graph-serializer

0.0.0

Generated by Doxygen 1.9.8

Chapter 1

Namespace Index

1.1 Namespace List

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

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Chapter 4

File Index

4.1 File List

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

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

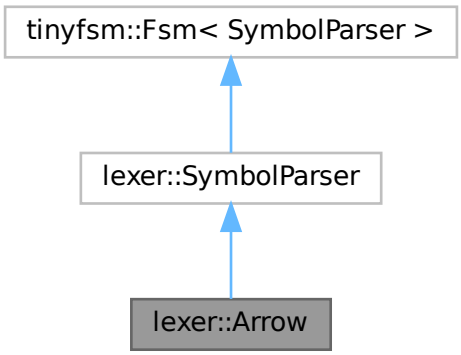
action	action to add

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

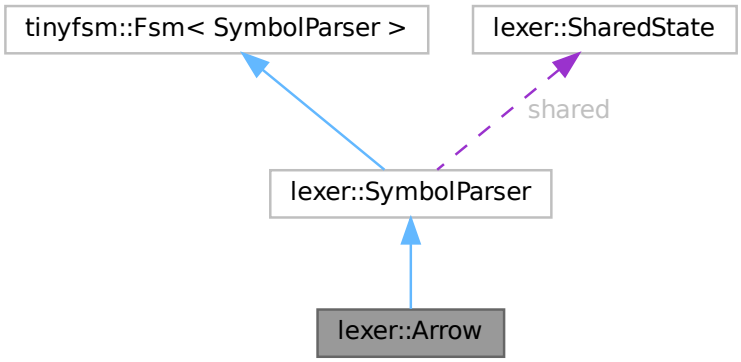
- src/common/action-queue.hpp
- src/common/action-queue.cpp

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 &)
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- 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 &)
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- virtual void **react** (InputLabel_b const &)
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- virtual void **react** (InputLabel_l const &)
- virtual void **react** (InputWeight_w const &)
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- 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

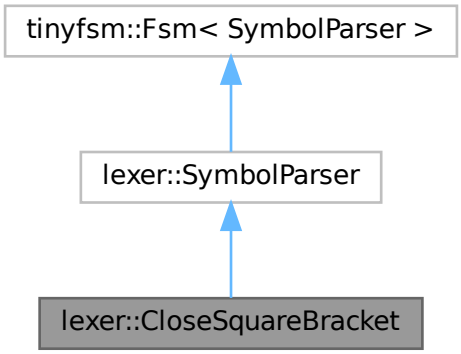
- static SharedState **shared** {}

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

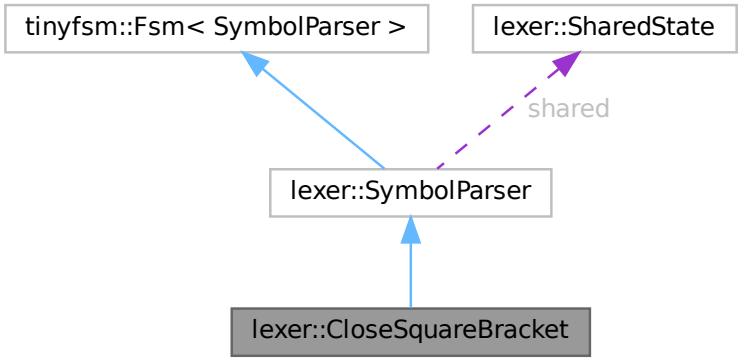
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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 &)
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- virtual void **react** (InputCloseSquareBracket const &)
- virtual void **react** (InputHyphenFirst const &)
- virtual void **react** (InputHyphenSecond const &)
- virtual void **react** (InputArrow const &)
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- virtual void **react** (InputLabel_l const &)
- virtual void **react** (InputWeight_w const &)
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- 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

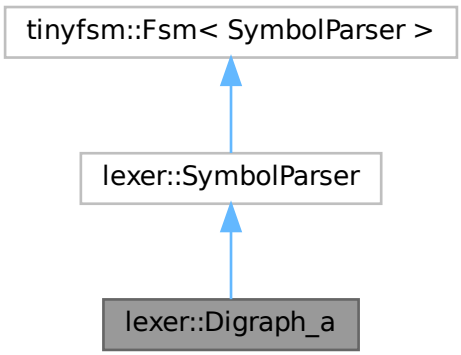
Edge Represents edge without source node.

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

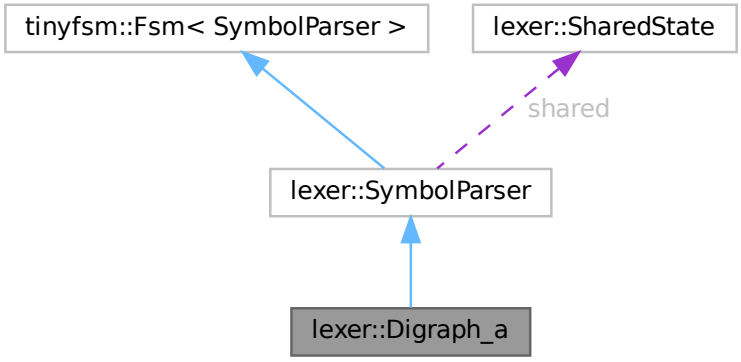
- src/common/common.hpp
- src/common/common.cpp

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 &)
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- virtual void **react** (InputGraph_r const &)
- virtual void **react** (InputGraph_a const &)
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- virtual void **react** (InputGraph_h const &)
- virtual void **react** (InputOpenCurlyBracket const &)
- virtual void **react** (InputCloseCurlyBracket const &)
- virtual void **react** (InputNodeId const &)
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- virtual void **react** (InputSpace const &)
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- virtual void **react** (InputLabel_l const &)
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- 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

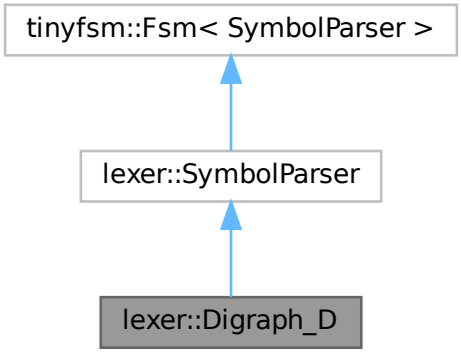
- static SharedState **shared** {}

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

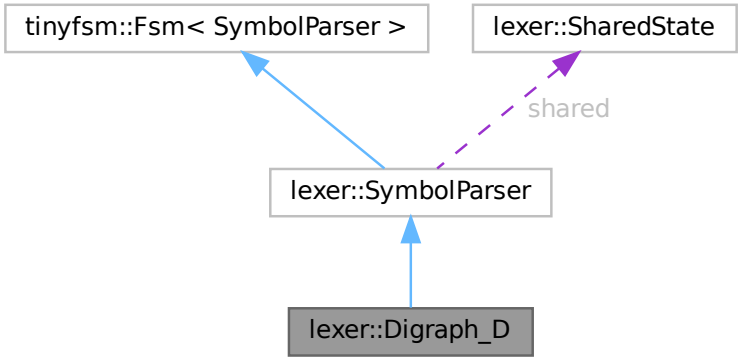
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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 &)
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- virtual void **react** (InputGraph_h const &)
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- virtual void **react** (InputSpace const &)
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- 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

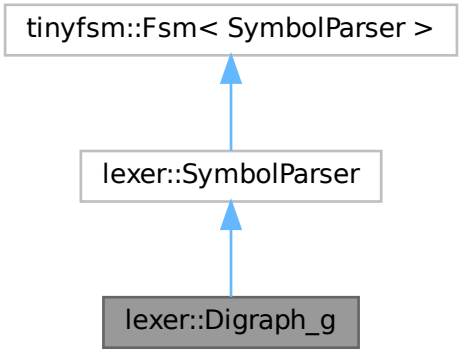
- static SharedState **shared** {}

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

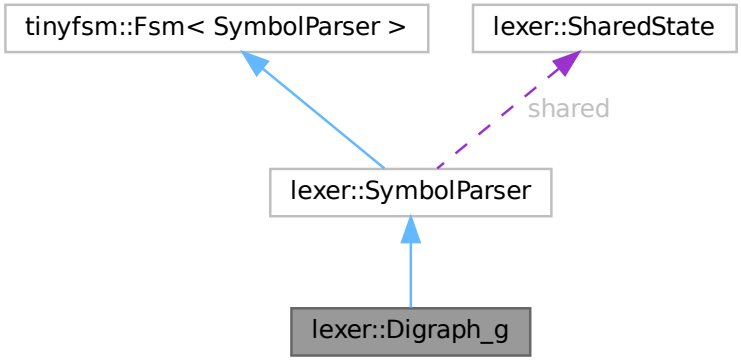
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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 &)
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- virtual void **react** (InputNewLine const &)
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- 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

