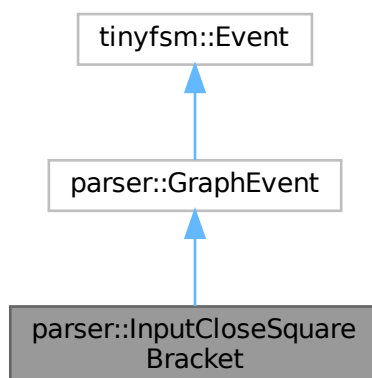
- src/lexer/lexer.hpp

## 6.34 parser::InputCloseSquareBracket Struct Reference

Inheritance diagram for parser::InputCloseSquareBracket:



Collaboration diagram for parser::InputCloseSquareBracket:



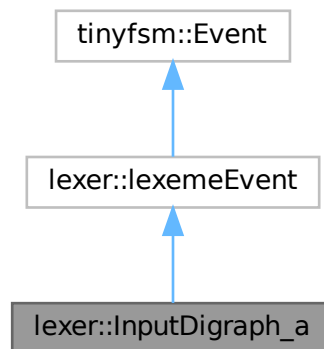
The documentation for this struct was generated from the following file:

- src/parser/parser.hpp

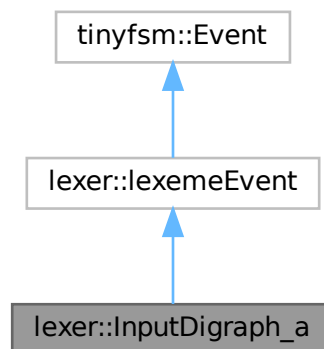


## 6.35 lexer::InputDigraph\_a Struct Reference

Inheritance diagram for lexer::InputDigraph\_a:



Collaboration diagram for lexer::InputDigraph\_a:

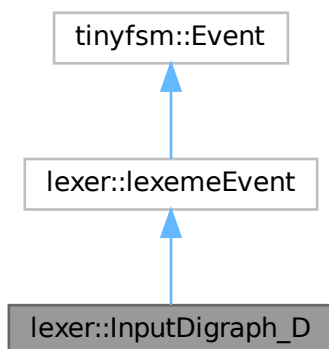


The documentation for this struct was generated from the following file:

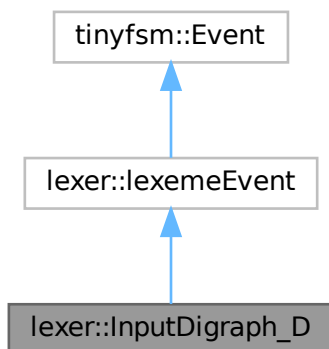
- src/lexer/lexer.hpp

## 6.36 lexer::InputDigraph\_D Struct Reference

Inheritance diagram for lexer::InputDigraph\_D:



Collaboration diagram for lexer::InputDigraph\_D:

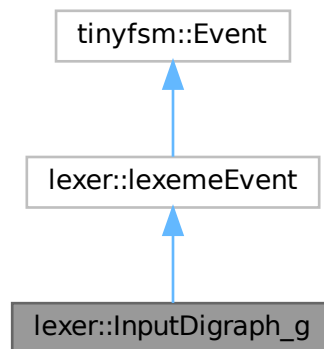


The documentation for this struct was generated from the following file:

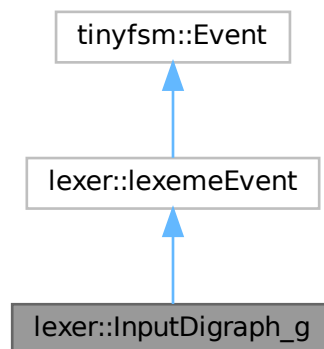
- src/lexer/lexer.hpp

## 6.37 lexer::InputDigraph\_g Struct Reference

Inheritance diagram for lexer::InputDigraph\_g:



Collaboration diagram for lexer::InputDigraph\_g:

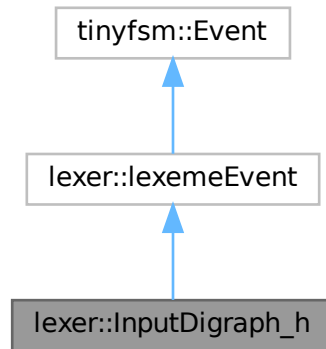


The documentation for this struct was generated from the following file:

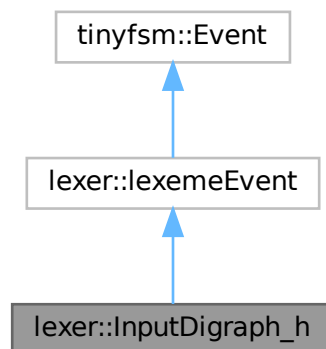
- `src/lexer/lexer.hpp`

## 6.38 lexer::InputDigraph\_h Struct Reference

Inheritance diagram for lexer::InputDigraph\_h:



Collaboration diagram for lexer::InputDigraph\_h:

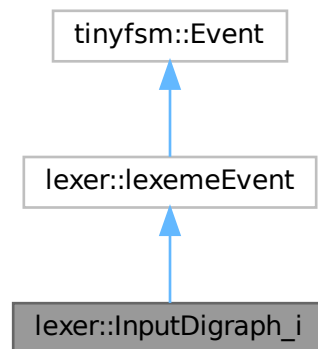


The documentation for this struct was generated from the following file:

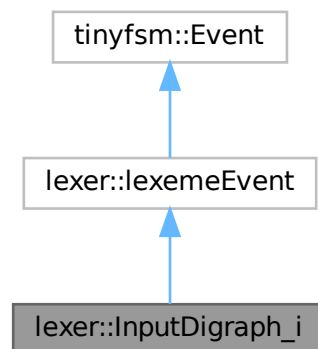
- `src/lexer/lexer.hpp`

## 6.39 lexer::InputDigraph\_i Struct Reference

Inheritance diagram for lexer::InputDigraph\_i:



Collaboration diagram for lexer::InputDigraph\_i:

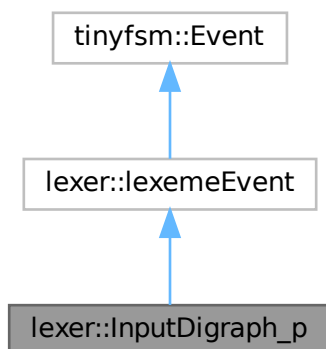


The documentation for this struct was generated from the following file:

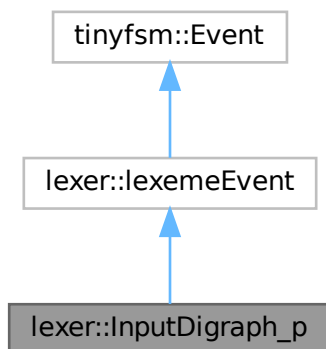
- `src/lexer/lexer.hpp`

## 6.40 lexer::InputDigraph\_p Struct Reference

Inheritance diagram for lexer::InputDigraph\_p:



Collaboration diagram for lexer::InputDigraph\_p:

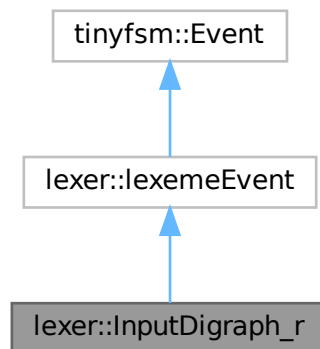


The documentation for this struct was generated from the following file:

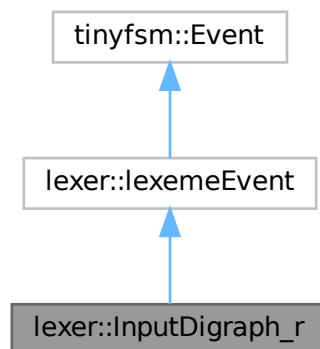
- `src/lexer/lexer.hpp`

## 6.41 lexer::InputDigraph\_r Struct Reference

Inheritance diagram for lexer::InputDigraph\_r:



Collaboration diagram for lexer::InputDigraph\_r:

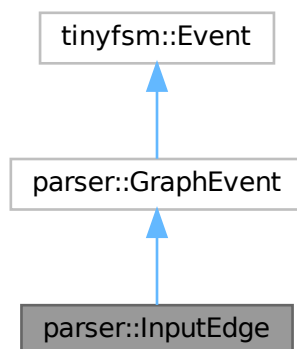


The documentation for this struct was generated from the following file:

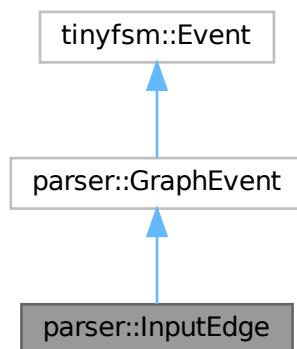
- `src/lexer/lexer.hpp`

## 6.42 parser::InputEdge Struct Reference

Inheritance diagram for parser::InputEdge:



Collaboration diagram for parser::InputEdge:



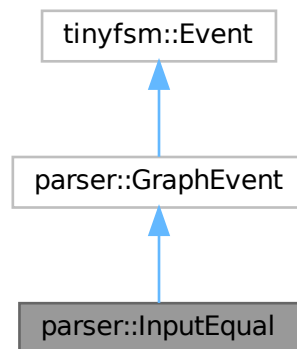
The documentation for this struct was generated from the following file:

- src/parser/parser.hpp

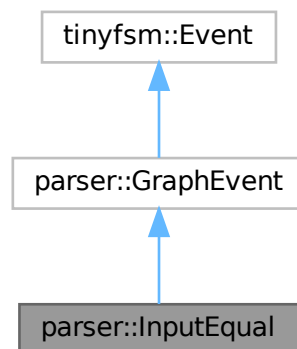


## 6.43 parser::InputEqual Struct Reference

Inheritance diagram for parser::InputEqual:



Collaboration diagram for parser::InputEqual:

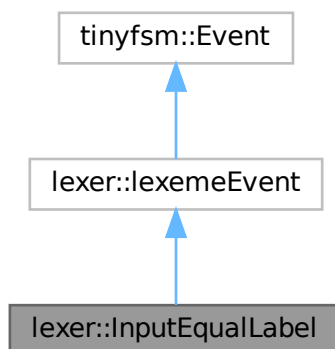


The documentation for this struct was generated from the following file:

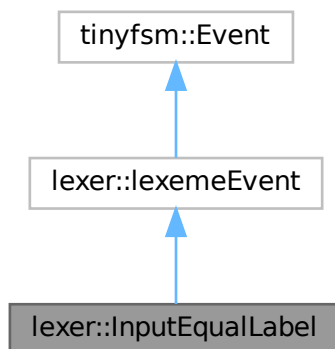
- `src/parser/parser.hpp`

## 6.44 lexer::InputEqualLabel Struct Reference

Inheritance diagram for lexer::InputEqualLabel:



Collaboration diagram for lexer::InputEqualLabel:

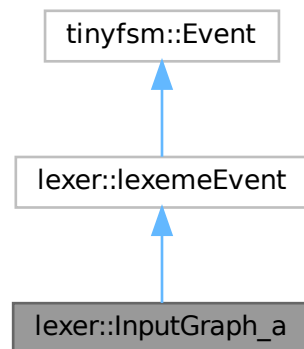


The documentation for this struct was generated from the following file:

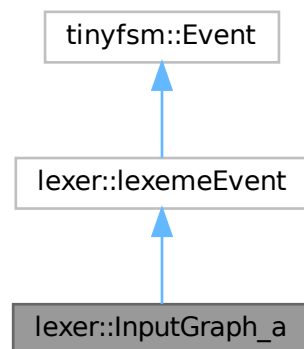
- `src/lexer/lexer.hpp`

## 6.45 lexer::InputGraph\_a Struct Reference

Inheritance diagram for lexer::InputGraph\_a:



Collaboration diagram for lexer::InputGraph\_a:

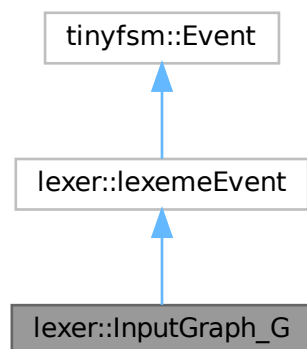


The documentation for this struct was generated from the following file:

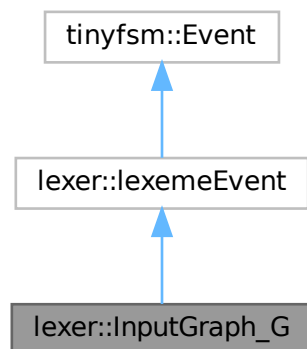
- src/lexer/lexer.hpp

## 6.46 lexer::InputGraph\_G Struct Reference

Inheritance diagram for lexer::InputGraph\_G:



Collaboration diagram for lexer::InputGraph\_G:

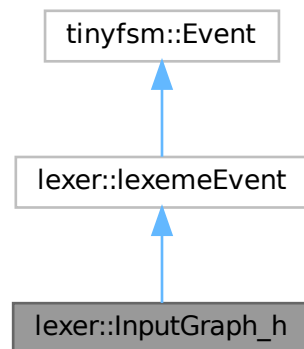


The documentation for this struct was generated from the following file:

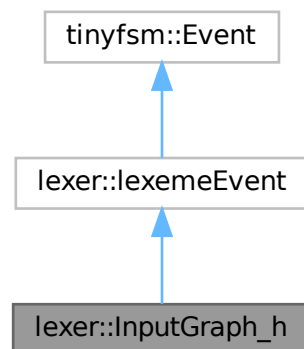
- src/lexer/lexer.hpp

## 6.47 lexer::InputGraph\_h Struct Reference

Inheritance diagram for lexer::InputGraph\_h:



Collaboration diagram for lexer::InputGraph\_h:

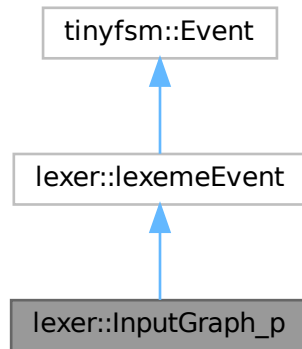


The documentation for this struct was generated from the following file:

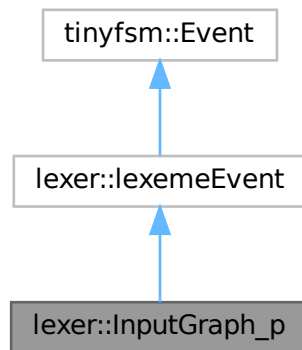
- `src/lexer/lexer.hpp`

## 6.48 lexer::InputGraph\_p Struct Reference

Inheritance diagram for lexer::InputGraph\_p:



Collaboration diagram for lexer::InputGraph\_p:

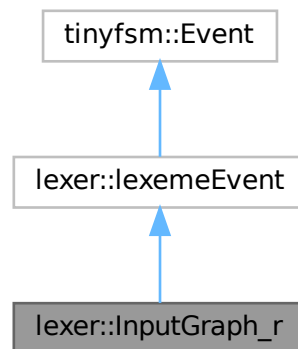


The documentation for this struct was generated from the following file:

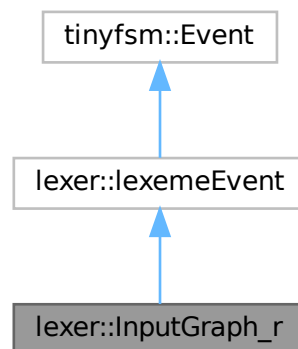
- src/lexer/lexer.hpp

## 6.49 lexer::InputGraph\_r Struct Reference

Inheritance diagram for lexer::InputGraph\_r:



Collaboration diagram for lexer::InputGraph\_r:

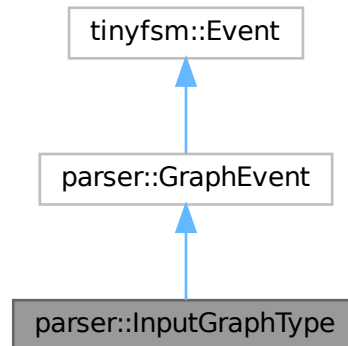


The documentation for this struct was generated from the following file:

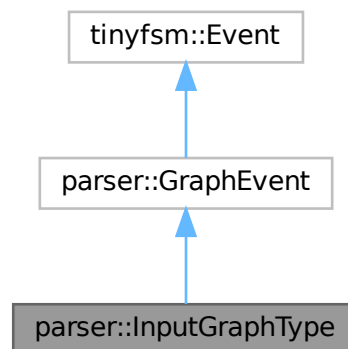
- src/lexer/lexer.hpp

## 6.50 parser::InputGraphType Struct Reference

Inheritance diagram for parser::InputGraphType:



Collaboration diagram for parser::InputGraphType:



### Public Attributes

- `std::string` **graphType**

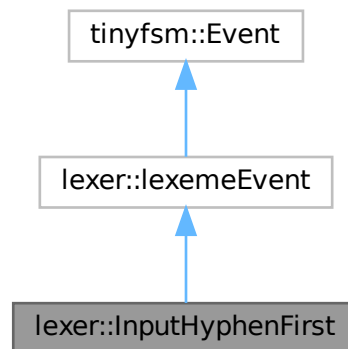
The documentation for this struct was generated from the following file:

- `src/parser/parser.hpp`

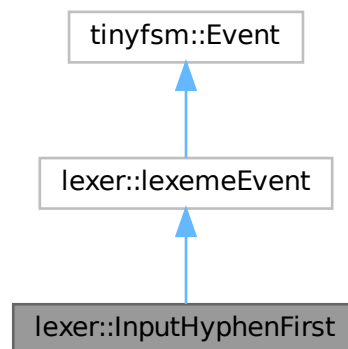


## 6.51 lexer::InputHyphenFirst Struct Reference

Inheritance diagram for lexer::InputHyphenFirst:



Collaboration diagram for lexer::InputHyphenFirst:

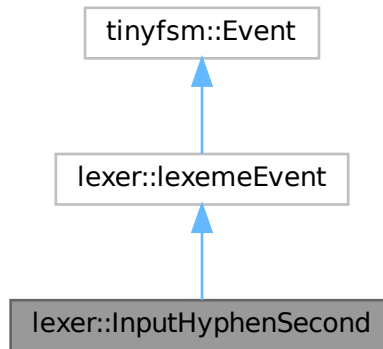


The documentation for this struct was generated from the following file:

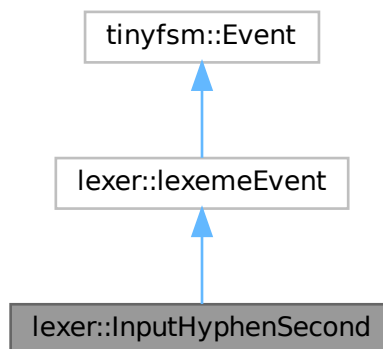
- src/lexer/lexer.hpp

## 6.52 lexer::InputHyphenSecond Struct Reference

Inheritance diagram for lexer::InputHyphenSecond:



Collaboration diagram for lexer::InputHyphenSecond:

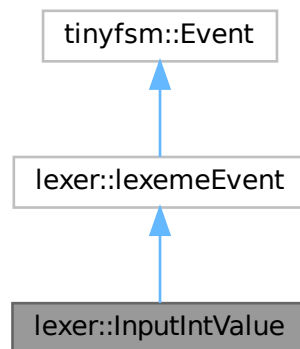


The documentation for this struct was generated from the following file:

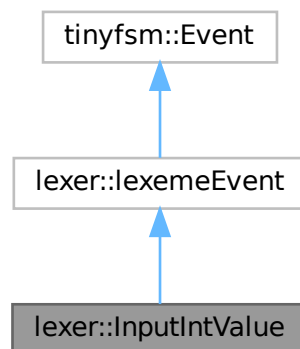
- src/lexer/lexer.hpp

## 6.53 lexer::InputIntValue Struct Reference

Inheritance diagram for lexer::InputIntValue:



Collaboration diagram for lexer::InputIntValue:



### Public Attributes

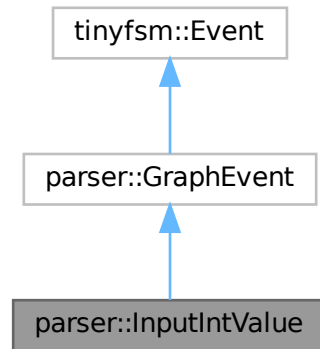
- int **IntValue**

The documentation for this struct was generated from the following file:

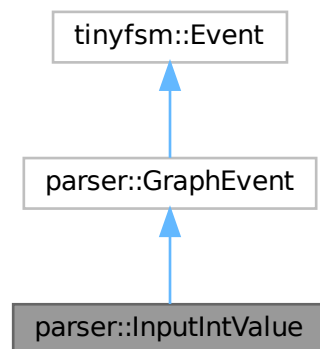
- src/lexer/lexer.hpp

## 6.54 parser::InputIntValue Struct Reference

Inheritance diagram for parser::InputIntValue:



Collaboration diagram for parser::InputIntValue:



### Public Attributes

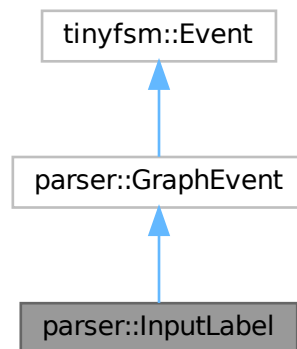
- `int` **weight**

The documentation for this struct was generated from the following file:

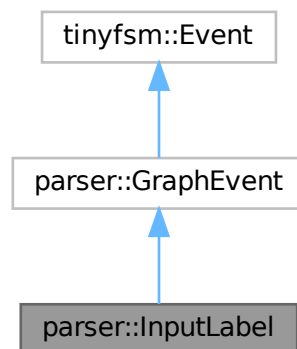
- `src/parser/parser.hpp`

## 6.55 parser::InputLabel Struct Reference

Inheritance diagram for parser::InputLabel:



Collaboration diagram for parser::InputLabel:

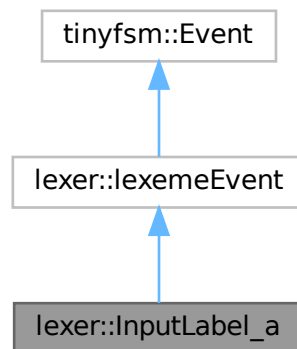


The documentation for this struct was generated from the following file:

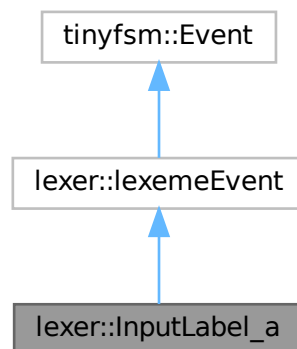
- src/parser/parser.hpp

## 6.56 lexer::InputLabel\_a Struct Reference

Inheritance diagram for lexer::InputLabel\_a:



Collaboration diagram for lexer::InputLabel\_a:

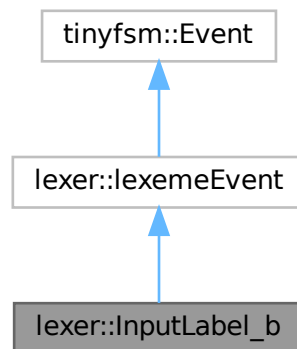


The documentation for this struct was generated from the following file:

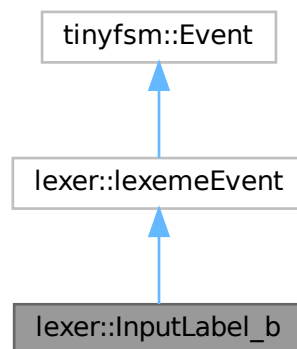
- src/lexer/lexer.hpp

## 6.57 lexer::InputLabel\_b Struct Reference

Inheritance diagram for lexer::InputLabel\_b:



Collaboration diagram for lexer::InputLabel\_b:

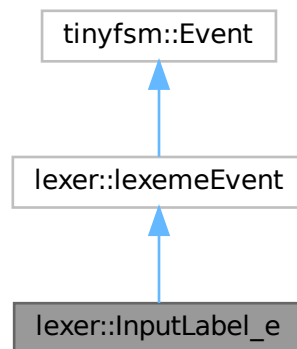


The documentation for this struct was generated from the following file:

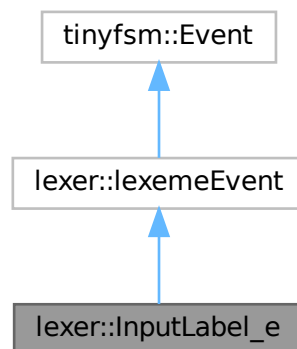
- `src/lexer/lexer.hpp`

## 6.58 lexer::InputLabel\_e Struct Reference

Inheritance diagram for lexer::InputLabel\_e:



Collaboration diagram for lexer::InputLabel\_e:



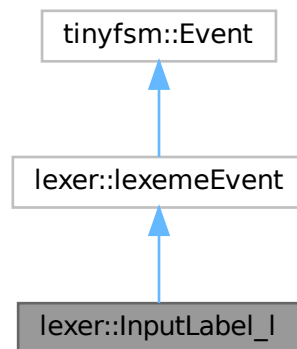
The documentation for this struct was generated from the following file:

- src/lexer/lexer.hpp

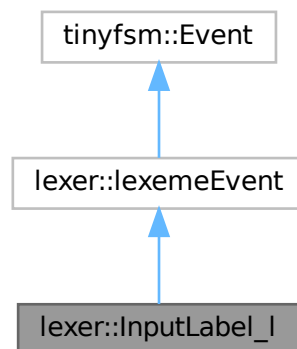


## 6.59 lexer::InputLabel\_I Struct Reference

Inheritance diagram for lexer::InputLabel\_I:



Collaboration diagram for lexer::InputLabel\_I:

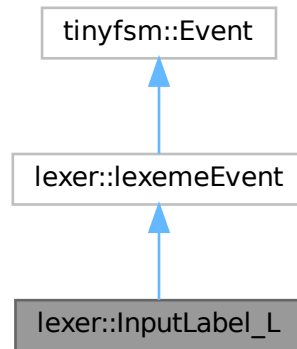


The documentation for this struct was generated from the following file:

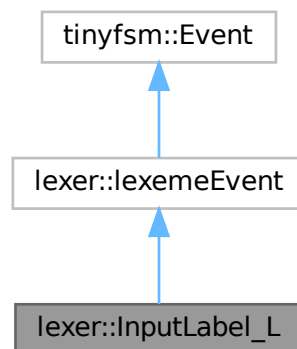
- `src/lexer/lexer.hpp`

## 6.60 lexer::InputLabel\_L Struct Reference

Inheritance diagram for lexer::InputLabel\_L:



Collaboration diagram for lexer::InputLabel\_L:

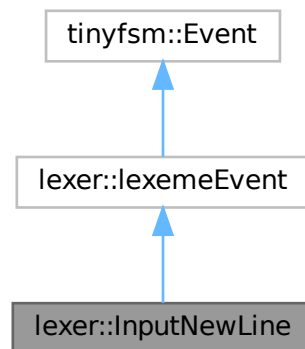


The documentation for this struct was generated from the following file:

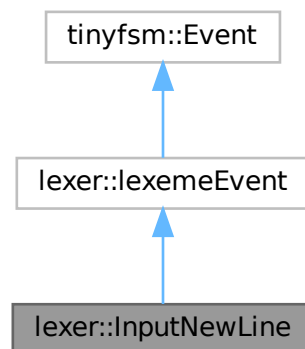
- `src/lexer/lexer.hpp`

## 6.61 lexer::InputNewLine Struct Reference

Inheritance diagram for lexer::InputNewLine:



Collaboration diagram for lexer::InputNewLine:

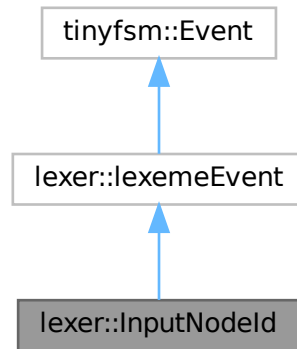


The documentation for this struct was generated from the following file:

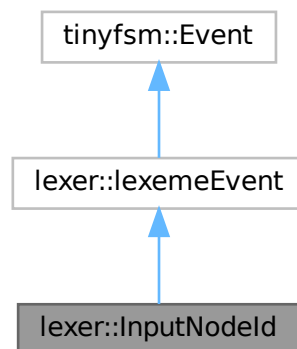
- `src/lexer/lexer.hpp`

## 6.62 lexer::InputNodeId Struct Reference

Inheritance diagram for lexer::InputNodeId:



Collaboration diagram for lexer::InputNodeId:



### Public Attributes

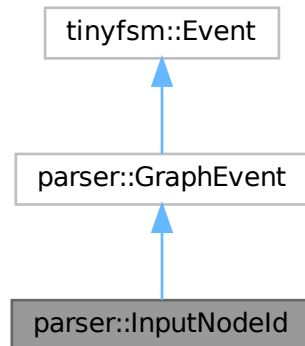
- `std::string` **NodeId**

The documentation for this struct was generated from the following file:

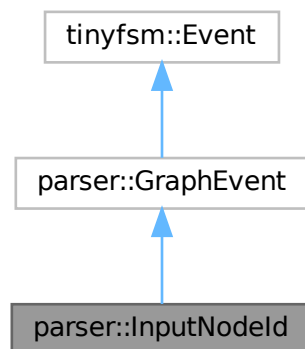
- `src/lexer/lexer.hpp`

## 6.63 parser::InputNodeId Struct Reference

Inheritance diagram for parser::InputNodeId:



Collaboration diagram for parser::InputNodeId:



### Public Attributes

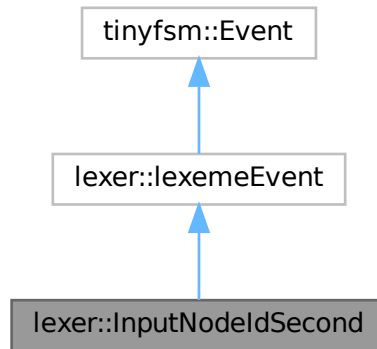
- std::string **NodeID**

The documentation for this struct was generated from the following file:

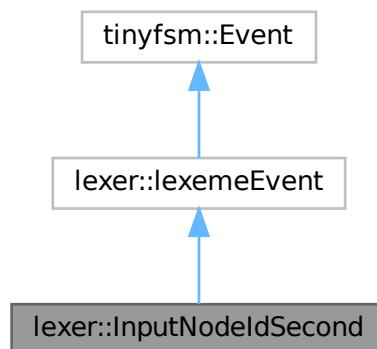
- src/parser/parser.hpp

## 6.64 lexer::InputNodeIdSecond Struct Reference

Inheritance diagram for lexer::InputNodeIdSecond:



Collaboration diagram for lexer::InputNodeIdSecond:



### Public Attributes

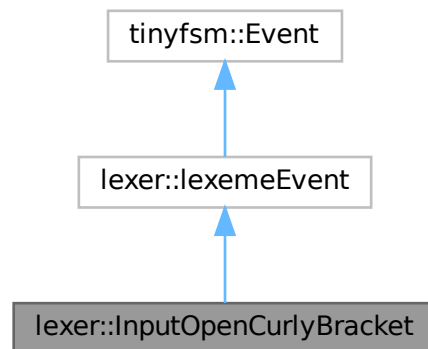
- `std::string` **NodeIdSecond**

The documentation for this struct was generated from the following file:

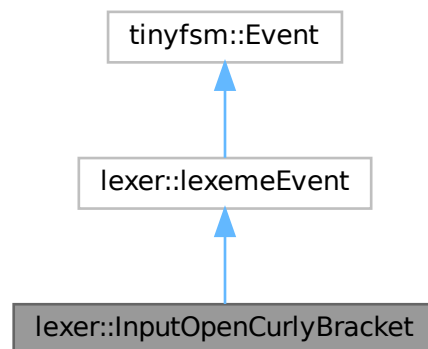
- `src/lexer/lexer.hpp`

## 6.65 lexer::InputOpenCurlyBracket Struct Reference

Inheritance diagram for lexer::InputOpenCurlyBracket:



Collaboration diagram for lexer::InputOpenCurlyBracket:

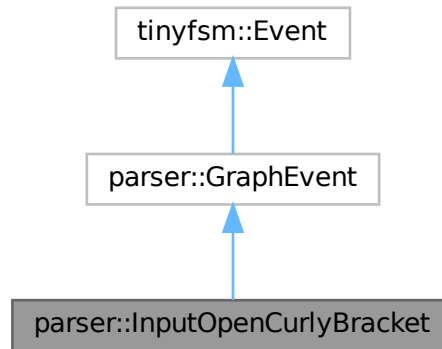


The documentation for this struct was generated from the following file:

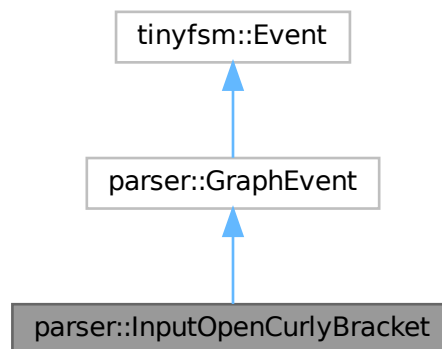
- `src/lexer/lexer.hpp`

## 6.66 parser::InputOpenCurlyBracket Struct Reference

Inheritance diagram for parser::InputOpenCurlyBracket:



Collaboration diagram for parser::InputOpenCurlyBracket:



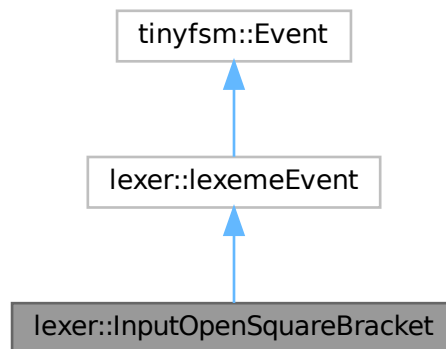
The documentation for this struct was generated from the following file:

- `src/parser/parser.hpp`

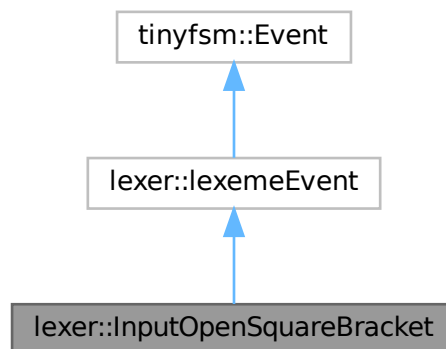


## 6.67 lexer::InputOpenSquareBracket Struct Reference

Inheritance diagram for lexer::InputOpenSquareBracket:



Collaboration diagram for lexer::InputOpenSquareBracket:

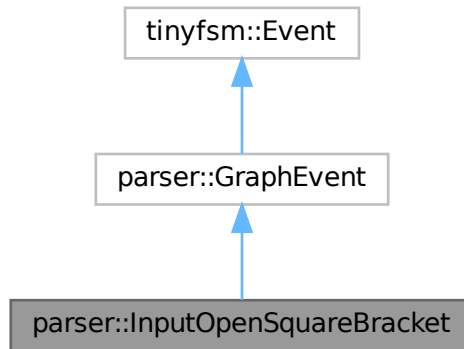


The documentation for this struct was generated from the following file:

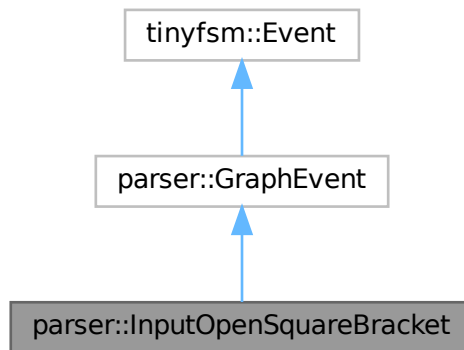
- `src/lexer/lexer.hpp`

## 6.68 parser::InputOpenSquareBracket Struct Reference

Inheritance diagram for parser::InputOpenSquareBracket:



Collaboration diagram for parser::InputOpenSquareBracket:

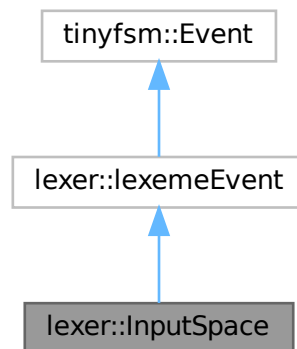


The documentation for this struct was generated from the following file:

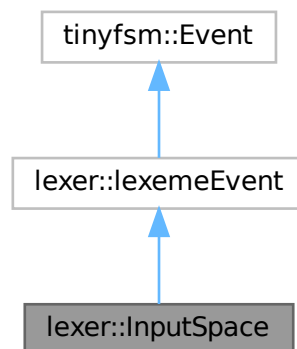
- src/parser/parser.hpp

## 6.69 lexer::InputSpace Struct Reference

Inheritance diagram for lexer::InputSpace:



Collaboration diagram for lexer::InputSpace:

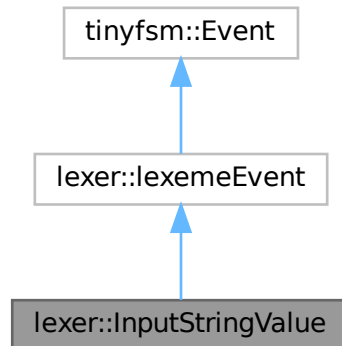


The documentation for this struct was generated from the following file:

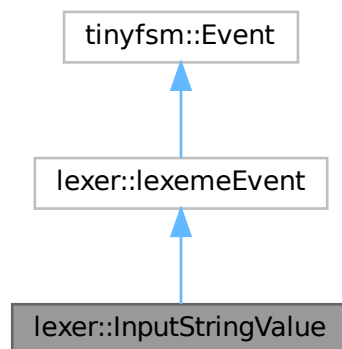
- src/lexer/lexer.hpp

## 6.70 lexer::InputStringValue Struct Reference

Inheritance diagram for lexer::InputStringValue:



Collaboration diagram for lexer::InputStringValue:



### Public Attributes

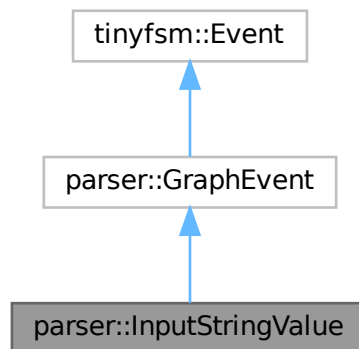
- `std::string` **StringValue**

The documentation for this struct was generated from the following file:

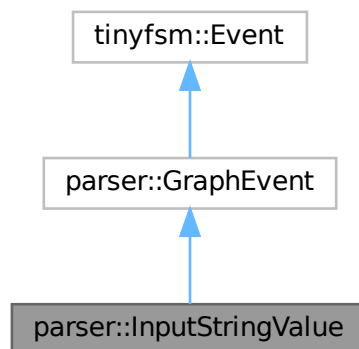
- `src/lexer/lexer.hpp`

## 6.71 parser::InputStringValue Struct Reference

Inheritance diagram for parser::InputStringValue:



Collaboration diagram for parser::InputStringValue:



### Public Attributes

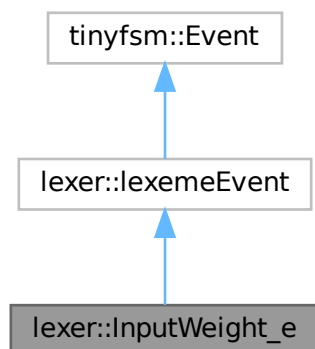
- `std::string label`

The documentation for this struct was generated from the following file:

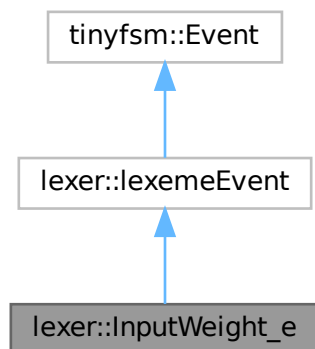
- `src/parser/parser.hpp`

## 6.72 lexer::InputWeight\_e Struct Reference

Inheritance diagram for lexer::InputWeight\_e:



Collaboration diagram for lexer::InputWeight\_e:

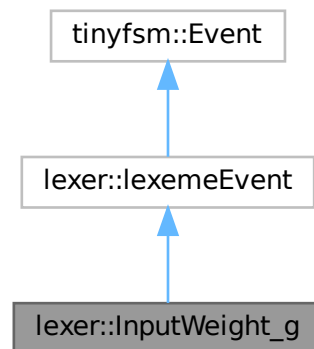


The documentation for this struct was generated from the following file:

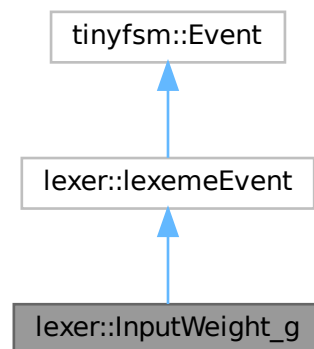
- `src/lexer/lexer.hpp`

## 6.73 lexer::InputWeight\_g Struct Reference

Inheritance diagram for lexer::InputWeight\_g:



Collaboration diagram for lexer::InputWeight\_g:

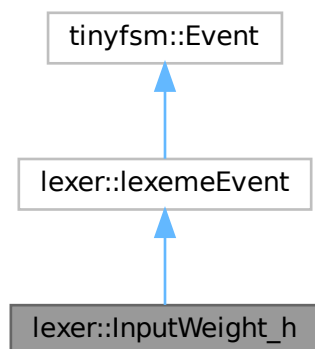


The documentation for this struct was generated from the following file:

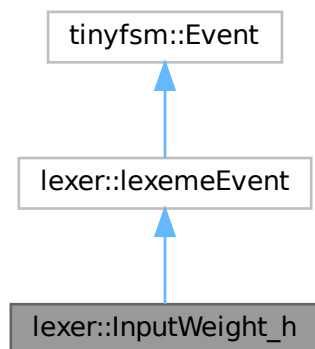
- src/lexer/lexer.hpp

## 6.74 lexer::InputWeight\_h Struct Reference

Inheritance diagram for lexer::InputWeight\_h:



Collaboration diagram for lexer::InputWeight\_h:



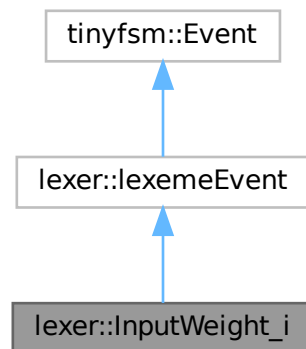
The documentation for this struct was generated from the following file:

- `src/lexer/lexer.hpp`

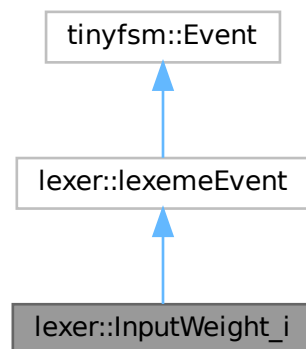


## 6.75 lexer::InputWeight\_i Struct Reference

Inheritance diagram for lexer::InputWeight\_i:



Collaboration diagram for lexer::InputWeight\_i:

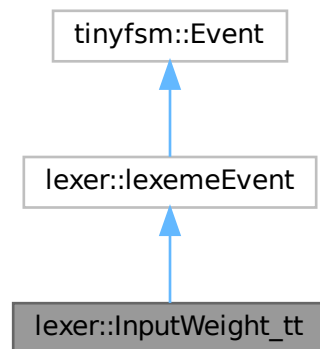


The documentation for this struct was generated from the following file:

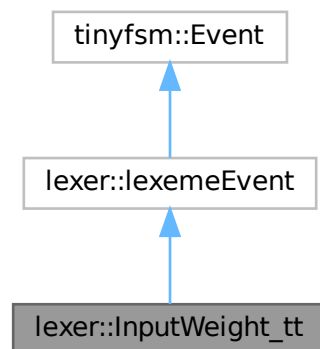
- `src/lexer/lexer.hpp`

## 6.76 lexer::InputWeight\_tt Struct Reference

Inheritance diagram for lexer::InputWeight\_tt:



Collaboration diagram for lexer::InputWeight\_tt:

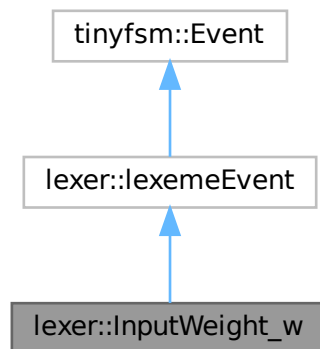


The documentation for this struct was generated from the following file:

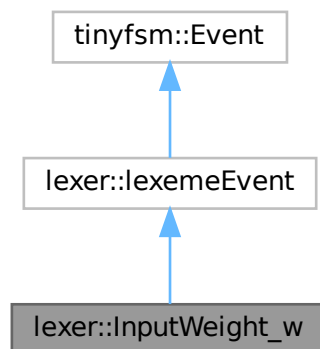
- `src/lexer/lexer.hpp`

## 6.77 lexer::InputWeight\_w Struct Reference

Inheritance diagram for lexer::InputWeight\_w:



Collaboration diagram for lexer::InputWeight\_w:

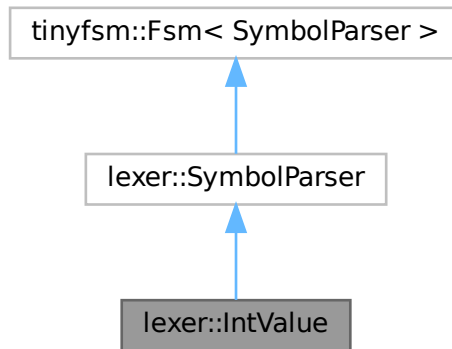


The documentation for this struct was generated from the following file:

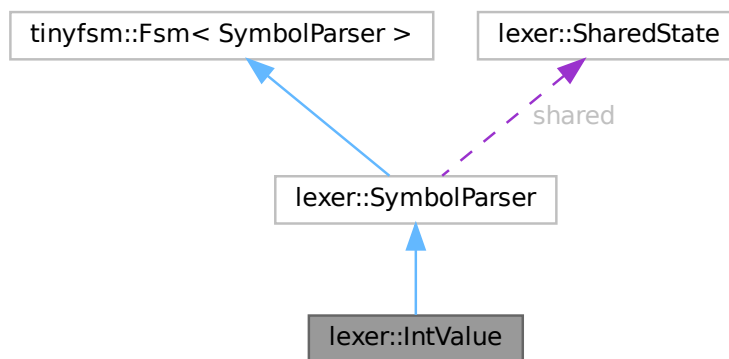
- `src/lexer/lexer.hpp`

## 6.78 lexer::IntValue Class Reference

Inheritance diagram for lexer::IntValue:



Collaboration diagram for lexer::IntValue:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

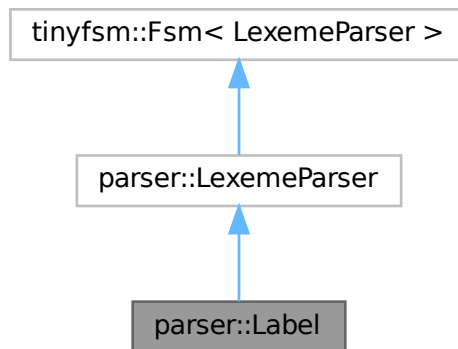
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

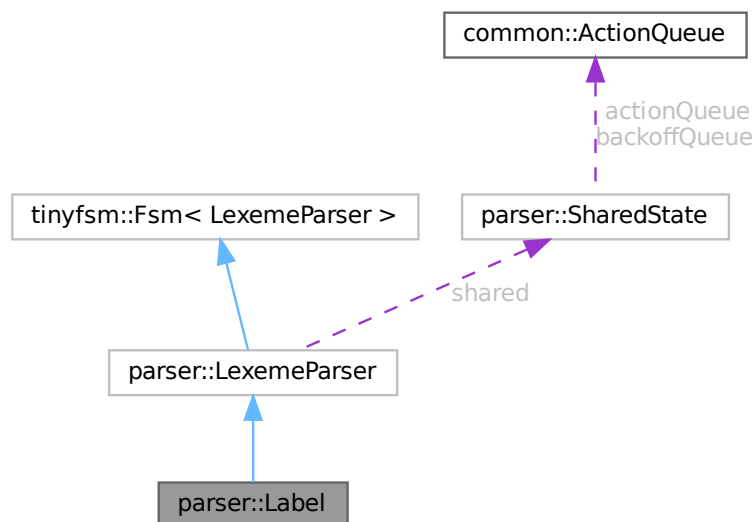
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.79 parser::Label Class Reference

Inheritance diagram for parser::Label:



Collaboration diagram for parser::Label:



### Additional Inherited Members

### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)

- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

### Static Protected Attributes inherited from [parser::LexemeParser](#)

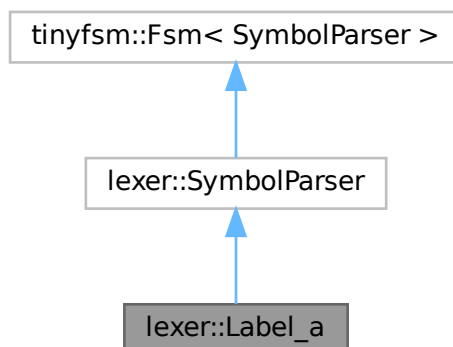
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

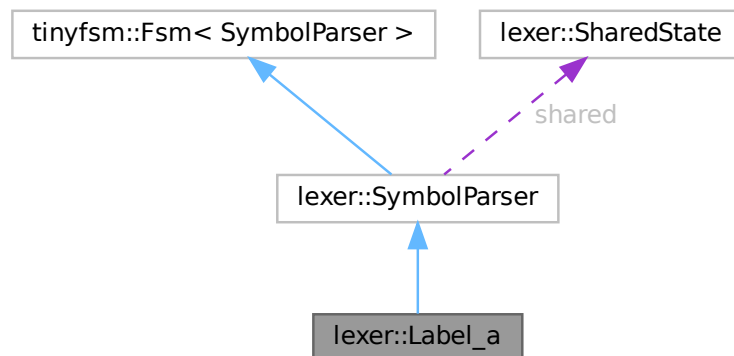
- [src/parser/parser.hpp](#)
- [src/parser/parser.cpp](#)

## 6.80 lexer::Label\_a Class Reference

Inheritance diagram for lexer::Label\_a:



Collaboration diagram for `lexer::Label_a`:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputSpace` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)



- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

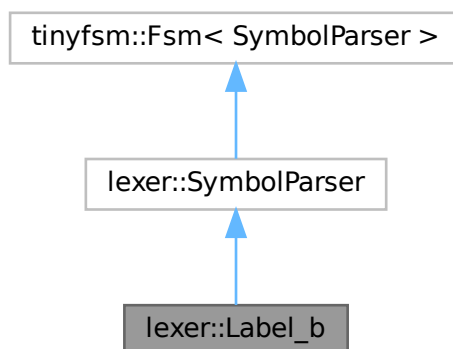
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

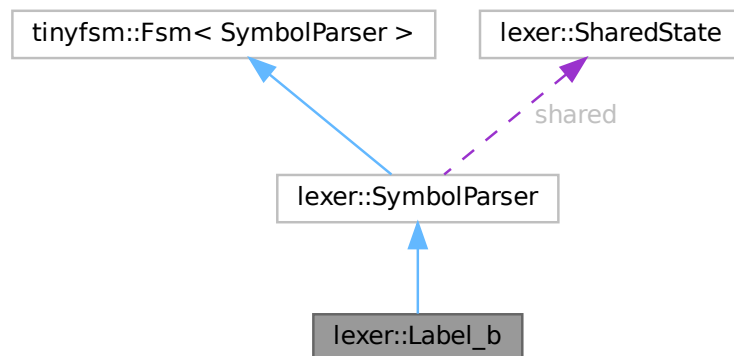
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.81 `lexer::Label_b` Class Reference

Inheritance diagram for `lexer::Label_b`:



Collaboration diagram for `lexer::Label_b`:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputSpace` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