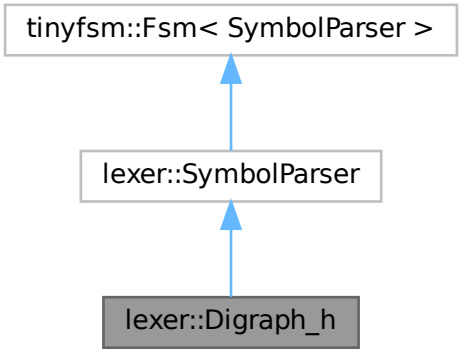
- static SharedState **shared** {}

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

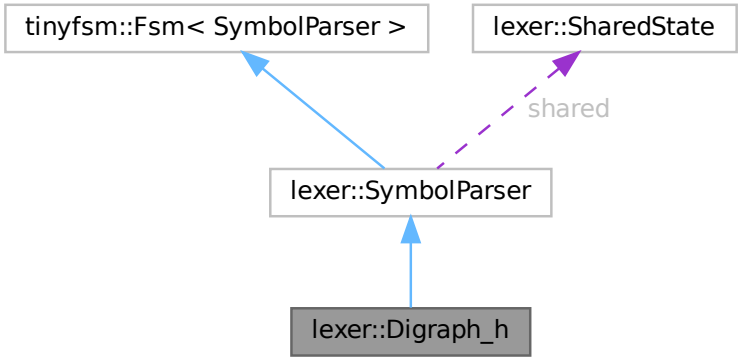
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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 &)
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- virtual void **react** (InputCloseSquareBracket const &)
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- virtual void **react** (InputHyphenSecond const &)
- virtual void **react** (InputArrow const &)
- virtual void **react** (InputLabel_L const &)
- virtual void **react** (InputLabel_a const &)
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- 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

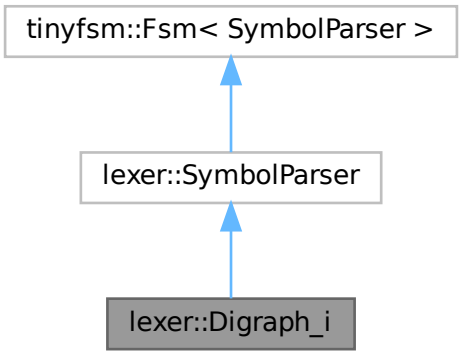
- static SharedState **shared** {}

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

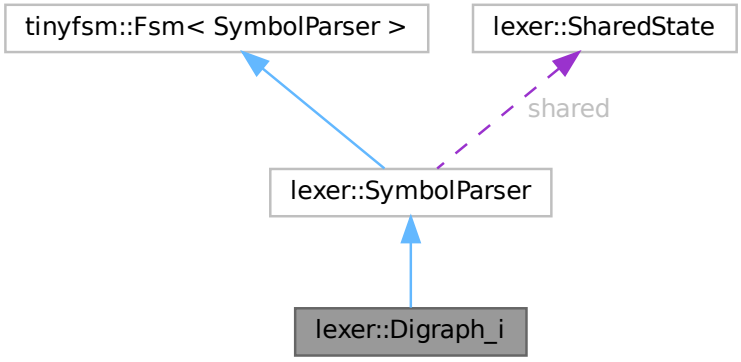
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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 &)
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- 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

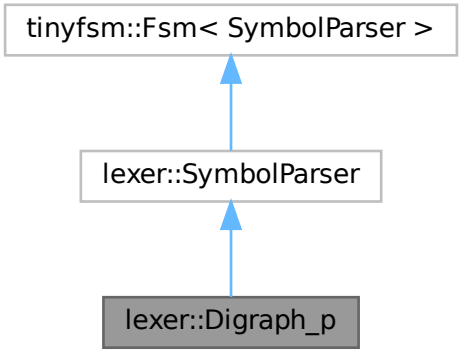
- static SharedState **shared** {}

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

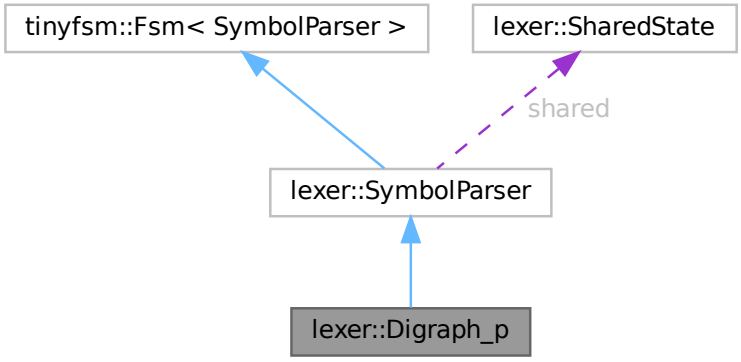
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

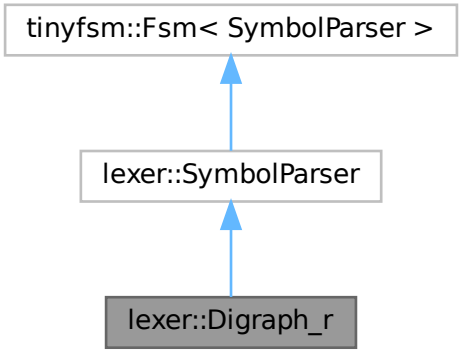
- static SharedState **shared** {}

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

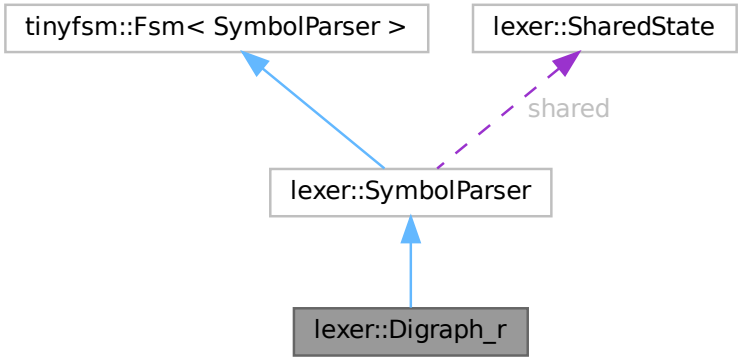
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

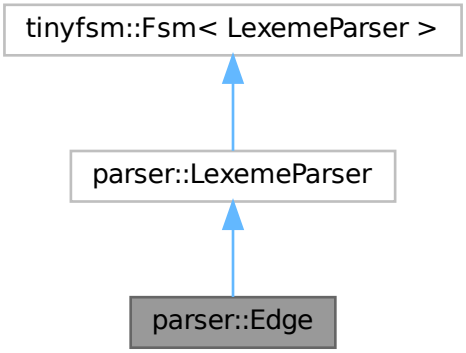
- static SharedState **shared** {}

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

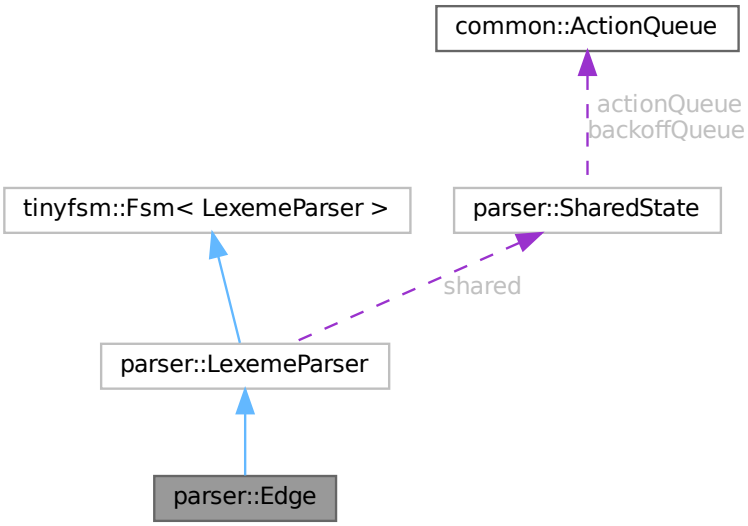
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

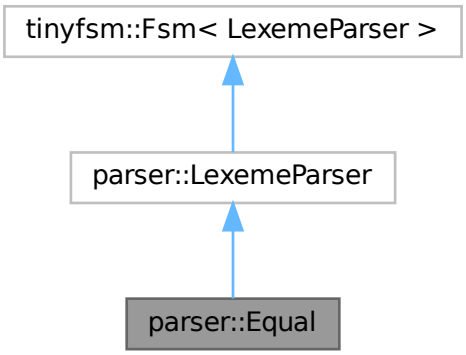
- static SharedState **shared** {}

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

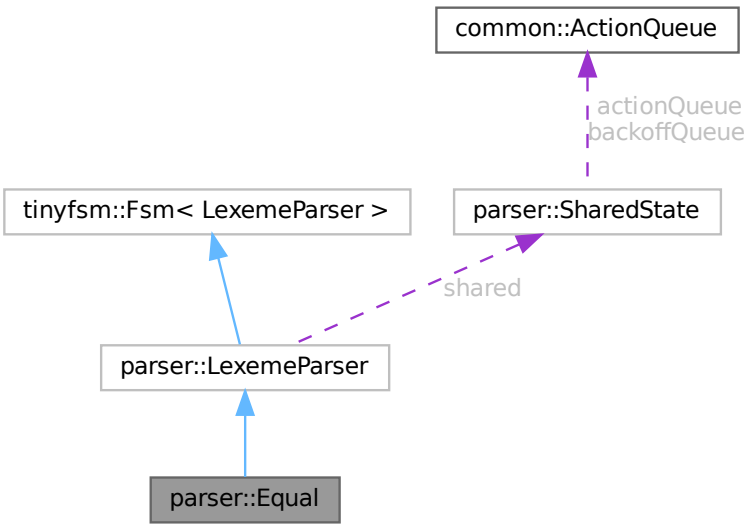
- src/parser/parser.hpp
- src/parser/parser.cpp

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

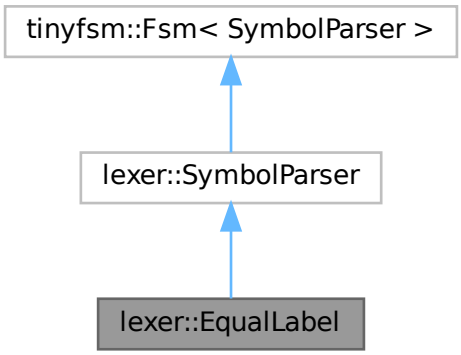
- static SharedState **shared** {}

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

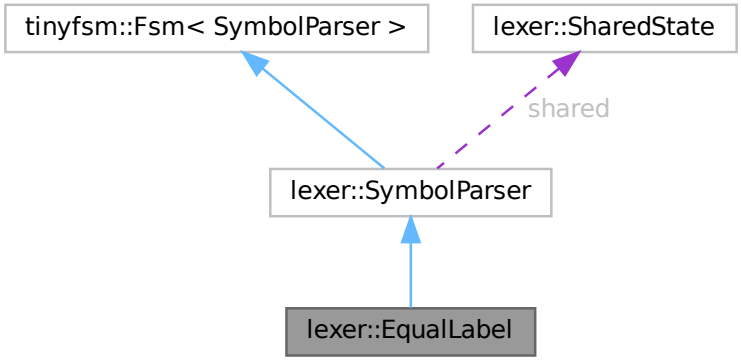
- src/parser/parser.hpp
- src/parser/parser.cpp

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

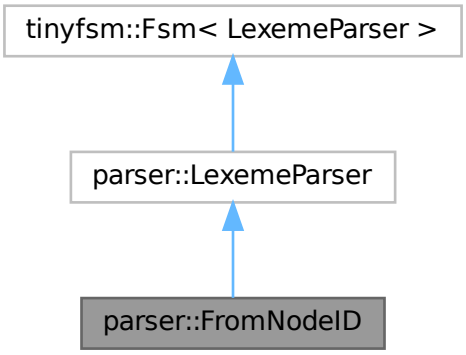
- static SharedState **shared** {}

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

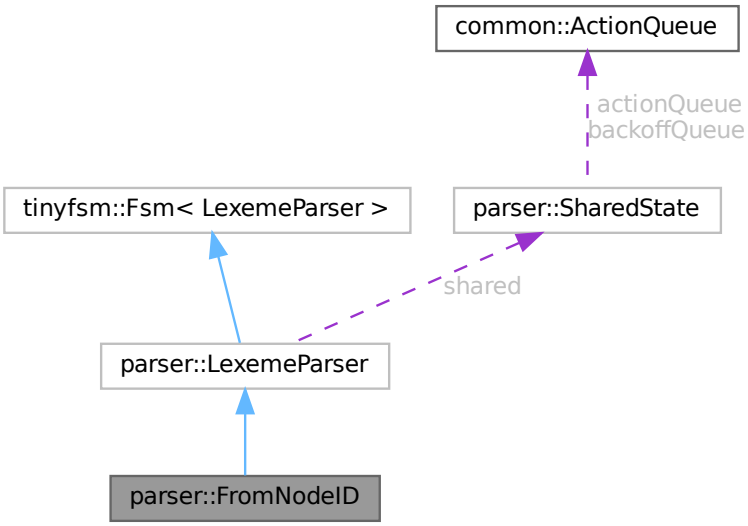
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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:

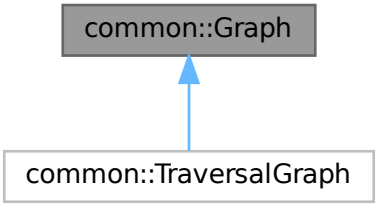
- src/parser/parser.hpp
- src/parser/parser.cpp

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

  Inits 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

source	first node ID
target	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

source	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

source	first node ID
target	second node ID

Returns

std::optional<int> weight if exists

6.16.2.6 init()

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

Inits graph object Sets flags and puts object into active mode.

Parameters

flags	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

source	source node ID
edge	edge to add

6.16.2.10 pushNode()

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

Adds new node to graph.

Parameters

name	node ID

6.16.2.11 removeLabel()

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

Removes label for node.

Parameters

source	node ID

6.16.2.12 setLabel()

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

Sets label for node.

Parameters

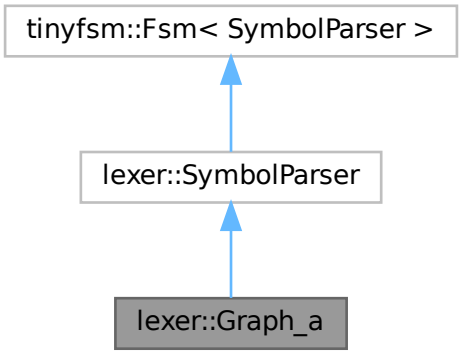
source	node ID
label	label string

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

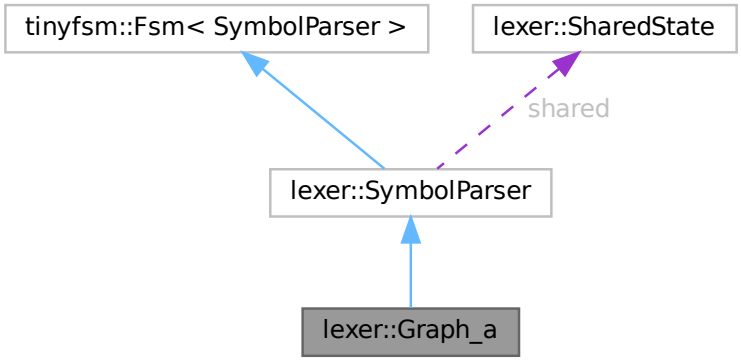
- src/common/common.hpp
- src/common/common.cpp

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

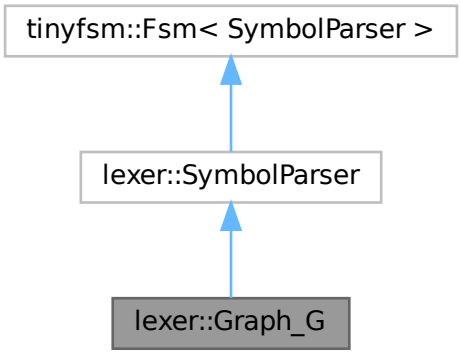
- static SharedState **shared** {}

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

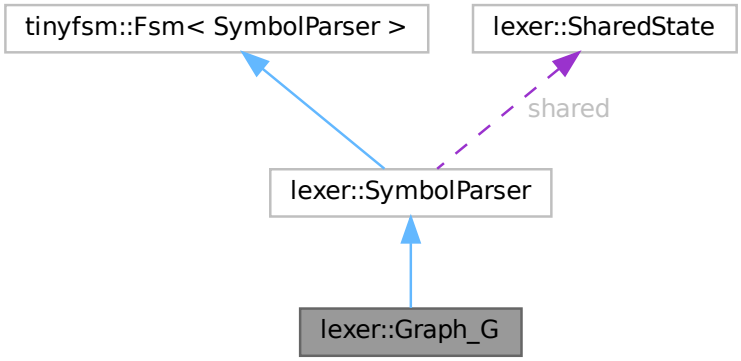
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

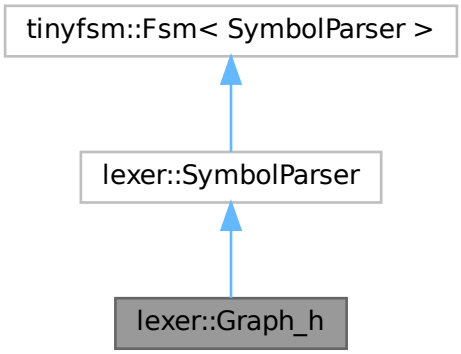
- static SharedState **shared** {}

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

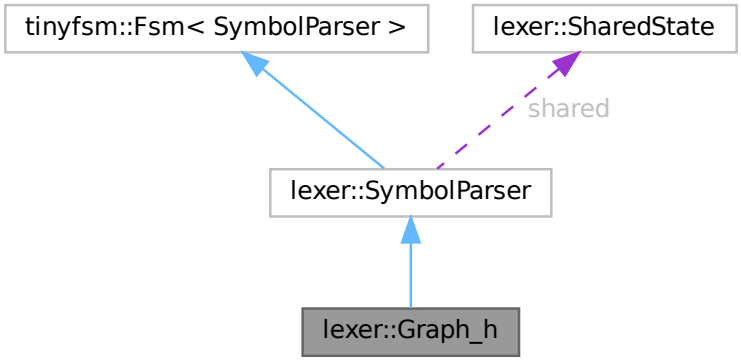
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

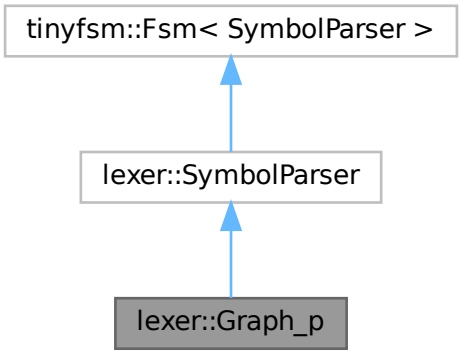
- static SharedState **shared** {}

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

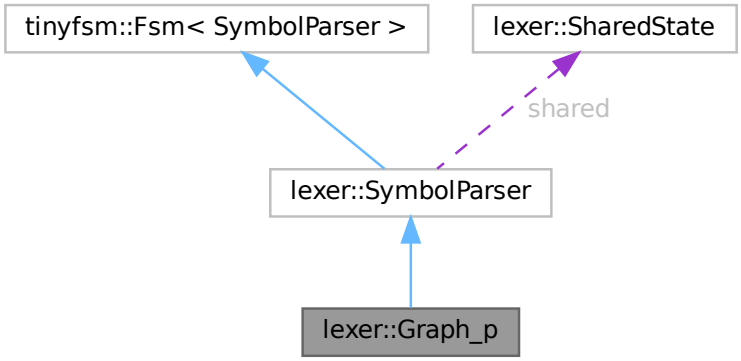
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