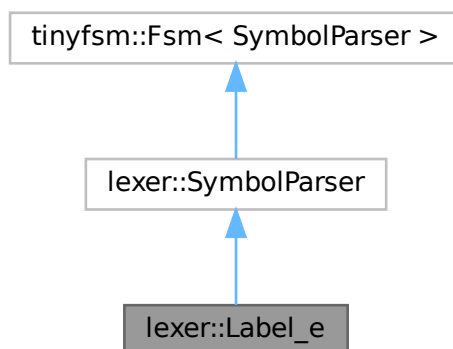
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

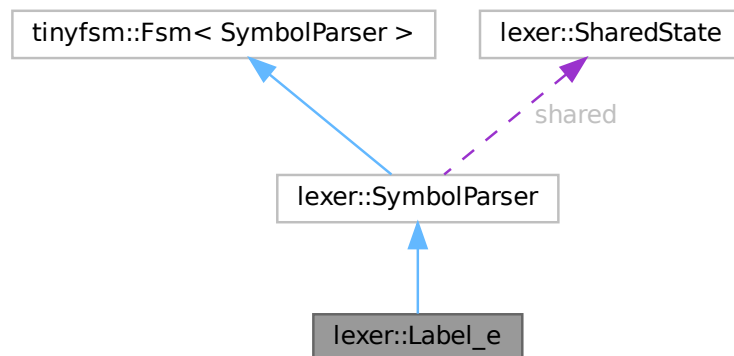
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.82 `lexer::Label_e` Class Reference

Inheritance diagram for `lexer::Label_e`:



Collaboration diagram for `lexer::Label_e`:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputSpace` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)

- virtual void **react** (`InputWeight_i` const &)
- virtual void **react** (`InputWeight_g` const &)
- virtual void **react** (`InputWeight_h` const &)
- virtual void **react** (`InputWeight_tt` const &)
- virtual void **react** (`InputEqualLabel` const &)
- virtual void **react** (`InputStringValue` const &)
- virtual void **react** (`InputIntValue` const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from `lexer::SymbolParser`

- static void **reset** ()

### Static Public Attributes inherited from `lexer::SymbolParser`

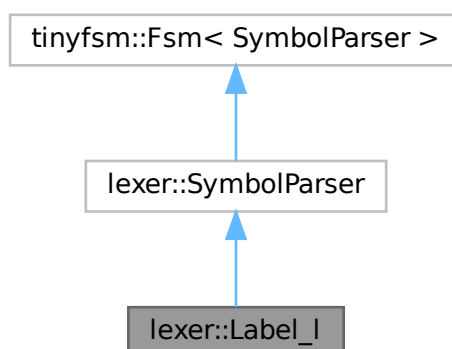
- static `SharedState` **shared** {}

The documentation for this class was generated from the following files:

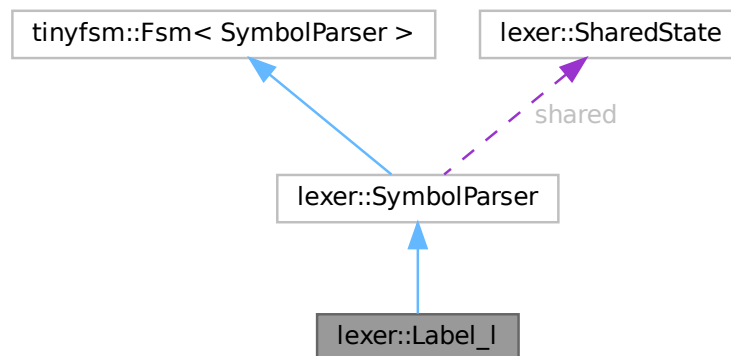
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.83 `lexer::Label_I` Class Reference

Inheritance diagram for `lexer::Label_I`:



Collaboration diagram for `lexer::Label_I`:



#### Additional Inherited Members

#### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_I` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

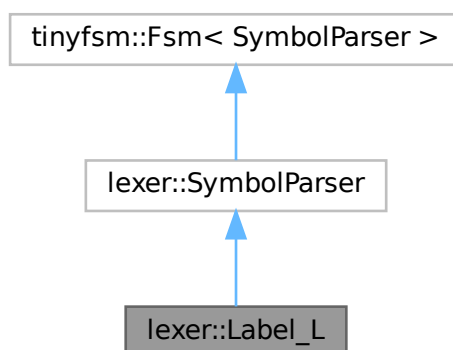
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

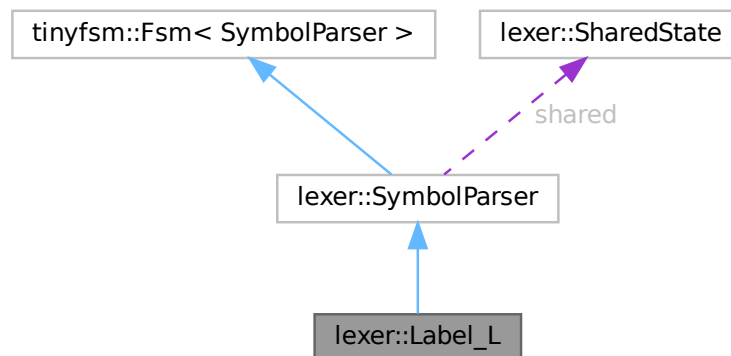
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.84 lexer::Label\_L Class Reference

Inheritance diagram for `lexer::Label_L`:



Collaboration diagram for `lexer::Label_L`:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputSpace` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)



- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.85 common::Lexeme Struct Reference

[Lexeme](#) Represents single unit of lexer output.

```
#include <common.hpp>
```

### Public Attributes

- LexemeType **type**
- std::any **value**

### 6.85.1 Detailed Description

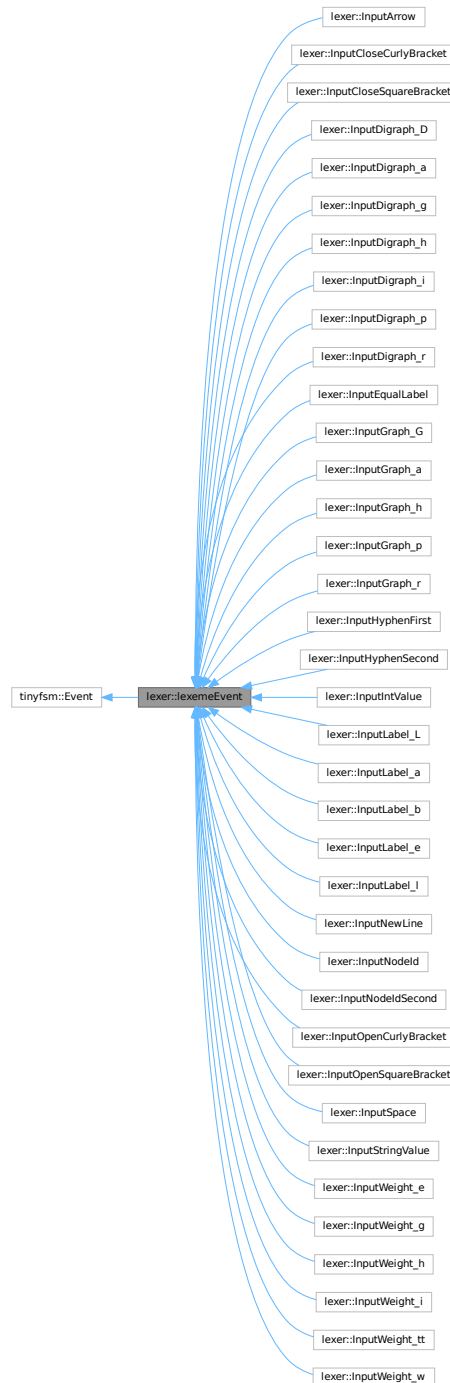
[Lexeme](#) Represents single unit of lexer output.

The documentation for this struct was generated from the following file:

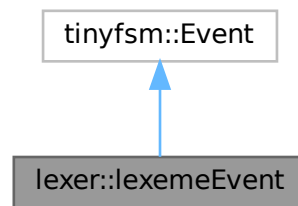
- `src/common/common.hpp`

## 6.86 lexer::lexemeEvent Struct Reference

Inheritance diagram for lexer::lexemeEvent:



Collaboration diagram for lexer::lexemeEvent:

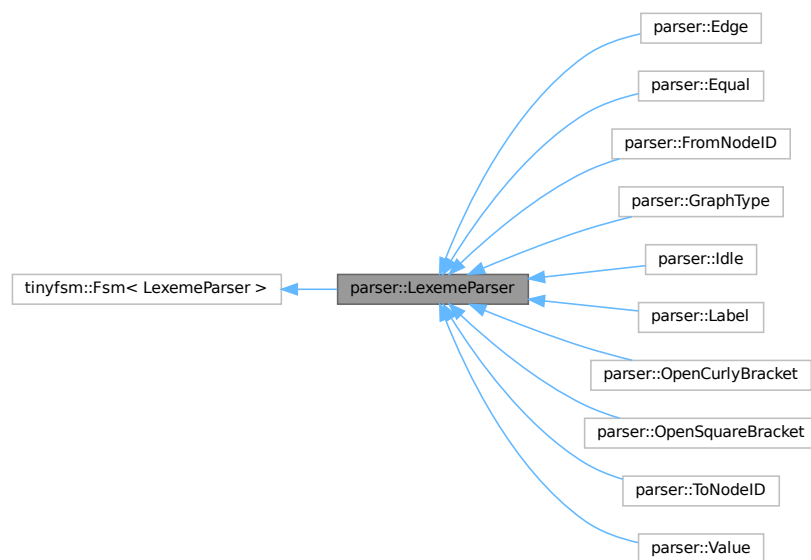


The documentation for this struct was generated from the following file:

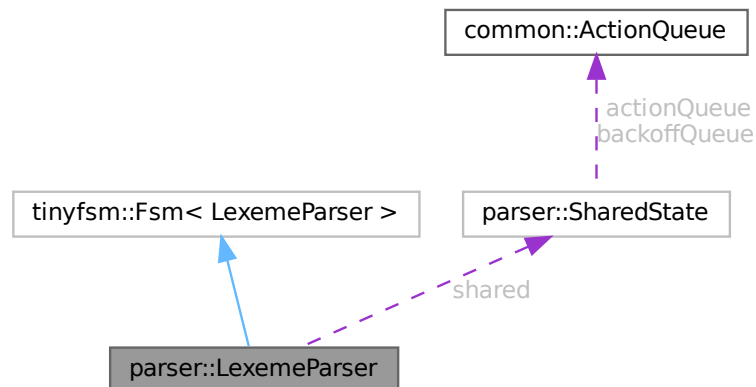
- `src/lexer/lexer.hpp`

## 6.87 parser::LexemeParser Class Reference

Inheritance diagram for parser::LexemeParser:



Collaboration diagram for parser::LexemeParser:



### Public Member Functions

- virtual void **react** ([InputGraphType](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions

- static void **reset** ()

### Static Protected Attributes

- static [SharedState](#) **shared** {}

### Friends

- std::shared\_ptr< [common::TraversalGraph](#) > [parse](#) (std::vector< [common::Lexeme](#) > &input)  
*Parse lexemes vector into graph object.*

## 6.87.1 Friends And Related Symbol Documentation

### 6.87.1.1 parse

```
std::shared_ptr< common::TraversalGraph > parse (  
    std::vector< common::Lexeme > & input )    [friend]
```

Parse lexemes vector into graph object.

## Parameters

<i>input</i>	lexemes
--------------	---------

## Returns

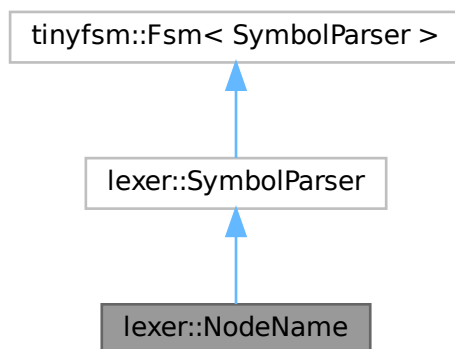
std::shared\_ptr<common::Graph> output object

The documentation for this class was generated from the following files:

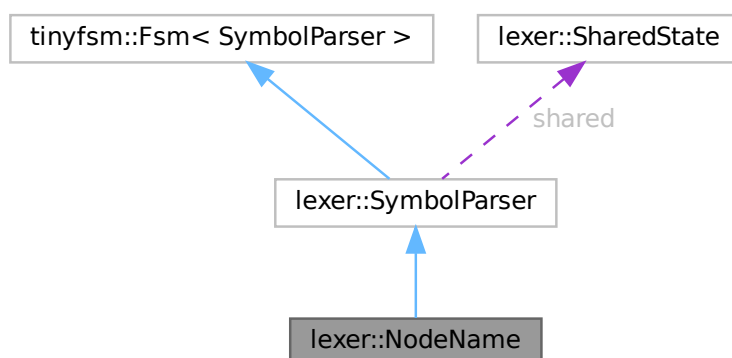
- src/parser/parser.hpp
- src/parser/parser.cpp

## 6.88 lexer::NodeName Class Reference

Inheritance diagram for lexer::NodeName:



Collaboration diagram for lexer::NodeName:



## Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)
- virtual void **react** (`InputWeight_i` const &)
- virtual void **react** (`InputWeight_g` const &)
- virtual void **react** (`InputWeight_h` const &)
- virtual void **react** (`InputWeight_tt` const &)
- virtual void **react** (`InputEqualLabel` const &)
- virtual void **react** (`InputStringValue` const &)
- virtual void **react** (`InputIntValue` const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from `lexer::SymbolParser`

- static void **reset** ()

### Static Public Attributes inherited from `lexer::SymbolParser`

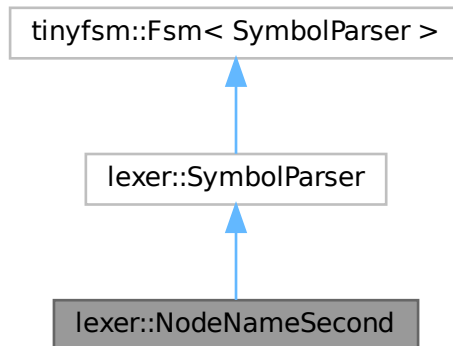
- static `SharedState` **shared** {}

The documentation for this class was generated from the following files:

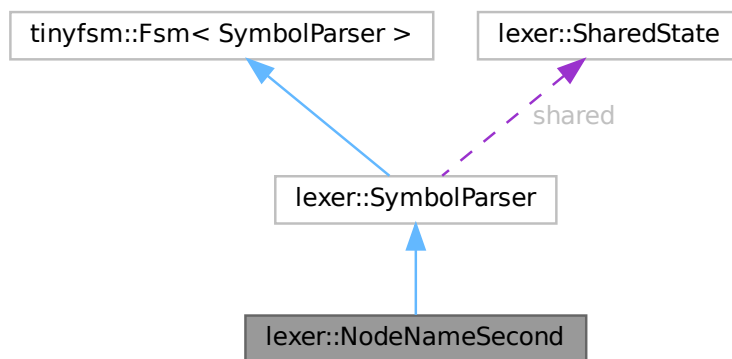
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.89 lexer::NodeNameSecond Class Reference

Inheritance diagram for lexer::NodeNameSecond:



Collaboration diagram for lexer::NodeNameSecond:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)



- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

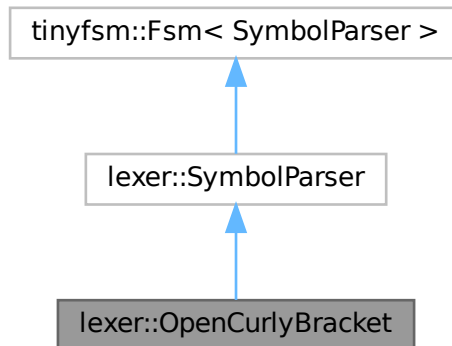
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

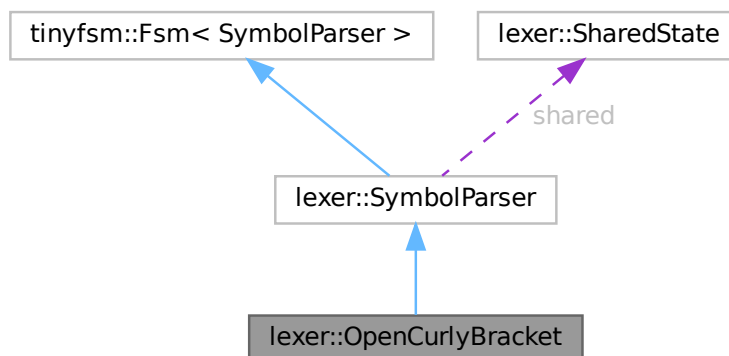
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.90 lexer::OpenCurlyBracket Class Reference

Inheritance diagram for lexer::OpenCurlyBracket:



Collaboration diagram for lexer::OpenCurlyBracket:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)

- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

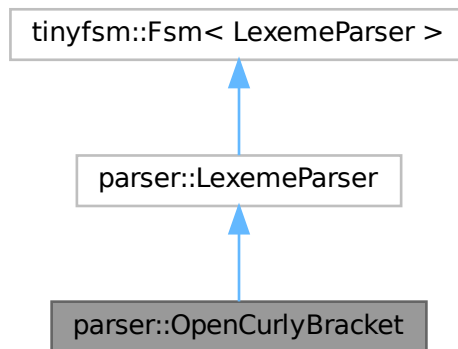
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

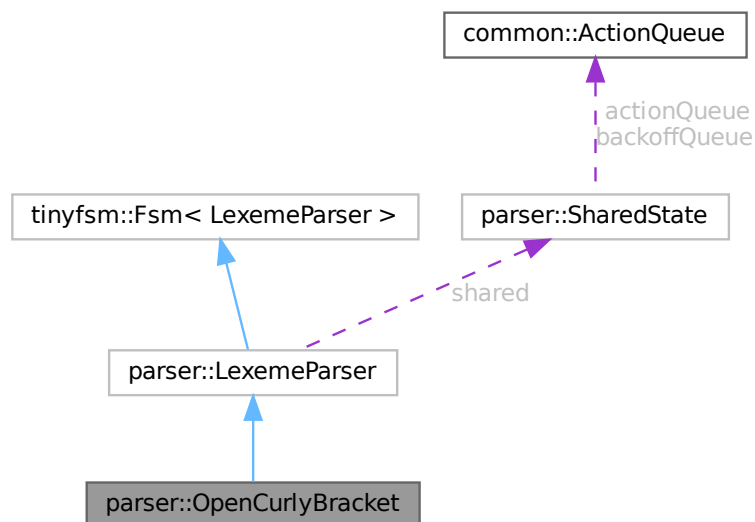
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.91 parser::OpenCurlyBracket Class Reference

Inheritance diagram for parser::OpenCurlyBracket:



Collaboration diagram for parser::OpenCurlyBracket:



### Additional Inherited Members

### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)

- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

#### Static Protected Attributes inherited from [parser::LexemeParser](#)

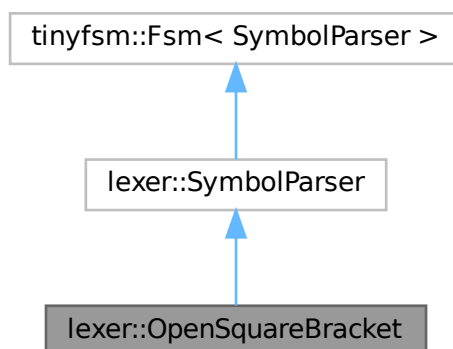
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

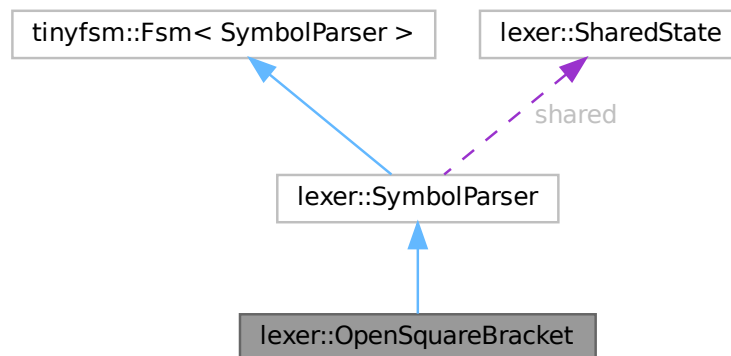
- src/parser/parser.hpp
- src/parser/parser.cpp

## 6.92 lexer::OpenSquareBracket Class Reference

Inheritance diagram for lexer::OpenSquareBracket:



Collaboration diagram for `lexer::OpenSquareBracket`:



### Additional Inherited Members

### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_e` const &)
- virtual void **react** (`InputWeight_i` const &)
- virtual void **react** (`InputWeight_g` const &)
- virtual void **react** (`InputWeight_h` const &)

- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

#### Static Public Attributes inherited from [lexer::SymbolParser](#)

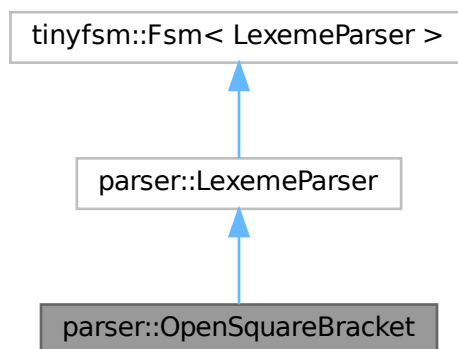
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

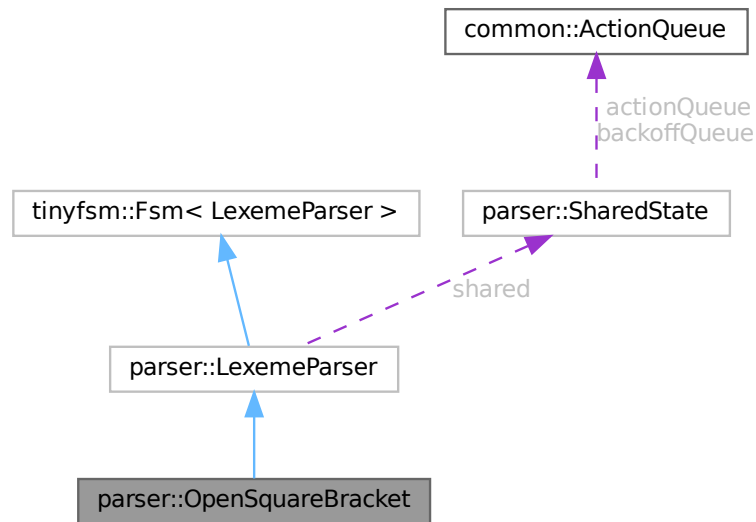
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.93 parser::OpenSquareBracket Class Reference

Inheritance diagram for parser::OpenSquareBracket:



Collaboration diagram for `parser::OpenSquareBracket`:



#### Additional Inherited Members

#### Public Member Functions inherited from `parser::LexemeParser`

- virtual void **react** (`InputGraphType` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputCloseSquareBracket` const &)
- virtual void **react** (`InputEdge` const &)
- virtual void **react** (`InputEqual` const &)
- virtual void **react** (`InputStringValue` const &)
- virtual void **react** (`InputIntValue` const &)
- void **entry** ()
- void **exit** ()

#### Static Public Member Functions inherited from `parser::LexemeParser`

- static void **reset** ()

#### Static Protected Attributes inherited from `parser::LexemeParser`

- static `SharedState` **shared** {}

The documentation for this class was generated from the following files:

- `src/parser/parser.hpp`
- `src/parser/parser.cpp`

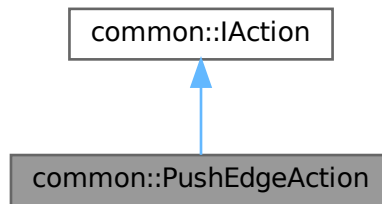


## 6.94 common::PushEdgeAction Class Reference

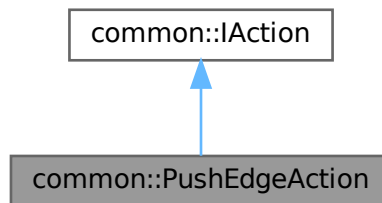
PushEdge action interface implementation.

```
#include <action-queue.hpp>
```

Inheritance diagram for common::PushEdgeAction:



Collaboration diagram for common::PushEdgeAction:



### Public Types

- using **push\_edge\_action** = void(common::Graph::\*)(std::string, [Connection](#))

### Public Member Functions

- **PushEdgeAction** (push\_edge\_action action, [Graph](#) \*instance, std::string name, [Connection](#) edge)
- virtual void **make** () override final  
*call to action*

#### 6.94.1 Detailed Description

PushEdge action interface implementation.

## 6.94.2 Member Function Documentation

### 6.94.2.1 make()

```
void PushEdgeAction::make ( ) [final], [override], [virtual]
```

call to action

Implements [common::IAction](#).

The documentation for this class was generated from the following files:

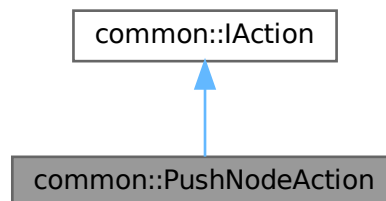
- src/common/action-queue.hpp
- src/common/action-queue.cpp

## 6.95 common::PushNodeAction Class Reference

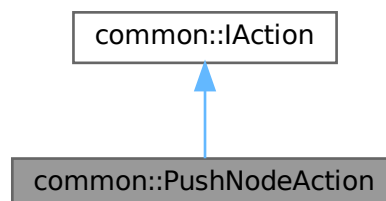
PushNode action interface implementation.

```
#include <action-queue.hpp>
```

Inheritance diagram for common::PushNodeAction:



Collaboration diagram for common::PushNodeAction:



## Public Types

- using **push\_node\_proto** = void(common::Graph::\*)(std::string)

## Public Member Functions

- **PushNodeAction** (push\_node\_proto action, [Graph](#) \*instance, std::string name)
- virtual void [make](#) () override final  
*call to action*

### 6.95.1 Detailed Description

PushNode action interface implementation.

### 6.95.2 Member Function Documentation

#### 6.95.2.1 make()

```
void PushNodeAction::make ( ) [final], [override], [virtual]
```

call to action

Implements [common::IAction](#).

The documentation for this class was generated from the following files:

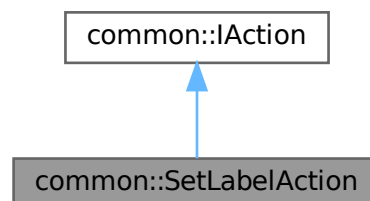
- src/common/action-queue.hpp
- src/common/action-queue.cpp

## 6.96 common::SetLabelAction Class Reference

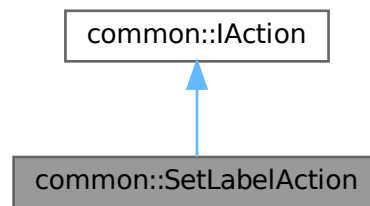
SetLabel action interface implementation.

```
#include <action-queue.hpp>
```

Inheritance diagram for common::SetLabelAction:



Collaboration diagram for common::SetLabelAction:



### Public Types

- using **set\_node\_label** = void(common::Graph::\*)(std::string, std::string)

### Public Member Functions

- **SetLabelAction** (set\_node\_label action, [Graph](#) \*instance, std::string name, std::string label)
- virtual void **make** () override final  
*call to action*

## 6.96.1 Detailed Description

SetLabel action interface implementation.

## 6.96.2 Member Function Documentation

### 6.96.2.1 make()

```
void SetLabelAction::make ( ) [final], [override], [virtual]
```

call to action

Implements [common::IAction](#).

The documentation for this class was generated from the following files:

- src/common/action-queue.hpp
- src/common/action-queue.cpp

## 6.97 common::GraphDumpingFactory::Settings Struct Reference

### Public Attributes

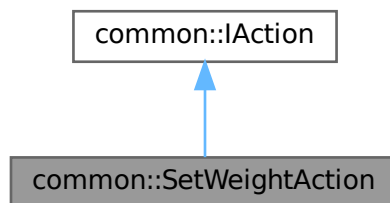
- bool **verboseWrite** = false

The documentation for this struct was generated from the following file:

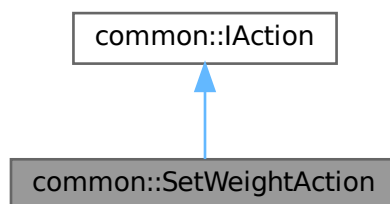
- src/common/reverted.hpp

## 6.98 common::SetWeightAction Class Reference

Inheritance diagram for common::SetWeightAction:



Collaboration diagram for common::SetWeightAction:



### Public Types

- using **set\_weight\_proto** = void(common::Graph::\*)(std::string, std::string, int)

### Public Member Functions

- **SetWeightAction** (set\_weight\_proto action, [Graph](#) \*instance, std::string source, std::string target, int weight)
- virtual void [make](#) () override final  
*call to action*

## 6.98.1 Member Function Documentation

### 6.98.1.1 make()

```
void SetWeightAction::make ( ) [final], [override], [virtual]
```

call to action

Implements [common::IAction](#).

The documentation for this class was generated from the following files:

- src/common/action-queue.hpp
- src/common/action-queue.cpp

## 6.99 lexer::SharedState Struct Reference

### Public Attributes

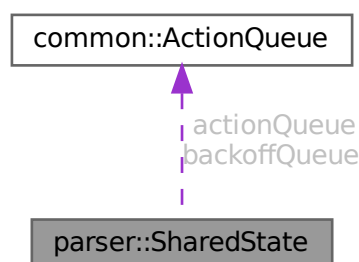
- std::vector< [common::Lexeme](#) > **tokens**
- std::string **token**
- int **flag\_label** = 0
- int **flag\_curly** = 0
- int **flag\_square** = 0
- int **flag\_hyphen** = 0
- int **flag\_label\_l** = 0
- int **quotes\_count** = 0

The documentation for this struct was generated from the following file:

- src/lexer/lexer.hpp

## 6.100 parser::SharedState Struct Reference

Collaboration diagram for parser::SharedState:



### Public Attributes

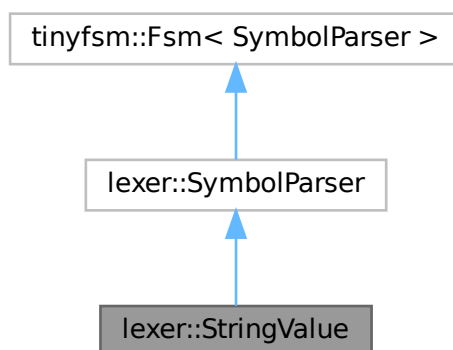
- std::shared\_ptr< [common::Graph](#) > **graph**
- [common::ActionQueue](#) **backoffQueue**
- [common::ActionQueue](#) **actionQueue**
- std::string **fromNodeId**
- std::string **toNodeId**
- std::string **label**
- std::string **expectedValue**
- std::uint8\_t **flags** = 0x0
- int **weight** = -1

The documentation for this struct was generated from the following file:

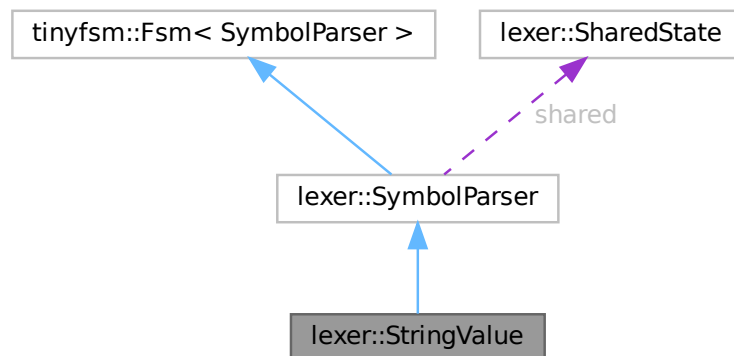
- src/parser/parser.hpp

## 6.101 lexer::StringValue Class Reference

Inheritance diagram for lexer::StringValue:



Collaboration diagram for `lexer::StringValue`:



#### Additional Inherited Members

#### Public Member Functions inherited from `lexer::SymbolParser`

- virtual void **react** (`InputDigraph_D` const &)
- virtual void **react** (`InputDigraph_i` const &)
- virtual void **react** (`InputDigraph_g` const &)
- virtual void **react** (`InputDigraph_r` const &)
- virtual void **react** (`InputDigraph_a` const &)
- virtual void **react** (`InputDigraph_p` const &)
- virtual void **react** (`InputDigraph_h` const &)
- virtual void **react** (`InputGraph_G` const &)
- virtual void **react** (`InputGraph_r` const &)
- virtual void **react** (`InputGraph_a` const &)
- virtual void **react** (`InputGraph_p` const &)
- virtual void **react** (`InputGraph_h` const &)
- virtual void **react** (`InputOpenCurlyBracket` const &)
- virtual void **react** (`InputCloseCurlyBracket` const &)
- virtual void **react** (`InputNodeId` const &)
- virtual void **react** (`InputNodeIdSecond` const &)
- virtual void **react** (`InputNewLine` const &)
- virtual void **react** (`InputOpenSquareBracket` const &)
- virtual void **react** (`InputHyphenFirst` const &)
- virtual void **react** (`InputHyphenSecond` const &)
- virtual void **react** (`InputArrow` const &)
- virtual void **react** (`InputLabel_L` const &)
- virtual void **react** (`InputLabel_a` const &)
- virtual void **react** (`InputLabel_b` const &)
- virtual void **react** (`InputLabel_e` const &)
- virtual void **react** (`InputLabel_l` const &)
- virtual void **react** (`InputWeight_w` const &)
- virtual void **react** (`InputWeight_e` const &)
- virtual void **react** (`InputWeight_i` const &)



- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

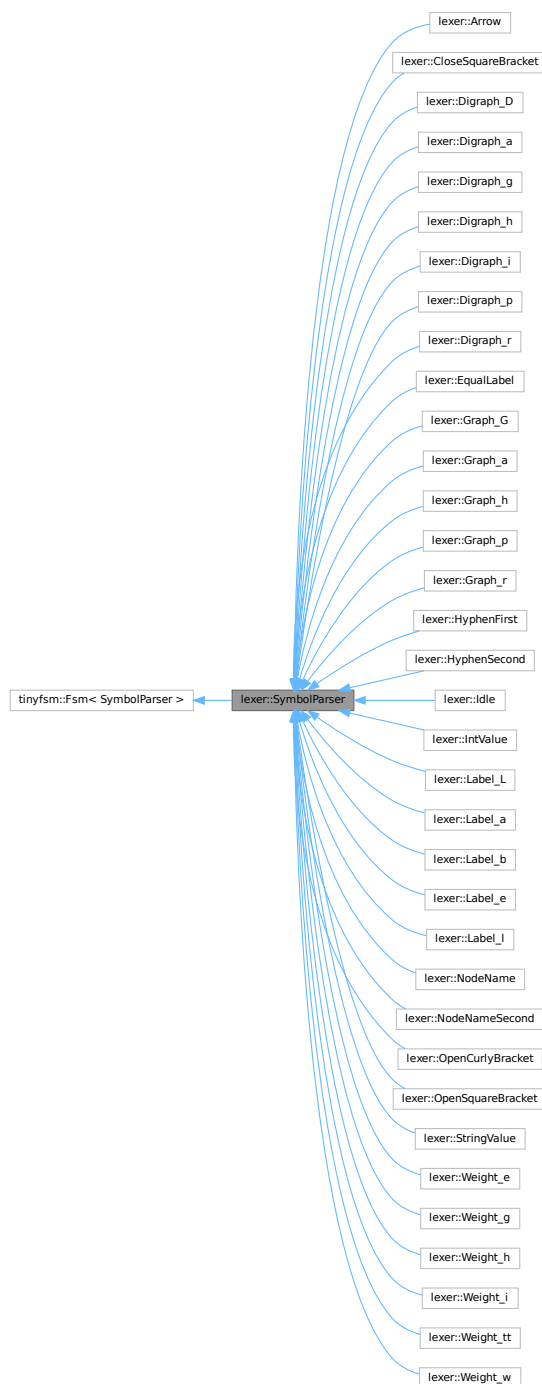
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

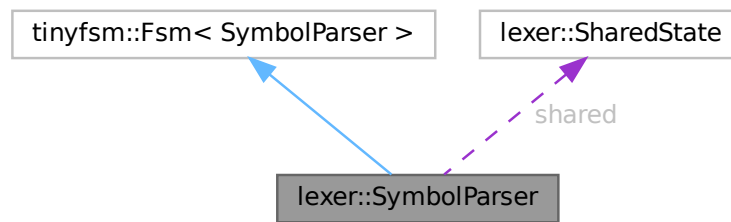
- `src/lexer/lexer.hpp`
- `src/lexer/lexer.cpp`

## 6.102 lexer::SymbolParser Class Reference

Inheritance diagram for lexer::SymbolParser:



Collaboration diagram for lexer::SymbolParser:



### Public Member Functions

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions

- static void **reset** ()

### Static Public Attributes

- static [SharedState](#) **shared** {}

### Friends

- std::vector< [common::Lexeme](#) > **lex** (const std::string &input)  
*Lex string.*

## 6.102.1 Friends And Related Symbol Documentation

### 6.102.1.1 lex

```
std::vector< common::Lexeme > lex (  
    const std::string & input ) [friend]
```

*Lex string.*

#### Parameters

<i>input</i>	string to lex
--------------	---------------

#### Returns

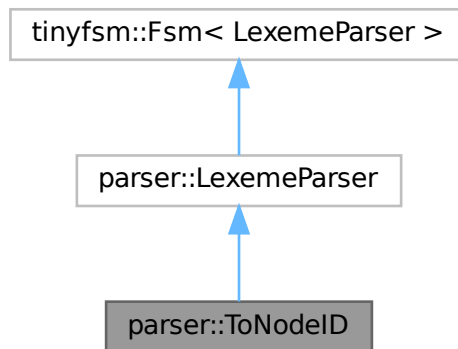
std::vector<common::Lexeme> output lexemes

The documentation for this class was generated from the following files:

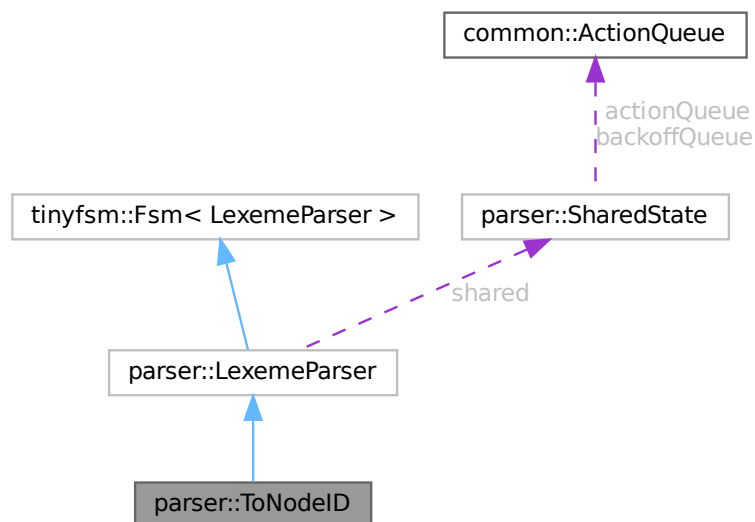
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

## 6.103 parser::ToNodeID Class Reference

Inheritance diagram for parser::ToNodeID:



Collaboration diagram for parser::ToNodeID:



### Additional Inherited Members

### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)

- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

### Static Protected Attributes inherited from [parser::LexemeParser](#)

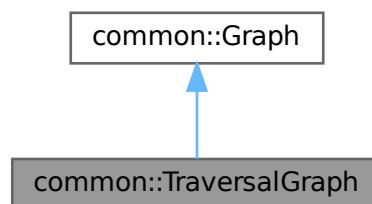
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

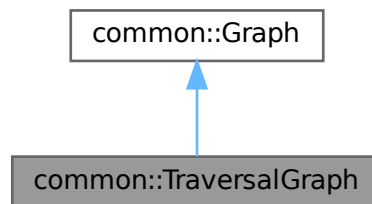
- [src/parser/parser.hpp](#)
- [src/parser/parser.cpp](#)

## 6.104 common::TraversalGraph Class Reference

Inheritance diagram for common::TraversalGraph:



Collaboration diagram for common::TraversalGraph:



### Public Member Functions

- void [tofWithTimestamps](#) (const std::string &node, std::unordered\_set< std::string > &visited, std::vector< std::string > &result, std::unordered\_map< std::string, std::pair< int, int > > &timestamps, int &discovery\_time, int &flag)  
*Recursive DFS with timestamps for traversal order.*
- void [dfsWithTimestamps](#) (const std::string &node, std::unordered\_set< std::string > &visited, std::vector< std::string > &result, std::unordered\_map< std::string, std::pair< int, int > > &timestamps, int &discovery\_time, int &flag\_to\_quit, std::string &searched\_node)  
*Recursive DFS with timestamps for traversal order.*
- void [findNode](#) (std::string &desired\_node)  
*Find node with depth-first search of graph.*
- void **showTraversalOrder** ()  
*Show depth-first search traversal order of graph.*

### Public Member Functions inherited from [common::Graph](#)

- virtual **~Graph** ()=default  
*Object destructor.*
- **Graph** () noexcept  
*Construct a new [Graph](#) object Constructs object and puts it into non-initialized state.*
- void [init](#) (graph\_flags\_t flags=0x0) noexcept  
*Init's graph object Sets flags and puts object into active mode.*
- bool [isDirectional](#) () const noexcept  
*Checks for drc flag.*
- bool [isWeighted](#) () const noexcept  
*Checks for wgh flag.*
- void [pushNode](#) (std::string name)  
*Adds new node to graph.*
- void [pushEdge](#) (std::string source, [Connection](#) edge)  
*Adds new edge to graph.*
- void [setLabel](#) (std::string source, std::string label)  
*Sets label for node.*
- void [removeLabel](#) (const std::string &source)  
*Removes label for node.*

- bool [areConnected](#) (std::string\_view source, std::string\_view target) const  
*Checks for connection between nodes.*
- std::optional< int > [getWeight](#) (std::string\_view source, std::string\_view target) const  
*Gets weight of edge.*
- std::optional< std::string > [getLabel](#) (std::string source) const  
*Gets label of node.*
- std::string [dumpGraphState](#) () const  
*Dump graph state to a string.*
- std::vector< std::string > [getNodes](#) () const  
*Gets nodes ID.*

### Additional Inherited Members

### Public Types inherited from [common::Graph](#)

- using **graph\_flags\_t** = std::uint8\_t
- using **connections\_t** = std::vector< [Connection](#) >
- using **label\_container\_t** = std::unordered\_map< std::string, std::string >
- using **container\_t** = std::unordered\_map< std::string, connections\_t >
- using **container\_value\_t** = std::pair< std::string, connections\_t >

### Public Attributes inherited from [common::Graph](#)

- friend **GraphDumpingFactory**

### Protected Attributes inherited from [common::Graph](#)

- std::uint8\_t **flags\_**
- std::unique\_ptr< container\_t > **connections\_**
- std::unique\_ptr< label\_container\_t > **labels\_**

## 6.104.1 Member Function Documentation

### 6.104.1.1 dfsWithTimestamps()

```
void TraversalGraph::dfsWithTimestamps (
    const std::string & node,
    std::unordered_set< std::string > & visited,
    std::vector< std::string > & result,
    std::unordered_map< std::string, std::pair< int, int > > & timestamps,
    int & discovery_time,
    int & flag_to_quit,
    std::string & searched_node )
```

Recursive DFS with timestamps for traversal order.

#### Parameters

<i>node</i>	Current processing node
<i>visited</i>	Set of visited nodes
<i>result</i>	Vector to preserve traversal order
<i>timestamps</i>	Timestamps of current node
<i>discovery_time</i>	Start time of current node
<i>flag_to_quit</i>	Flag to quit from recursion



### 6.104.1.2 findNode()

```
void TraversalGraph::findNode (
    std::string & desired_node )
```

Find node with depth-first search of graph.

#### Parameters

<i>desired_node</i>	Desired node of graph
---------------------	-----------------------

### 6.104.1.3 tofWithTimestamps()

```
void TraversalGraph::tofWithTimestamps (
    const std::string & node,
    std::unordered_set< std::string > & visited,
    std::vector< std::string > & result,
    std::unordered_map< std::string, std::pair< int, int > > & timestamps,
    int & discovery_time,
    int & flag )
```

Recursive DFS with timestamps for traversal order.

#### Parameters

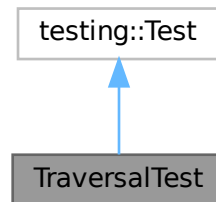
<i>node</i>	Current processing node
<i>visited</i>	Set of visited nodes
<i>result</i>	Vector to preserve traversal order
<i>timestamps</i>	Timestamps of current node
<i>discovery_time</i>	Start time of current node

The documentation for this class was generated from the following files:

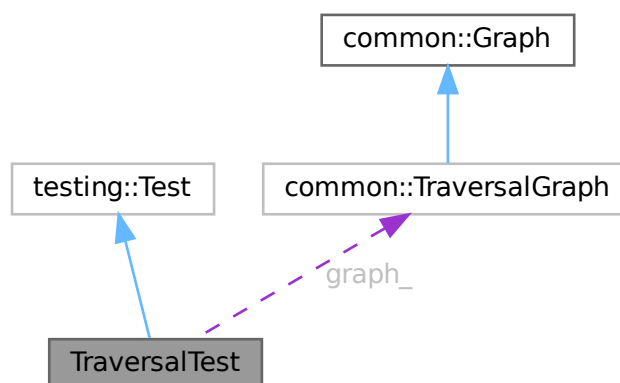
- src/algorithms/traversal.hpp
- src/algorithms/traversal.cpp

## 6.105 TraversalTest Class Reference

Inheritance diagram for TraversalTest:



Collaboration diagram for TraversalTest:



### Protected Member Functions

- void **SetUp** () override

### Protected Attributes

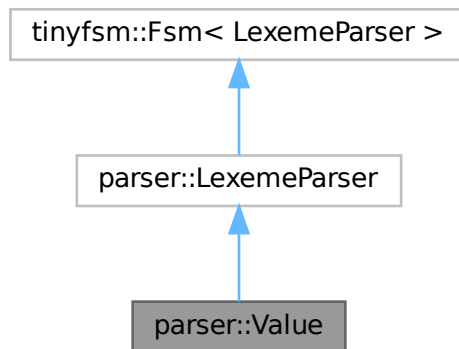
- [common::TraversalGraph](#) **graph\_**
- std::unordered\_set< std::string > **visited\_**
- std::vector< std::string > **traversal\_order\_**
- std::unordered\_map< std::string, std::pair< int, int > > **timestamps\_**
- int **discovery\_time\_** = 0

The documentation for this class was generated from the following file:

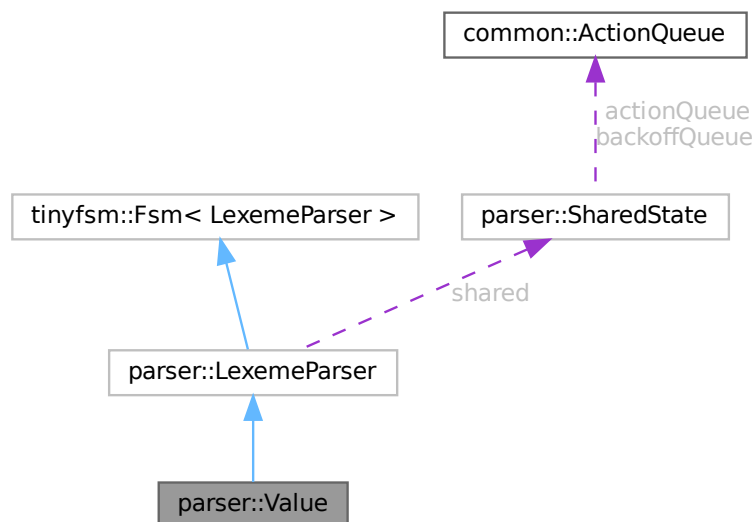
- src/tests/traversal-test.cpp

## 6.106 parser::Value Class Reference

Inheritance diagram for parser::Value:



Collaboration diagram for parser::Value:



### Additional Inherited Members

### Public Member Functions inherited from [parser::LexemeParser](#)

- virtual void **react** ([InputGraphType](#) const &)

- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputEdge](#) const &)
- virtual void **react** ([InputLabel](#) const &)
- virtual void **react** ([InputEqual](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [parser::LexemeParser](#)

- static void **reset** ()

### Static Protected Attributes inherited from [parser::LexemeParser](#)

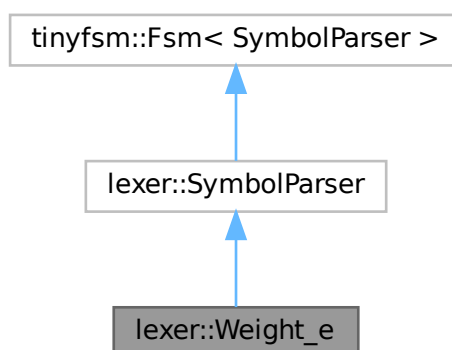
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

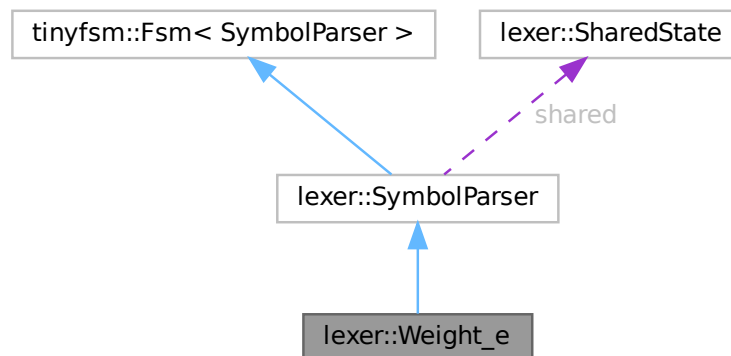
- [src/parser/parser.hpp](#)
- [src/parser/parser.cpp](#)

## 6.107 [lexer::Weight\\_e](#) Class Reference

Inheritance diagram for [lexer::Weight\\_e](#):



Collaboration diagram for lexer::Weight\_e:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)

- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

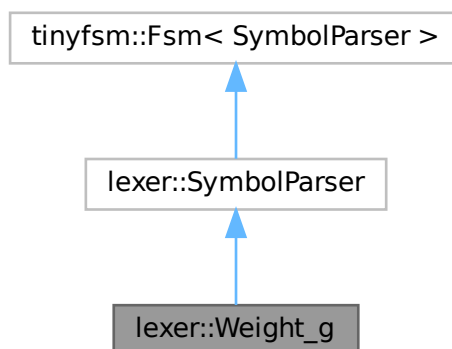
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

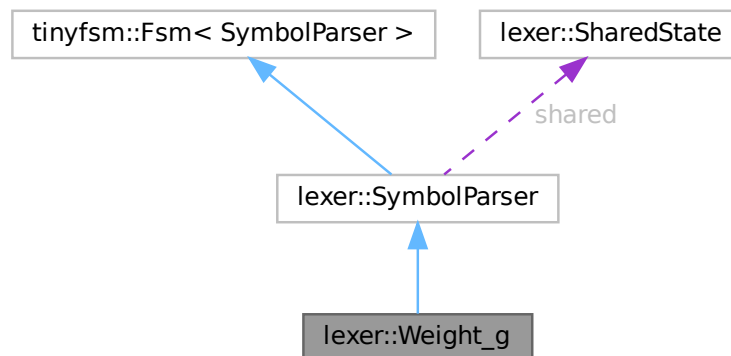
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.108 [lexer::Weight\\_g](#) Class Reference

Inheritance diagram for [lexer::Weight\\_g](#):



Collaboration diagram for lexer::Weight\_g:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)

- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

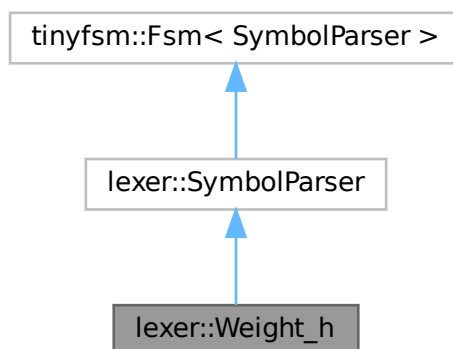
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

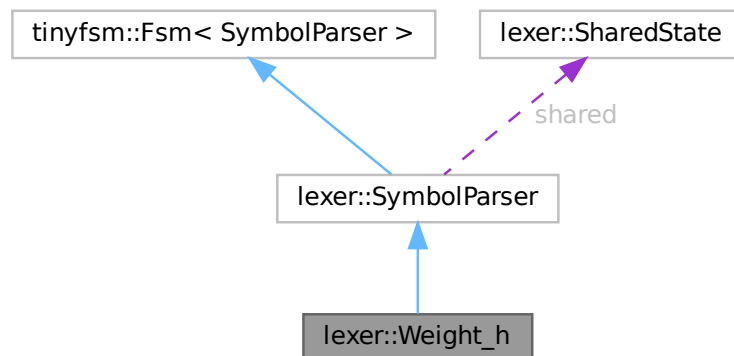
## 6.109 [lexer::Weight\\_h](#) Class Reference

Inheritance diagram for [lexer::Weight\\_h](#):





Collaboration diagram for lexer::Weight\_h:



#### Additional Inherited Members

#### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)

- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

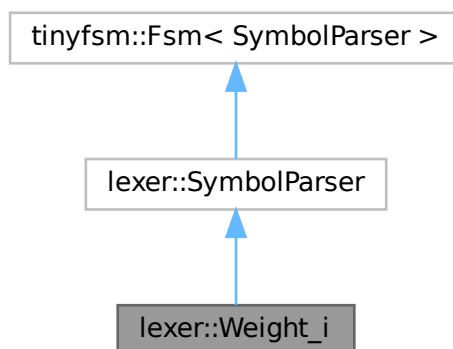
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

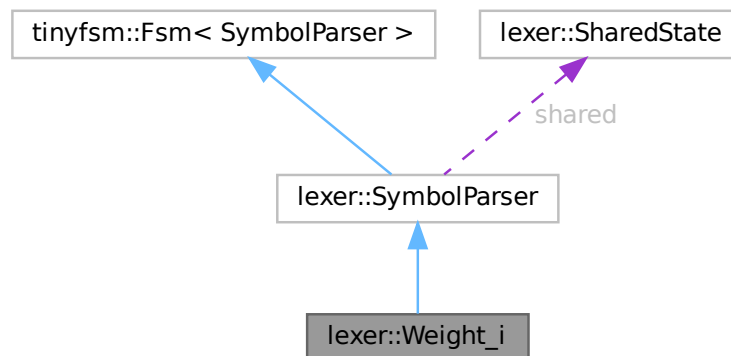
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.110 [lexer::Weight\\_i](#) Class Reference

Inheritance diagram for [lexer::Weight\\_i](#):



Collaboration diagram for lexer::Weight\_i:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)

- virtual void **react** ([InputWeight\\_e](#) const &)
- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

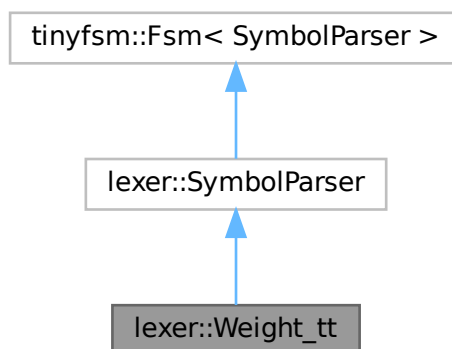
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

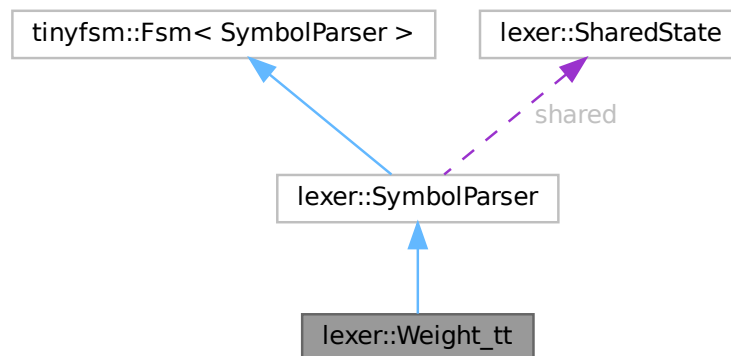
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.111 [lexer::Weight\\_tt](#) Class Reference

Inheritance diagram for [lexer::Weight\\_tt](#):



Collaboration diagram for lexer::Weight\_tt:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)
- virtual void **react** ([InputWeight\\_e](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

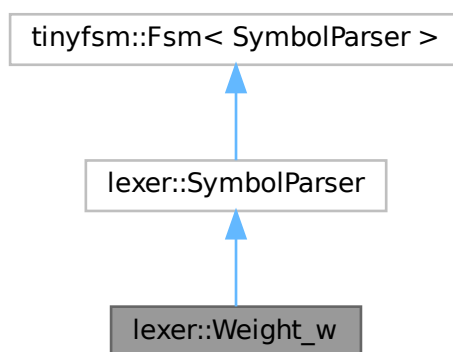
- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

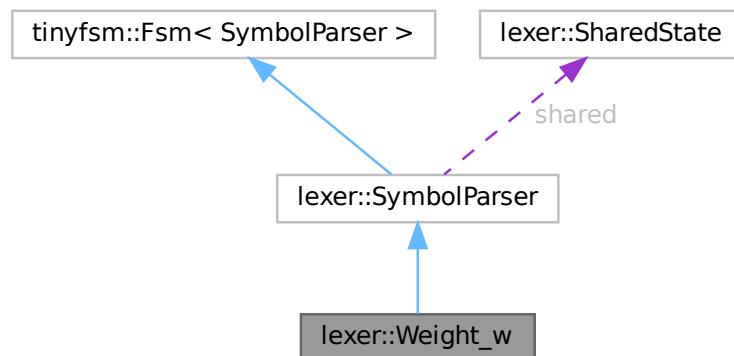
- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)

## 6.112 [lexer::Weight\\_w](#) Class Reference

Inheritance diagram for [lexer::Weight\\_w](#):



Collaboration diagram for lexer::Weight\_w:



### Additional Inherited Members

### Public Member Functions inherited from [lexer::SymbolParser](#)

- virtual void **react** ([InputDigraph\\_D](#) const &)
- virtual void **react** ([InputDigraph\\_i](#) const &)
- virtual void **react** ([InputDigraph\\_g](#) const &)
- virtual void **react** ([InputDigraph\\_r](#) const &)
- virtual void **react** ([InputDigraph\\_a](#) const &)
- virtual void **react** ([InputDigraph\\_p](#) const &)
- virtual void **react** ([InputDigraph\\_h](#) const &)
- virtual void **react** ([InputGraph\\_G](#) const &)
- virtual void **react** ([InputGraph\\_r](#) const &)
- virtual void **react** ([InputGraph\\_a](#) const &)
- virtual void **react** ([InputGraph\\_p](#) const &)
- virtual void **react** ([InputGraph\\_h](#) const &)
- virtual void **react** ([InputOpenCurlyBracket](#) const &)
- virtual void **react** ([InputCloseCurlyBracket](#) const &)
- virtual void **react** ([InputNodeId](#) const &)
- virtual void **react** ([InputNodeIdSecond](#) const &)
- virtual void **react** ([InputSpace](#) const &)
- virtual void **react** ([InputNewLine](#) const &)
- virtual void **react** ([InputOpenSquareBracket](#) const &)
- virtual void **react** ([InputCloseSquareBracket](#) const &)
- virtual void **react** ([InputHyphenFirst](#) const &)
- virtual void **react** ([InputHyphenSecond](#) const &)
- virtual void **react** ([InputArrow](#) const &)
- virtual void **react** ([InputLabel\\_L](#) const &)
- virtual void **react** ([InputLabel\\_a](#) const &)
- virtual void **react** ([InputLabel\\_b](#) const &)
- virtual void **react** ([InputLabel\\_e](#) const &)
- virtual void **react** ([InputLabel\\_l](#) const &)
- virtual void **react** ([InputWeight\\_w](#) const &)

- virtual void **react** ([InputWeight\\_i](#) const &)
- virtual void **react** ([InputWeight\\_g](#) const &)
- virtual void **react** ([InputWeight\\_h](#) const &)
- virtual void **react** ([InputWeight\\_tt](#) const &)
- virtual void **react** ([InputEqualLabel](#) const &)
- virtual void **react** ([InputStringValue](#) const &)
- virtual void **react** ([InputIntValue](#) const &)
- void **entry** ()
- void **exit** ()

### Static Public Member Functions inherited from [lexer::SymbolParser](#)

- static void **reset** ()

### Static Public Attributes inherited from [lexer::SymbolParser](#)

- static [SharedState](#) **shared** {}

The documentation for this class was generated from the following files:

- [src/lexer/lexer.hpp](#)
- [src/lexer/lexer.cpp](#)



# Chapter 7

## File Documentation

### 7.1 traversal.hpp

```
00001 #pragma once
00002
00003 #include <common/common.hpp>
00004
00005 namespace common {
00006     class TraversalGraph : public Graph {
00007     public:
00008
00017         void tofWithTimestamps(
00018             const std::string& node,
00019             std::unordered_set<std::string>& visited,
00020             std::vector<std::string>& result,
00021             std::unordered_map<std::string, std::pair<int, int>& timestamps,
00022             int& discovery_time,
00023             int& flag
00024         );
00025
00036         void dfsWithTimestamps(
00037             const std::string& node,
00038             std::unordered_set<std::string>& visited,
00039             std::vector<std::string>& result,
00040             std::unordered_map<std::string, std::pair<int, int>& timestamps,
00041             int& discovery_time,
00042             int& flag_to_quit,
00043             std::string& searched_node
00044         );
00045
00050         void findNode(std::string& desired_node);
00051
00055         void showTraversalOrder();
00056     };
00057 }
```

### 7.2 action-queue.hpp

```
00001 #pragma once
00002
00003 // standard
00004 #include <memory>
00005 #include <string>
00006 #include <queue>
00007
00008 // local
00009 #include "common.hpp"
00010
00011 namespace common {
00012
00017     class IAction {
00018     public:
00022         virtual void make() = 0;
00023     };
00024
00028     class PushNodeAction : public IAction {
```

```

00029     public:
00030         using push_node_proto = void (common::Graph::*)(std::string);
00031
00032         PushNodeAction(push_node_proto action, Graph* instance, std::string name);
00033         // IAction
00034         virtual void make() override final;
00035
00036     private:
00037         push_node_proto action_;
00038         Graph* this_;
00039         std::string name_;
00040     };
00041
00042     class SetLabelAction : public IAction {
00043     public:
00044         using set_node_label = void (common::Graph::*)(std::string, std::string);
00045
00046         SetLabelAction(set_node_label action, Graph* instance, std::string name, std::string label);
00047         // IAction
00048         virtual void make() override final;
00049
00050     private:
00051         set_node_label action_;
00052         Graph* this_;
00053         std::string name_;
00054         std::string label_;
00055     };
00056
00057     class PushEdgeAction : public IAction {
00058     public:
00059         using push_edge_action = void (common::Graph::*)(std::string, Connection);
00060
00061         PushEdgeAction(push_edge_action action, Graph* instance, std::string name, Connection edge);
00062         // IAction
00063         virtual void make() override final;
00064
00065     private:
00066         push_edge_action action_;
00067         Graph* this_;
00068         std::string name_;
00069         Connection edge_;
00070     };
00071
00072     class SetWeightAction : public IAction {
00073     public:
00074         using set_weight_proto = void (common::Graph::*)(std::string, std::string, int);
00075
00076         SetWeightAction(set_weight_proto action, Graph* instance, std::string source, std::string
00077         target, int weight);
00078         //Iaction
00079         virtual void make() override final;
00080
00081     private:
00082         set_weight_proto action_;
00083         Graph* this_;
00084         std::string source_;
00085         std::string target_;
00086         int weight_;
00087     };
00088
00089     class ActionQueue {
00090     public:
00091
00092         void dumpAllActions();
00093
00094         void dumpAction();
00095
00096         void query(std::shared_ptr<IAction> action);
00097
00098     private:
00099         std::queue<std::shared_ptr<IAction> actions_;
00100     };
00101 }

```

## 7.3 common.hpp

```

00001 #pragma once
00002
00003 // standard
00004 #include <unordered_set>
00005 #include <unordered_map>
00006 #include <string_view>
00007 #include <optional>

```

```

00008 #include <cstdint>
00009 #include <utility>
00010 #include <ostream>
00011 #include <memory>
00012 #include <string>
00013 #include <vector>
00014 #include <any>
00015
00016 namespace common {
00017
00018     // class to invert graph parsing (write it back)
00019     class GraphDumpingFactory;
00020
00021     namespace opt {
00022         inline constexpr std::uint8_t drc = 0x01;
00023         inline constexpr std::uint8_t wgh = 0x02;
00024     } // namespace opt
00025
00026     enum class LexemeType : std::uint8_t {
00027         GRAPH_START_LABEL = 0,
00028         OPEN_CURLY_BRACKET = 1,
00029         NODE_ID = 2,
00030         POINTED_ARROW = 3,
00031         FLAT_ARROW = 4,
00032         OPEN_SQUARE_BRACKET = 5,
00033         LABEL_ATTRIBUTE = 6,
00034         EQUALS_SIGN = 7,
00035         ATTRIBUTE_STRING_VALUE = 8,
00036         ATTRIBUTE_INT_VALUE = 9,
00037         CLOSED_CURLY_BRACKET = 10,
00038         CLOSED_SQUARE_BRACKET = 11
00039     };
00040
00041     struct Lexeme {
00042         LexemeType type;
00043         std::any value;
00044     };
00045
00046     struct Connection {
00047         std::optional<int> weight;
00048         std::optional<std::string> label;
00049         std::string peer;
00050
00051         Connection(
00052             std::string peer,
00053             std::optional<int> weight = std::nullopt,
00054             std::optional<std::string> label = std::nullopt
00055         ) noexcept;
00056
00057         bool operator==(const Connection& other) const {
00058             return peer == other.peer
00059                 && weight == other.weight
00060                 && label == other.label;
00061         }
00062     };
00063
00064     class Graph {
00065     public:
00066         using graph_flags_t = std::uint8_t;
00067         using connections_t = std::vector<Connection>;
00068         using label_container_t = std::unordered_map<std::string, std::string>;
00069         using container_t = std::unordered_map<std::string, connections_t>;
00070         using container_value_t = std::pair<std::string, connections_t>;
00071
00072         virtual ~Graph() = default;
00073
00074         Graph() noexcept;
00075
00076         void init(graph_flags_t flags = 0x0) noexcept;
00077
00078         bool isDirectional() const noexcept;
00079
00080         bool isWeighted() const noexcept;
00081
00082         void pushNode(std::string name);
00083
00084         void pushEdge(std::string source, Connection edge);
00085
00086         void setLabel(std::string source, std::string label);
00087
00088         void removeLabel(const std::string& source);
00089
00090         bool areConnected(std::string_view source, std::string_view target) const;
00091
00092         std::optional<int> getWeight(std::string_view source, std::string_view target) const;
00093
00094     };
00095
00096     GraphDumpingFactory* gdf = new GraphDumpingFactory();
00097 }

```

```

00176         std::optional<std::string> getLabel(std::string source) const;
00177
00182         std::string dumpGraphState() const;
00183
00188         std::vector<std::string> getNodes() const;
00189
00190         friend std::ostream& operator<<(std::ostream& os, const Graph& graph);
00191         friend GraphDumpingFactory;
00192
00193     private:
00194         void insert(std::string_view source, Connection edge);
00195         connections_t::iterator findConnection(std::string_view source, std::string_view target)
const;
00196
00197     protected:
00198         std::uint8_t flags_;
00199         std::unique_ptr<container_t> connections_;
00200         std::unique_ptr<label_container_t> labels_;
00201     };
00202
00203     std::ostream& operator<<(std::ostream& os, const Graph& graph);
00204
00205 } // namespace common

```

## 7.4 reverted.hpp

```

00001 #pragma once
00002
00003 // standard
00004 #include <unordered_map>
00005 #include <string_view>
00006 #include <optional>
00007 #include <fstream>
00008 #include <utility>
00009 #include <ostream>
00010 #include <memory>
00011 #include <string>
00012 #include <vector>
00013 #include <any>
00014
00015 // local
00016 #include <common/common.hpp>
00017
00018
00019 namespace common {
00020
00021     class GraphDumpingFactory {
00022     public:
00023         struct Settings {
00024             bool verboseWrite = false;
00025         };
00026         // constructors
00031         GraphDumpingFactory(Settings settings) noexcept;
00032         GraphDumpingFactory(GraphDumpingFactory&&) noexcept = default;
00033         GraphDumpingFactory(const GraphDumpingFactory&) = delete;
00034
00040         void dumpOne(const Graph& one, std::string_view filename);
00041
00042     private:
00043         void dumpGraphMetadata(const Graph& unit);
00044         void dumpGraphNodes(const Graph& unit);
00045         void dumpGraphEdges(const Graph& unit);
00046         void trail(const Graph& unit);
00047
00048         void error(const std::string& message);
00049
00050     private:
00051         Settings settings_;
00052         std::ofstream ofs_;
00053     };
00054
00055 }