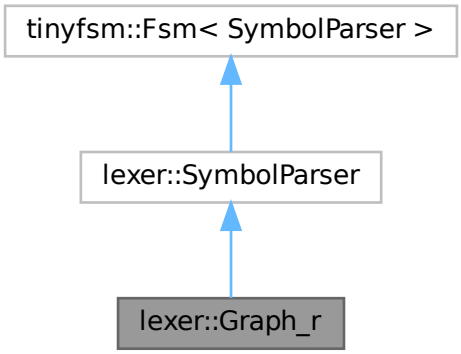
- static SharedState **shared** {}

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

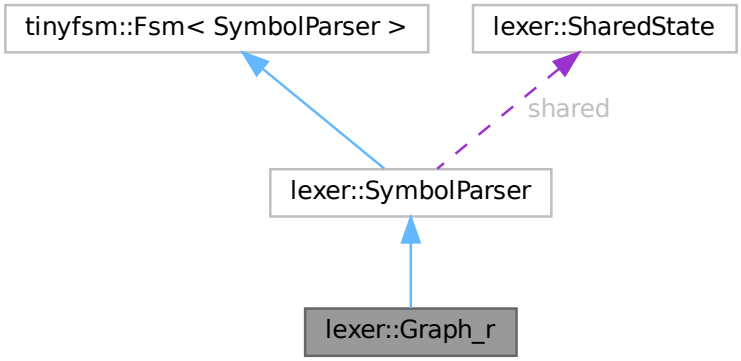
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

settings	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

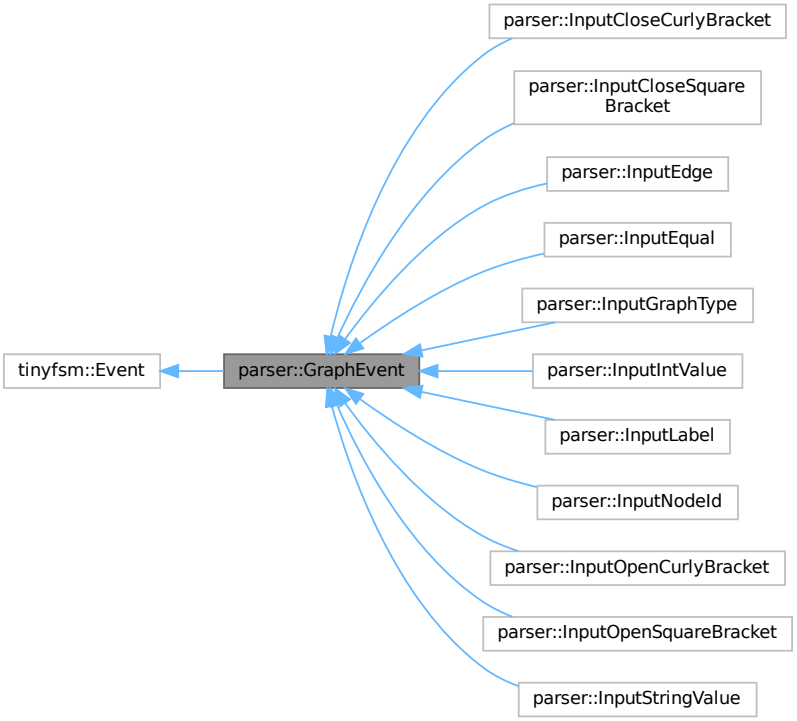
one	target graph object
filename	file to dump to

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

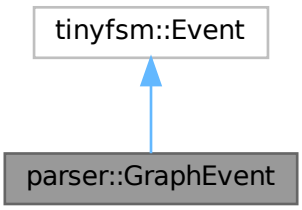
- src/common/reverted.hpp
- src/common/reverted.cpp

6.23 parser::GraphEvent Struct Reference

Inheritance diagram for parser::GraphEvent:



Collaboration diagram for parser::GraphEvent:

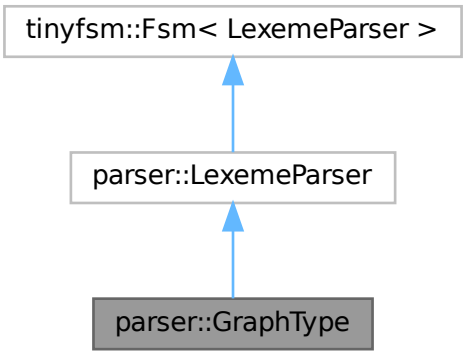


The documentation for this struct was generated from the following file:

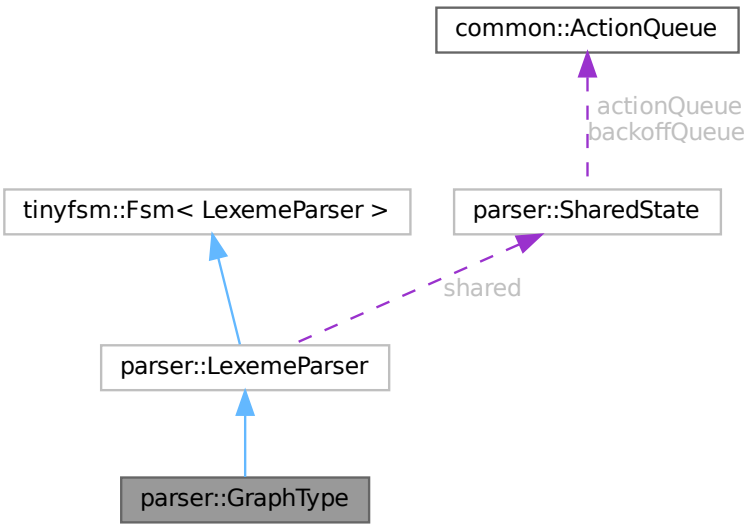
- src/parser/parser.hpp

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

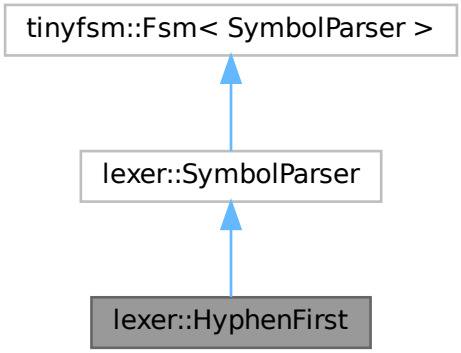
- static SharedState **shared** {}

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

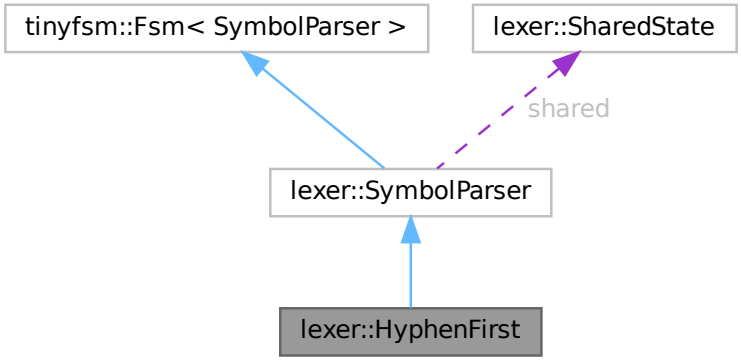
- src/parser/parser.hpp
- src/parser/parser.cpp

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

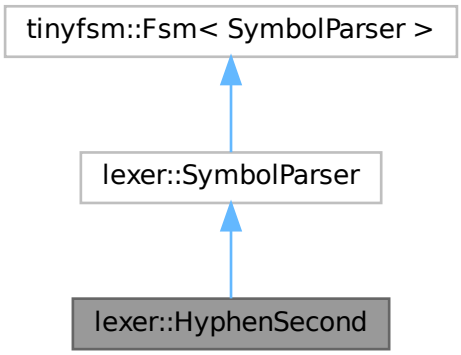
- static SharedState **shared** {}

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

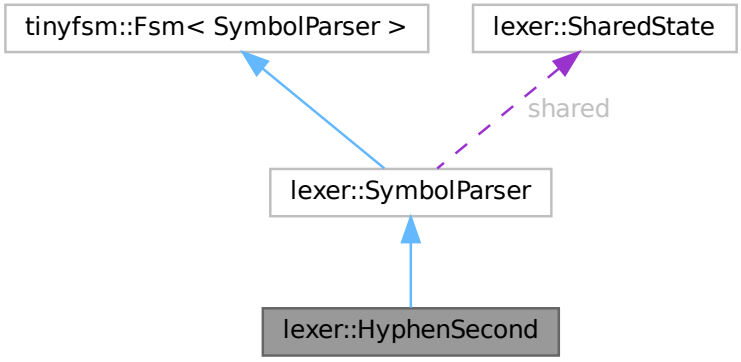
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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:

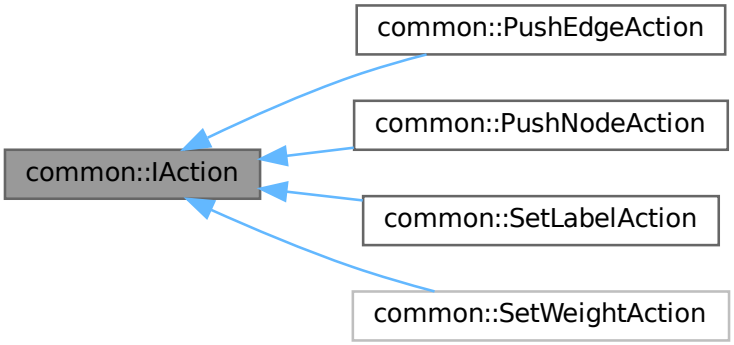
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

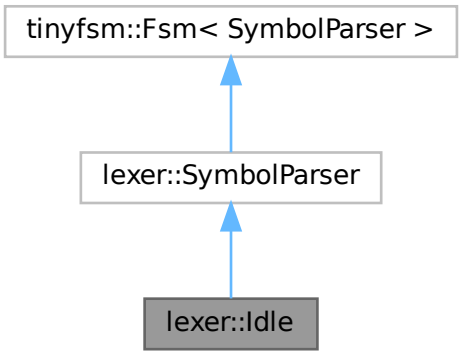
Implemented in common::PushNodeAction, common::SetLabelAction, common::PushEdgeAction, and common::SetWeightAction.