```

## 7.5 lexer.hpp

```

00001 #pragma once
00002
00003 // standard
00004 #include <vector>

```

```

00005 #include <string>
00006
00007 // internal
00008 #include <common/common.hpp>
00009
00010 // contrib
00011 #include <tinyfsm.hpp>
00012
00013 namespace lexer {
00014     inline void throw_invalid_input(std::string message) {
00015         throw std::runtime_error(message);
00016     }
00017
00018     struct SharedState {
00019         std::vector<common::Lexeme> tokens;
00020         std::string token;
00021
00022         int flag_label = 0;
00023         int flag_curly = 0;
00024         int flag_square = 0;
00025         int flag_hyphen = 0;
00026         int flag_label_l = 0;
00027         int quotes_count = 0;
00028     };
00029
00030     // -----
00031     // 1. Event Declarations
00032     //
00033     struct lexemeEvent : tinyfsm::Event {};
00034     struct InputDigraph_D : lexemeEvent {};
00035     struct InputDigraph_i : lexemeEvent {};
00036     struct InputDigraph_g : lexemeEvent {};
00037     struct InputDigraph_r : lexemeEvent {};
00038     struct InputDigraph_a : lexemeEvent {};
00039     struct InputDigraph_p : lexemeEvent {};
00040     struct InputDigraph_h : lexemeEvent {};
00041     struct InputGraph_G : lexemeEvent {};
00042     struct InputGraph_r : lexemeEvent {};
00043     struct InputGraph_a : lexemeEvent {};
00044     struct InputGraph_p : lexemeEvent {};
00045     struct InputGraph_h : lexemeEvent {};
00046     struct InputOpenCurlyBracket : lexemeEvent {};
00047     struct InputCloseCurlyBracket : lexemeEvent {};
00048     struct InputOpenSquareBracket : lexemeEvent {};
00049     struct InputCloseSquareBracket : lexemeEvent {};
00050     struct InputHyphenFirst : lexemeEvent {};
00051     struct InputHyphenSecond : lexemeEvent {};
00052     struct InputArrow : lexemeEvent {};
00053     struct InputLabel_L : lexemeEvent {};
00054     struct InputLabel_a : lexemeEvent {};
00055     struct InputLabel_b : lexemeEvent {};
00056     struct InputLabel_e : lexemeEvent {};
00057     struct InputLabel_l : lexemeEvent {};
00058     struct InputWeight_w : lexemeEvent {};
00059     struct InputWeight_e : lexemeEvent {};
00060     struct InputWeight_i : lexemeEvent {};
00061     struct InputWeight_g : lexemeEvent {};
00062     struct InputWeight_h : lexemeEvent {};
00063     struct InputWeight_tt : lexemeEvent {};
00064     struct InputEqualLabel : lexemeEvent {};
00065     struct InputSpace : lexemeEvent {};
00066     struct InputNewLine : lexemeEvent {};
00067     struct InputNodeId : lexemeEvent {std::string NodeId; };
00068     struct InputNodeIdSecond : lexemeEvent {std::string NodeIdSecond; };
00069     struct InputStringValue : lexemeEvent {std::string StringValue; };
00070     struct InputIntValue : lexemeEvent {int IntValue; };
00071
00072     // -----
00073     // 2. State Machine Base Class Declaration
00074     //
00075     class SymbolParser : public tinyfsm::Fsm<SymbolParser> {
00076     public:
00077         virtual void react(InputDigraph_D const &) { throw_invalid_input(""); };
00078         virtual void react(InputDigraph_i const &) { throw_invalid_input(""); };
00079         virtual void react(InputDigraph_g const &) { throw_invalid_input(""); };
00080         virtual void react(InputDigraph_r const &) { throw_invalid_input(""); };
00081         virtual void react(InputDigraph_a const &) { throw_invalid_input(""); };
00082         virtual void react(InputDigraph_p const &) { throw_invalid_input(""); };
00083         virtual void react(InputDigraph_h const &) { throw_invalid_input(""); };
00084         virtual void react(InputGraph_G const &) { throw_invalid_input(""); };
00085         virtual void react(InputGraph_r const &) { throw_invalid_input(""); };
00086         virtual void react(InputGraph_a const &) { throw_invalid_input(""); };
00087         virtual void react(InputGraph_p const &) { throw_invalid_input(""); };
00088         virtual void react(InputGraph_h const &) { throw_invalid_input(""); };
00089         virtual void react(InputOpenCurlyBracket const &) { throw_invalid_input(""); };
00090         virtual void react(InputCloseCurlyBracket const &) { throw_invalid_input(""); };
00091         virtual void react(InputNodeId const &) { throw_invalid_input(""); };

```

```

00092     virtual void react(InputNodeIdSecond const &) { throw_invalid_input(""); };
00093     virtual void react(InputSpace const &) { throw_invalid_input(""); };
00094     virtual void react(InputNewLine const &) { throw_invalid_input(""); };
00095     virtual void react(InputOpenSquareBracket const &) { throw_invalid_input(""); };
00096     virtual void react(InputCloseSquareBracket const &) { throw_invalid_input(""); };
00097     virtual void react(InputHyphenFirst const &) { throw_invalid_input(""); };
00098     virtual void react(InputHyphenSecond const &) { throw_invalid_input(""); };
00099     virtual void react(InputArrow const &) { throw_invalid_input(""); };
00100     virtual void react(InputLabel_L const &) { throw_invalid_input(""); };
00101     virtual void react(InputLabel_a const &) { throw_invalid_input(""); };
00102     virtual void react(InputLabel_b const &) { throw_invalid_input(""); };
00103     virtual void react(InputLabel_e const &) { throw_invalid_input(""); };
00104     virtual void react(InputLabel_l const &) { throw_invalid_input(""); };
00105     virtual void react(InputWeight_w const &) { throw_invalid_input(""); };
00106     virtual void react(InputWeight_e const &) { throw_invalid_input(""); };
00107     virtual void react(InputWeight_i const &) { throw_invalid_input(""); };
00108     virtual void react(InputWeight_g const &) { throw_invalid_input(""); };
00109     virtual void react(InputWeight_h const &) { throw_invalid_input(""); };
00110     virtual void react(InputWeight_tt const &) { throw_invalid_input(""); };
00111     virtual void react(InputEqualLabel const &) { throw_invalid_input(""); };
00112     virtual void react(InputStringValue const &) { throw_invalid_input(""); };
00113     virtual void react(InputIntValue const &) { throw_invalid_input(""); };
00114
00115
00116     static void reset();
00117     void entry(); /* entry actions in some states */
00118     void exit(); /* no exit actions */
00119
00120     friend std::vector<common::Lexeme> lex(const std::string& input);
00121
00122     inline static SharedState shared {};
00123 };
00124
00125 // -----
00126 // 3. State Declarations
00127 //
00128 class Idle : public SymbolParser {
00129     void react(InputDigraph_D const &) override;
00130     void react(InputGraph_G const &) override;
00131     void react(InputSpace const &) override;
00132     void react(InputNewLine const &) override;
00133 };
00134
00135 class Digraph_D : public SymbolParser {
00136     void react(InputDigraph_i const &) override;
00137 };
00138 class Digraph_i : public SymbolParser {
00139     void react(InputDigraph_g const &) override;
00140 };
00141 class Digraph_g : public SymbolParser {
00142     void react(InputDigraph_r const &) override;
00143 };
00144 class Digraph_r : public SymbolParser {
00145     void react(InputDigraph_a const &) override;
00146 };
00147 class Digraph_a : public SymbolParser {
00148     void react(InputDigraph_p const &) override;
00149 };
00150 class Digraph_p : public SymbolParser {
00151     void react(InputDigraph_h const &) override;
00152 };
00153 class Digraph_h : public SymbolParser {
00154     void react(InputOpenCurlyBracket const &) override;
00155     void react(InputSpace const &) override;
00156 };
00157
00158 class Graph_G : public SymbolParser {
00159     void react(InputGraph_r const &) override;
00160 };
00161 class Graph_r : public SymbolParser {
00162     void react(InputGraph_a const &) override;
00163 };
00164 class Graph_a : public SymbolParser {
00165     void react(InputGraph_p const &) override;
00166 };
00167 class Graph_p : public SymbolParser {
00168     void react(InputGraph_h const &) override;
00169 };
00170 class Graph_h : public SymbolParser {
00171     void react(InputOpenCurlyBracket const &) override;
00172     void react(InputSpace const &) override;
00173 };
00174
00175 class OpenCurlyBracket : public SymbolParser {
00176     void react(InputNodeId const &) override;
00177     void react(InputCloseCurlyBracket const &) override;
00178     void react(InputSpace const &) override;

```

```
00179         void react(InputNewLine const &) override;
00180     };
00181
00182     class NodeName : public SymbolParser {
00183     public:
00184         void react(InputOpenSquareBracket const &) override;
00185         void react(InputCloseCurlyBracket const &) override;
00186         void react(InputHyphenFirst const &) override;
00187         void react(InputSpace const &) override;
00188         void react(InputNewLine const &) override;
00189     };
00190
00191     class OpenSquareBracket : public SymbolParser {
00192     public:
00193         void react(InputWeight_w const &) override;
00194         void react(InputLabel_L const &) override;
00195         void react(InputSpace const &) override;
00196         void react(InputCloseSquareBracket const &) override;
00197     };
00198
00199     class HyphenFirst : public SymbolParser {
00200     public:
00201         void react(InputHyphenSecond const &) override;
00202         void react(InputArrow const &) override;
00203     };
00204
00205     class HyphenSecond : public SymbolParser {
00206     public:
00207         void react(InputNodeIdSecond const &) override;
00208         void react(InputSpace const &) override;
00209     };
00210
00211     class Arrow : public SymbolParser {
00212     public:
00213         void react(InputNodeIdSecond const &) override;
00214         void react(InputSpace const &) override;
00215     };
00216
00217     class NodeNameSecond : public SymbolParser {
00218     public:
00219         void react(InputOpenSquareBracket const &) override;
00220         void react(InputCloseCurlyBracket const &) override;
00221         void react(InputNewLine const &) override;
00222         void react(InputSpace const &) override;
00223     };
00224
00225     class Label_L : public SymbolParser {
00226     public:
00227         void react(InputLabel_a const &) override;
00228     };
00229
00230     class Label_a : public SymbolParser {
00231     public:
00232         void react(InputLabel_b const &) override;
00233     };
00234
00235     class Label_b : public SymbolParser {
00236     public:
00237         void react(InputLabel_e const &) override;
00238     };
00239
00240     class Label_e : public SymbolParser {
00241     public:
00242         void react(InputLabel_l const &) override;
00243     };
00244
00245     class Label_l : public SymbolParser {
00246     public:
00247         void react(InputEqualLabel const &) override;
00248         void react(InputSpace const &) override;
00249     };
00250
00251     class Weight_w : public SymbolParser {
00252     public:
00253         void react(InputWeight_e const &) override;
00254     };
00255
00256     class Weight_e : public SymbolParser {
00257     public:
00258         void react(InputWeight_i const &) override;
00259     };
00260
00261     class Weight_i : public SymbolParser {
00262     public:
00263         void react(InputWeight_g const &) override;
00264     };
00265
00266     class Weight_g : public SymbolParser {
00267     public:
00268         void react(InputWeight_h const &) override;
00269     };
00270
00271     class Weight_h : public SymbolParser {
00272     public:
00273         void react(InputWeight_tt const &) override;
00274     };
00275
00276     class Weight_tt : public SymbolParser {
00277     public:
00278         void react(InputEqualLabel const &) override;
00279         void react(InputSpace const &) override;
00280     };
00281
00282     class EqualLabel : public SymbolParser {
00283     public:
00284         void react(InputStringValue const &) override;
00285         void react(InputIntValue const &) override;
00286         void react(InputSpace const &) override;
00287     };
00288
00289     class StringValue : public SymbolParser {
00290     public:
00291         void react(InputCloseSquareBracket const &) override;
00292         void react(InputSpace const &) override;
00293     };
00294
00295     class IntValue : public SymbolParser {
00296     public:
00297         void react(InputCloseSquareBracket const &) override;
```

```

00266         void react(InputSpace const &) override;
00267     };
00268
00269     class CloseSquareBracket : public SymbolParser {
00270     public:
00271         void react(InputNodeId const &) override;
00272         void react(InputCloseCurlyBracket const &) override;
00273         void react(InputSpace const &) override;
00274         void react(InputNewLine const &) override;
00275     };
00276
00277     std::vector<common::Lexeme> lex(const std::string& input);
00278 }

```

## 7.6 parser.hpp

```

00001 #pragma once
00002
00003 // standard
00004 #include <stdint>
00005 #include <memory>
00006 #include <string>
00007
00008 // internal
00009 #include <common/action-queue.hpp>
00010 #include <common/common.hpp>
00011 #include <algorithms/traversal.hpp>
00012
00013 // contrib
00014 #include <tinyfsm.hpp>
00015
00016 namespace parser {
00017     inline void throw_invalid_input(std::string message) {
00018         throw std::runtime_error(message);
00019     }
00020
00021     struct SharedState {
00022     public:
00023         std::shared_ptr<common::Graph> graph;
00024
00025         common::ActionQueue backoffQueue;
00026         common::ActionQueue actionQueue;
00027
00028         std::string fromNodeId;
00029         std::string toNodeId;
00030         std::string label;
00031         std::string expectedValue;
00032
00033         std::uint8_t flags = 0x0;
00034         int weight = -1;
00035     };
00036
00037     // -----
00038     // 1. Event Declarations
00039     // -----
00040     struct GraphEvent : tinyfsm::Event {};
00041     struct InputOpenCurlyBracket : GraphEvent {};
00042     struct InputCloseCurlyBracket : GraphEvent {};
00043     struct InputOpenSquareBracket : GraphEvent {};
00044     struct InputCloseSquareBracket : GraphEvent {};
00045     struct InputEdge : GraphEvent {};
00046     struct InputLabel : GraphEvent {};
00047     struct InputEqual : GraphEvent {};
00048     struct InputGraphType : GraphEvent { std::string graphType; };
00049     struct InputNodeId : GraphEvent { std::string NodeID; };
00050     struct InputStringValue : GraphEvent { std::string label; };
00051     struct InputIntValue : GraphEvent { int weight; };
00052
00053     // -----
00054     // 2. State Machine Base Class Declaration
00055     // -----
00056     class LexemeParser : public tinyfsm::Fsm<LexemeParser> {
00057     public:
00058         virtual void react(InputGraphType const &) {}
00059         virtual void react(InputOpenCurlyBracket const &) { throw_invalid_input(""); };
00060         virtual void react(InputCloseCurlyBracket const &) { throw_invalid_input(""); };
00061         virtual void react(InputNodeId const &) { throw_invalid_input(""); };
00062         virtual void react(InputOpenSquareBracket const &) { throw_invalid_input(""); };
00063         virtual void react(InputCloseSquareBracket const &) { throw_invalid_input(""); };
00064         virtual void react(InputEdge const &) { throw_invalid_input(""); };
00065         virtual void react(InputLabel const &) { throw_invalid_input(""); };
00066         virtual void react(InputEqual const &) { throw_invalid_input(""); };
00067         virtual void react(InputStringValue const &) { throw_invalid_input(""); };
00068     };

```



```

00069         virtual void react(InputIntValue const &) { throw_invalid_input(""); };
00070
00071         static void reset();
00072         void entry(); /* entry actions in some states */
00073         void exit(); /* no exit actions */
00074
00075         friend std::shared_ptr<common::TraversalGraph> parse(std::vector<common::Lexeme>& input);
00076
00077     protected:
00078         inline static SharedState shared {};
00079     };
00080
00081
00082
00083     // -----
00084     // 3. State Declarations
00085     //
00086     class Idle : public LexemeParser {
00087     public:
00088         void react(InputGraphType const &) override;
00089     };
00090
00091     class GraphType : public LexemeParser {
00092     public:
00093         void react(InputOpenCurlyBracket const &) override;
00094     };
00095
00096     class OpenCurlyBracket : public LexemeParser {
00097     public:
00098         void react(InputNodeId const &) override;
00099         void react(InputCloseCurlyBracket const &) override;
00100     };
00101
00102     class FromNodeID : public LexemeParser {
00103     public:
00104         void react(InputCloseCurlyBracket const&) override;
00105         void react(InputOpenSquareBracket const&) override;
00106         void react(InputEdge const&) override;
00107         void react(InputNodeId const&) override;
00108     };
00109
00110     class OpenSquareBracket : public LexemeParser {
00111     public:
00112         void react(InputLabel const &) override;
00113     };
00114
00115     class Edge : public LexemeParser {
00116     public:
00117         void react(InputNodeId const &) override;
00118     };
00119
00120     class ToNodeID : public LexemeParser {
00121     public:
00122         void react(InputOpenSquareBracket const &) override;
00123         void react(InputNodeId const& ) override;
00124         void react(InputCloseCurlyBracket const&) override;
00125     };
00126
00127     class Label : public LexemeParser {
00128     public:
00129         void react(InputEqual const &) override;
00130     };
00131
00132     class Equal : public LexemeParser {
00133     public:
00134         void react(InputStringValue const &) override;
00135         void react(InputIntValue const &) override;
00136     };
00137
00138     class Value : public LexemeParser {
00139     public:
00140         void react(InputCloseSquareBracket const &) override;
00141     };
00142
00143     //std::shared_ptr<common::Graph> parse(std::vector<common::Lexeme>& input);
00144     std::shared_ptr<common::TraversalGraph> parse(std::vector<common::Lexeme>& input);
00145 }

```



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