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

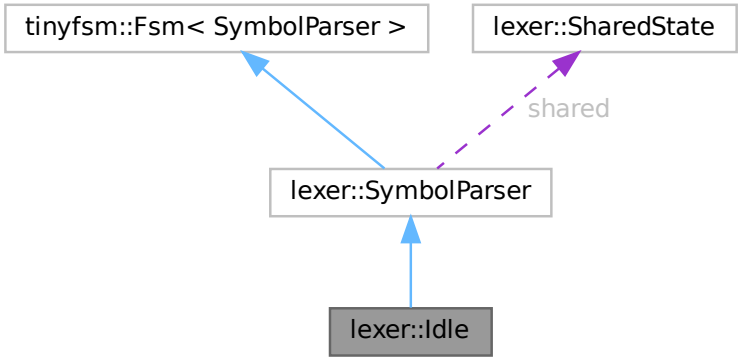
- src/common/action-queue.hpp

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

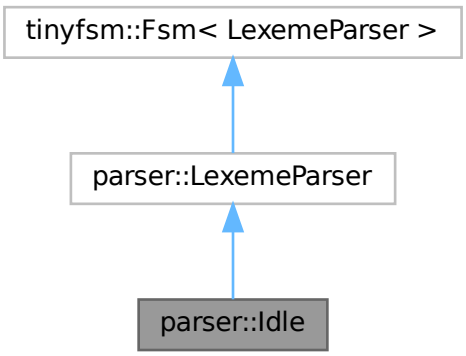
- static SharedState **shared** {}

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

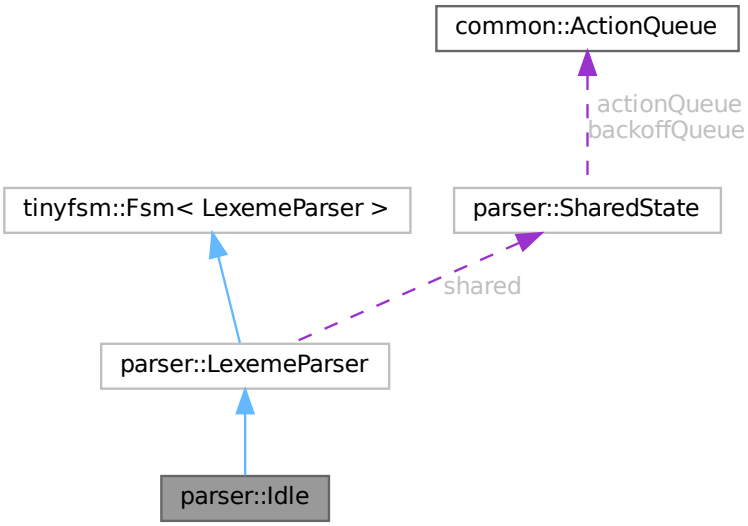
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

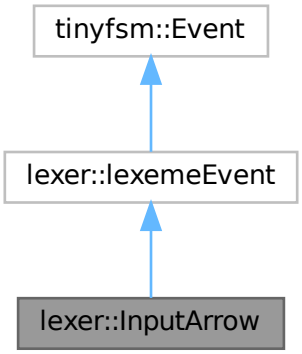
- static SharedState **shared** {}

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

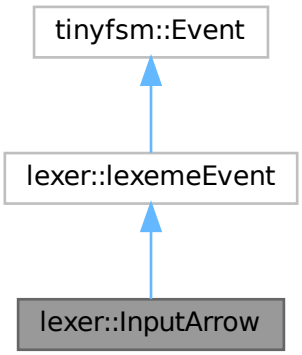
- src/parser/parser.hpp
- src/parser/parser.cpp

6.30 lexer::InputArrow Struct Reference

Inheritance diagram for lexer::InputArrow:



Collaboration diagram for lexer::InputArrow:

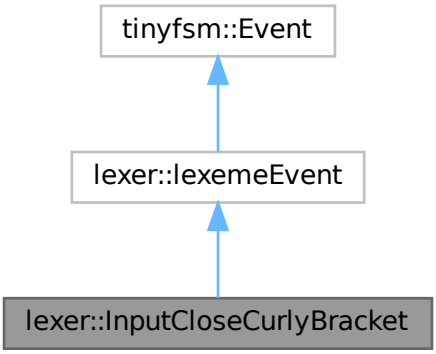


The documentation for this struct was generated from the following file:

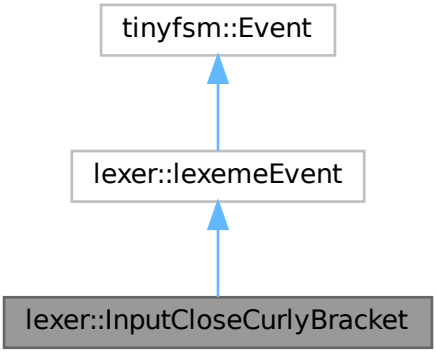
- src/lexer/lexer.hpp

6.31 lexer::InputCloseCurlyBracket Struct Reference

Inheritance diagram for lexer::InputCloseCurlyBracket:



Collaboration diagram for lexer::InputCloseCurlyBracket:

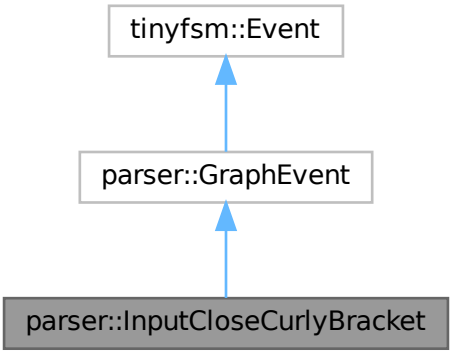


The documentation for this struct was generated from the following file:

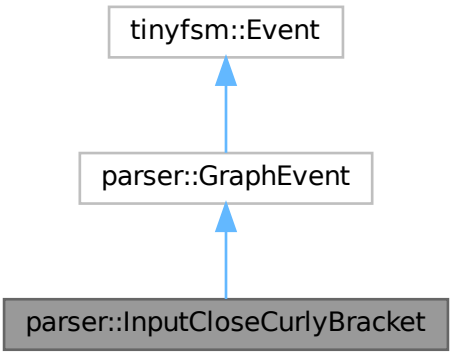
- src/lexer/lexer.hpp

6.32 parser::InputCloseCurlyBracket Struct Reference

Inheritance diagram for parser::InputCloseCurlyBracket:



Collaboration diagram for parser::InputCloseCurlyBracket:

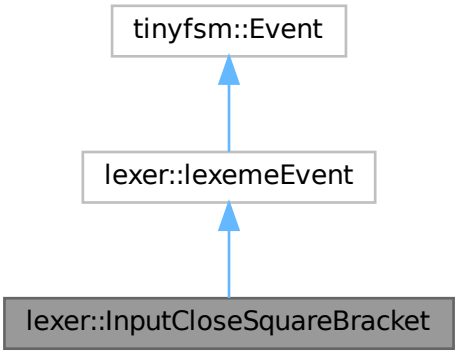


The documentation for this struct was generated from the following file:

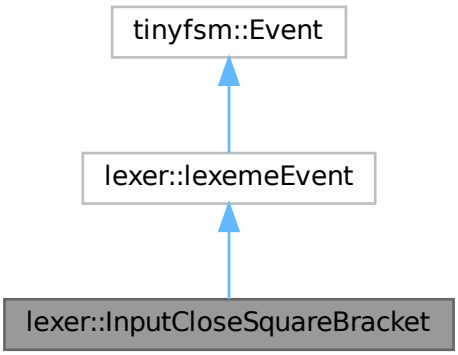
- src/parser/parser.hpp

6.33 lexer::InputCloseSquareBracket Struct Reference

Inheritance diagram for lexer::InputCloseSquareBracket:



Collaboration diagram for lexer::InputCloseSquareBracket:

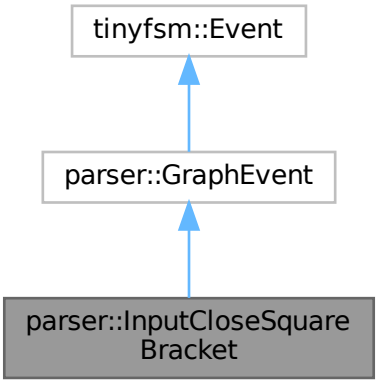


The documentation for this struct was generated from the following file:

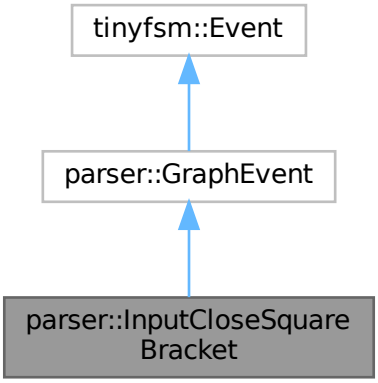
- src/lexer/lexer.hpp

6.34 parser::InputCloseSquareBracket Struct Reference

Inheritance diagram for parser::InputCloseSquareBracket:



Collaboration diagram for parser::InputCloseSquareBracket:

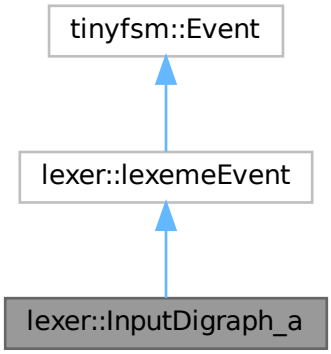


The documentation for this struct was generated from the following file:

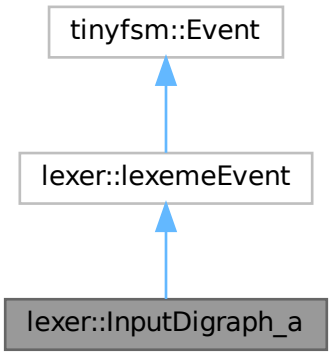
- src/parser/parser.hpp

6.35 lexer::InputDigraph_a Struct Reference

Inheritance diagram for lexer::InputDigraph_a:



Collaboration diagram for lexer::InputDigraph_a:

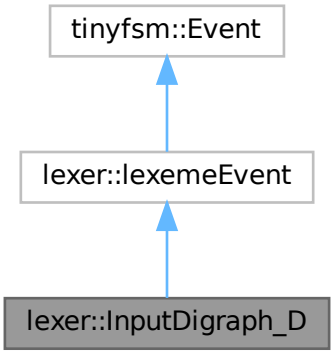


The documentation for this struct was generated from the following file:

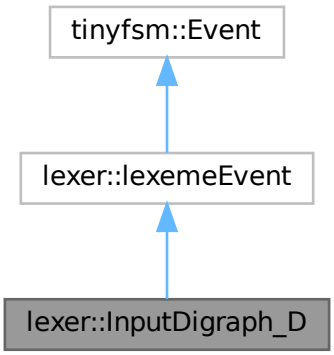
- src/lexer/lexer.hpp

6.36 lexer::InputDigraph_D Struct Reference

Inheritance diagram for lexer::InputDigraph_D:



Collaboration diagram for lexer::InputDigraph_D:

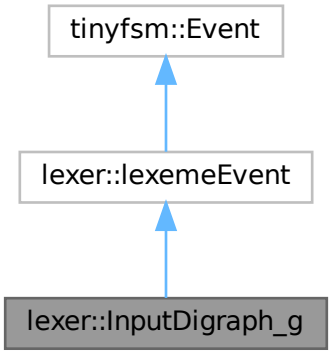


The documentation for this struct was generated from the following file:

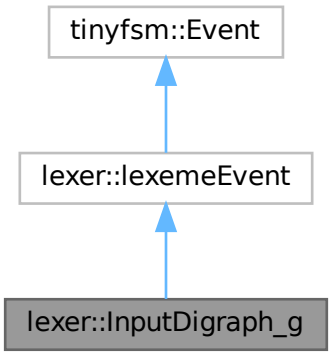
- src/lexer/lexer.hpp

6.37 lexer::InputDigraph_g Struct Reference

Inheritance diagram for lexer::InputDigraph_g:



Collaboration diagram for lexer::InputDigraph_g:

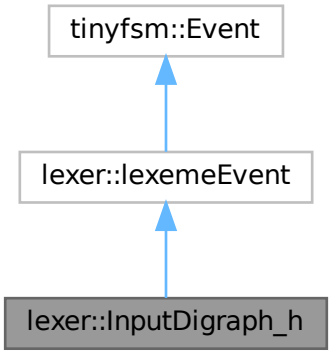


The documentation for this struct was generated from the following file:

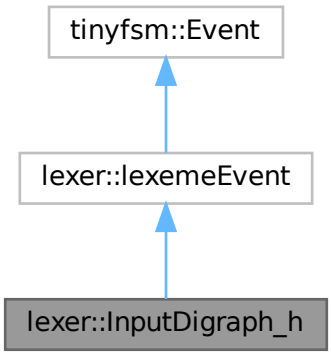
- src/lexer/lexer.hpp

6.38 lexer::InputDigraph_h Struct Reference

Inheritance diagram for lexer::InputDigraph_h:



Collaboration diagram for lexer::InputDigraph_h:

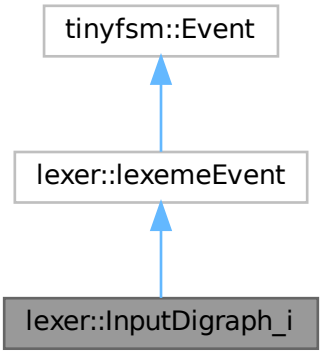


The documentation for this struct was generated from the following file:

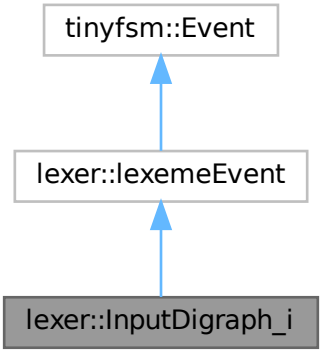
- src/lexer/lexer.hpp

6.39 lexer::InputDigraph_i Struct Reference

Inheritance diagram for lexer::InputDigraph_i:



Collaboration diagram for lexer::InputDigraph_i:

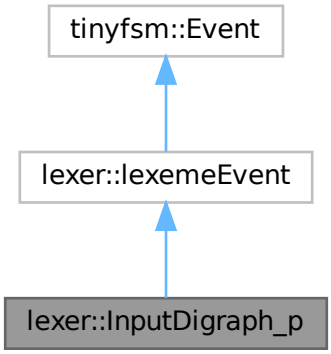


The documentation for this struct was generated from the following file:

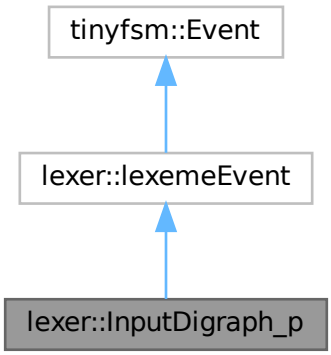
- src/lexer/lexer.hpp

6.40 lexer::InputDigraph_p Struct Reference

Inheritance diagram for lexer::InputDigraph_p:



Collaboration diagram for lexer::InputDigraph_p:

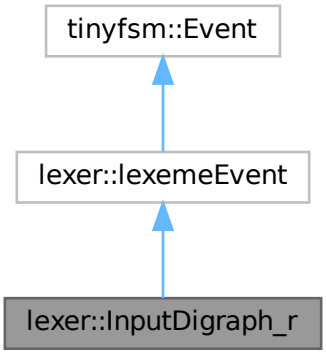


The documentation for this struct was generated from the following file:

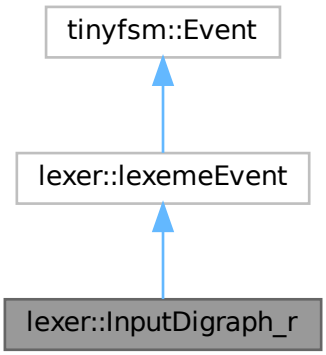
- src/lexer/lexer.hpp

6.41 lexer::InputDigraph_r Struct Reference

Inheritance diagram for lexer::InputDigraph_r:



Collaboration diagram for lexer::InputDigraph_r:

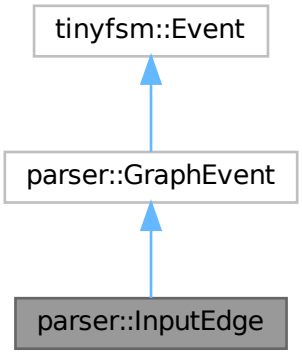


The documentation for this struct was generated from the following file:

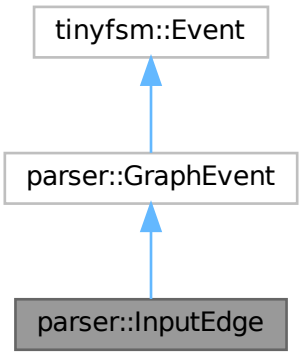
- src/lexer/lexer.hpp

6.42 parser::InputEdge Struct Reference

Inheritance diagram for parser::InputEdge:



Collaboration diagram for parser::InputEdge:

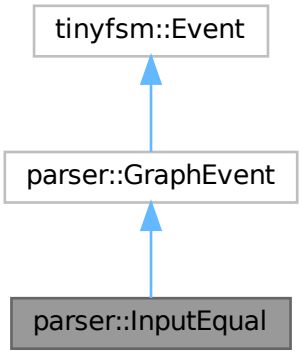


The documentation for this struct was generated from the following file:

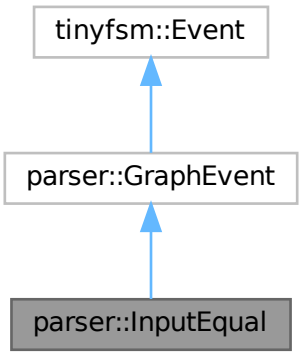
- src/parser/parser.hpp

6.43 parser::InputEqual Struct Reference

Inheritance diagram for parser::InputEqual:



Collaboration diagram for parser::InputEqual:

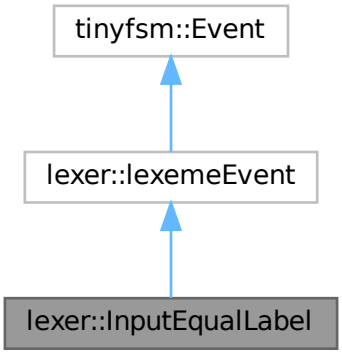


The documentation for this struct was generated from the following file:

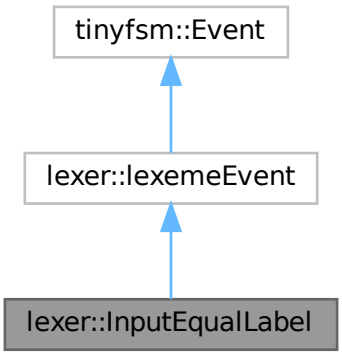
- src/parser/parser.hpp

6.44 lexer::InputEqualLabel Struct Reference

Inheritance diagram for lexer::InputEqualLabel:



Collaboration diagram for lexer::InputEqualLabel:

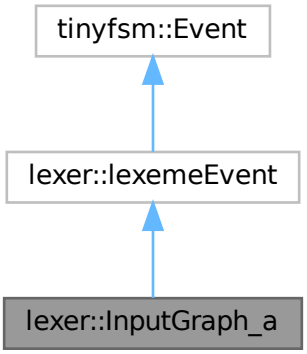


The documentation for this struct was generated from the following file:

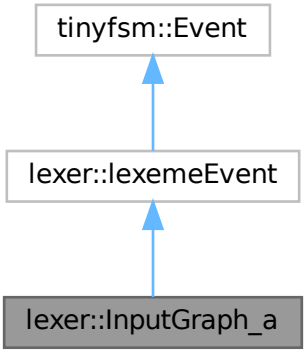
- src/lexer/lexer.hpp

6.45 lexer::InputGraph_a Struct Reference

Inheritance diagram for lexer::InputGraph_a:



Collaboration diagram for lexer::InputGraph_a:

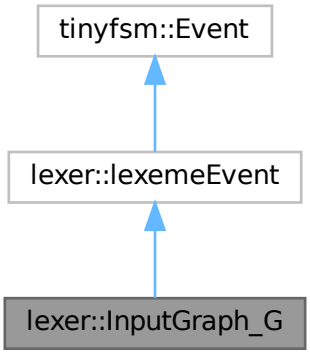


The documentation for this struct was generated from the following file:

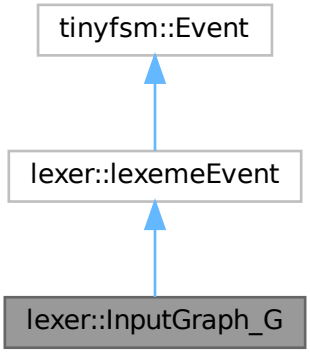
- src/lexer/lexer.hpp

6.46 lexer::InputGraph_G Struct Reference

Inheritance diagram for lexer::InputGraph_G:



Collaboration diagram for lexer::InputGraph_G:

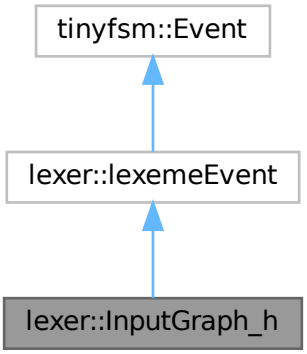


The documentation for this struct was generated from the following file:

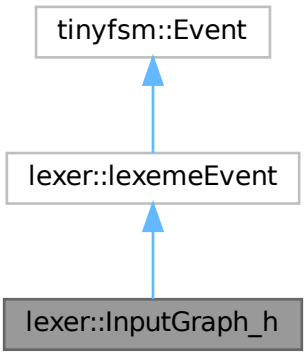
- src/lexer/lexer.hpp

6.47 lexer::InputGraph_h Struct Reference

Inheritance diagram for lexer::InputGraph_h:



Collaboration diagram for lexer::InputGraph_h:

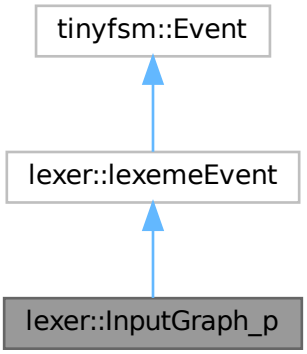


The documentation for this struct was generated from the following file:

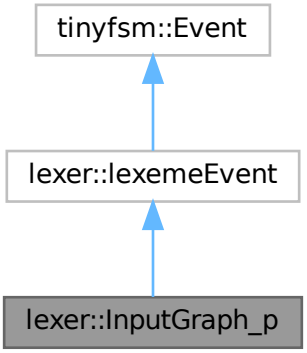
- src/lexer/lexer.hpp

6.48 lexer::InputGraph_p Struct Reference

Inheritance diagram for lexer::InputGraph_p:



Collaboration diagram for lexer::InputGraph_p:

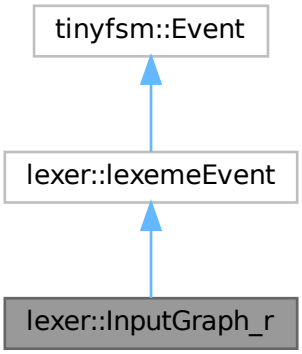


The documentation for this struct was generated from the following file:

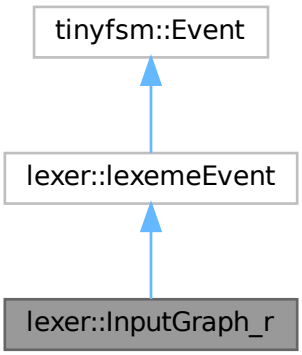
- src/lexer/lexer.hpp

6.49 lexer::InputGraph_r Struct Reference

Inheritance diagram for lexer::InputGraph_r:



Collaboration diagram for lexer::InputGraph_r:

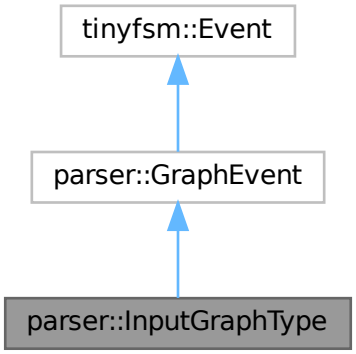


The documentation for this struct was generated from the following file:

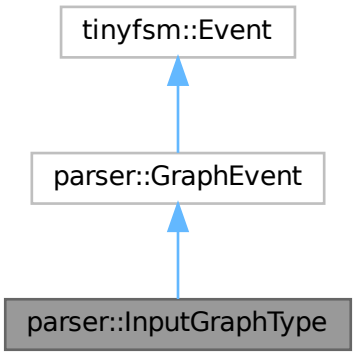
- src/lexer/lexer.hpp

6.50 parser::InputGraphType Struct Reference

Inheritance diagram for parser::InputGraphType:



Collaboration diagram for parser::InputGraphType:



Public Attributes

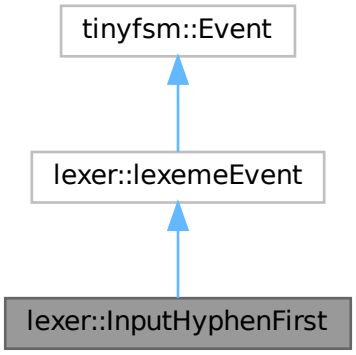
- std::string **graphType**

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

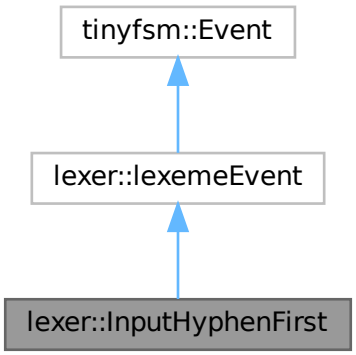
- src/parser/parser.hpp

6.51 lexer::InputHyphenFirst Struct Reference

Inheritance diagram for lexer::InputHyphenFirst:



Collaboration diagram for lexer::InputHyphenFirst:

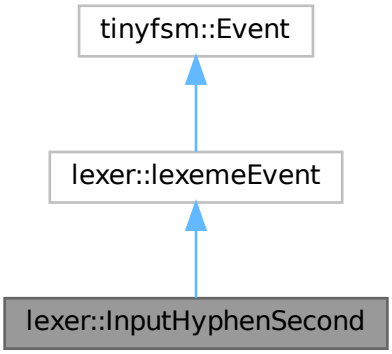


The documentation for this struct was generated from the following file:

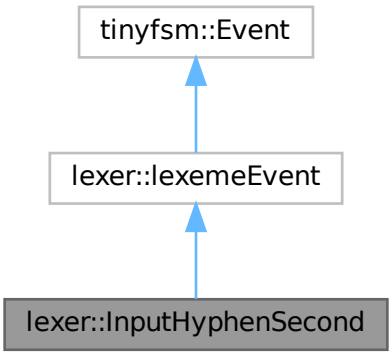
- src/lexer/lexer.hpp

6.52 lexer::InputHyphenSecond Struct Reference

Inheritance diagram for lexer::InputHyphenSecond:



Collaboration diagram for lexer::InputHyphenSecond:

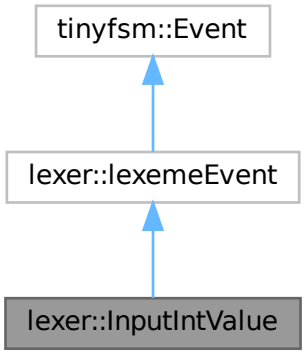


The documentation for this struct was generated from the following file:

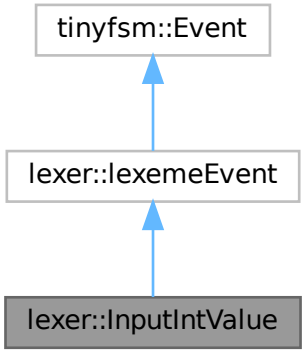
- src/lexer/lexer.hpp

6.53 lexer::InputIntValue Struct Reference

Inheritance diagram for lexer::InputIntValue:



Collaboration diagram for lexer::InputIntValue:



Public Attributes

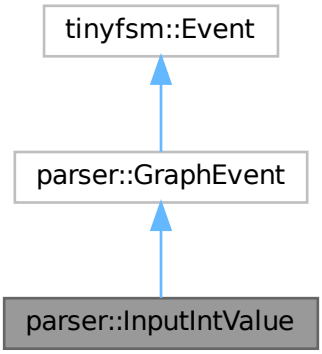
- int **IntValue**

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

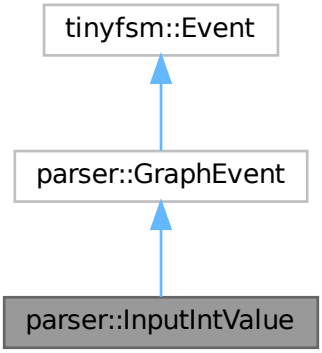
- src/lexer/lexer.hpp

6.54 parser::InputIntValue Struct Reference

Inheritance diagram for parser::InputIntValue:



Collaboration diagram for parser::InputIntValue:



Public Attributes

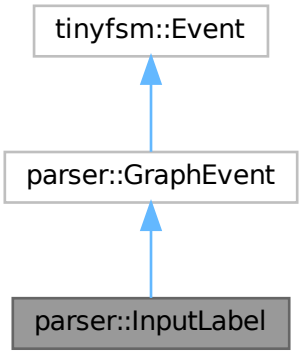
- int **weight**

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

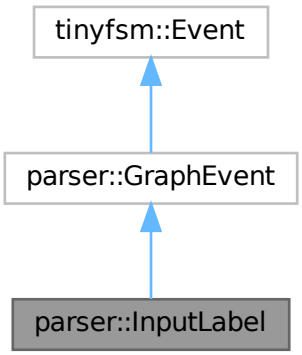
- src/parser/parser.hpp

6.55 parser::InputLabel Struct Reference

Inheritance diagram for parser::InputLabel:



Collaboration diagram for parser::InputLabel:

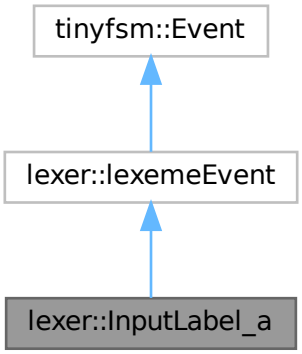


The documentation for this struct was generated from the following file:

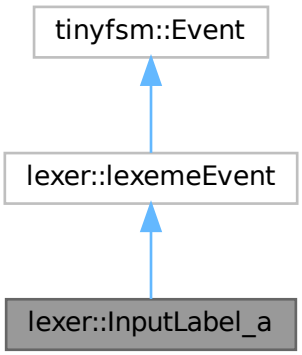
- src/parser/parser.hpp

6.56 lexer::InputLabel_a Struct Reference

Inheritance diagram for lexer::InputLabel_a:



Collaboration diagram for lexer::InputLabel_a:

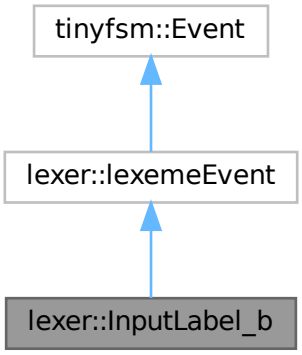


The documentation for this struct was generated from the following file:

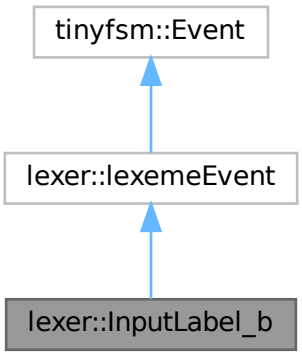
- src/lexer/lexer.hpp

6.57 lexer::InputLabel_b Struct Reference

Inheritance diagram for lexer::InputLabel_b:



Collaboration diagram for lexer::InputLabel_b:

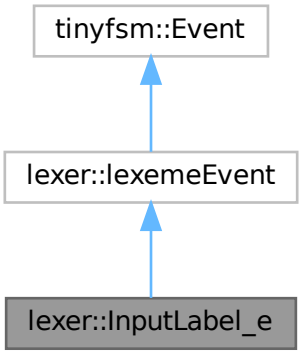


The documentation for this struct was generated from the following file:

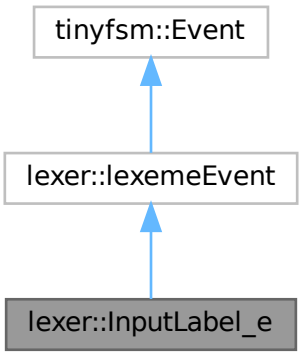
- src/lexer/lexer.hpp

6.58 lexer::InputLabel_e Struct Reference

Inheritance diagram for lexer::InputLabel_e:



Collaboration diagram for lexer::InputLabel_e:

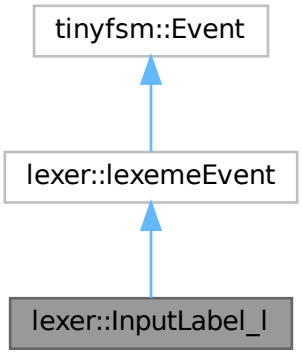


The documentation for this struct was generated from the following file:

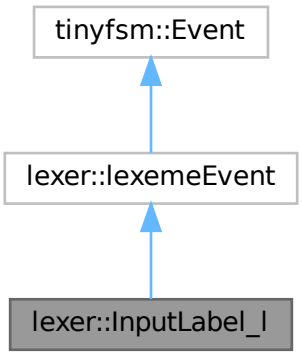
- src/lexer/lexer.hpp

6.59 lexer::InputLabel_l Struct Reference

Inheritance diagram for lexer::InputLabel_l:



Collaboration diagram for lexer::InputLabel_l:

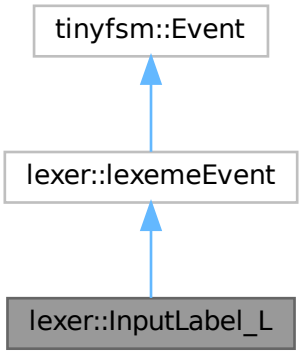


The documentation for this struct was generated from the following file:

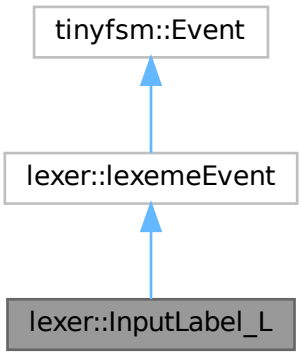
- src/lexer/lexer.hpp

6.60 lexer::InputLabel_L Struct Reference

Inheritance diagram for lexer::InputLabel_L:



Collaboration diagram for lexer::InputLabel_L:

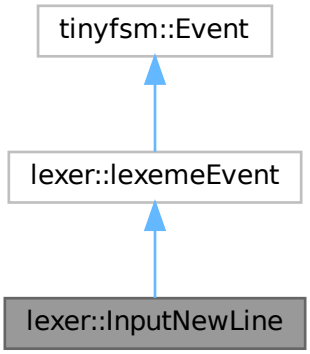


The documentation for this struct was generated from the following file:

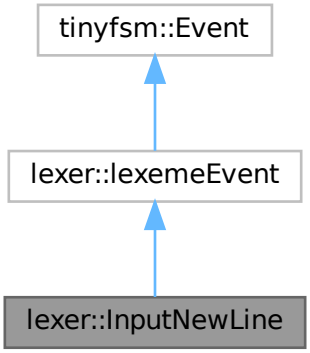
- src/lexer/lexer.hpp

6.61 lexer::InputNewLine Struct Reference

Inheritance diagram for lexer::InputNewLine:



Collaboration diagram for lexer::InputNewLine:

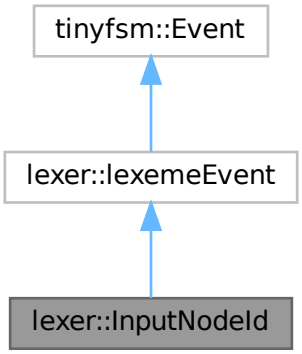


The documentation for this struct was generated from the following file:

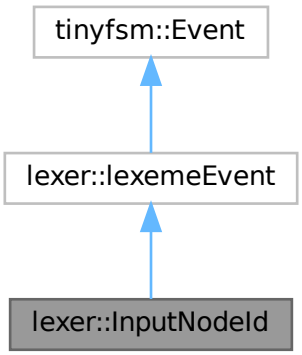
- src/lexer/lexer.hpp

6.62 lexer::InputNodeId Struct Reference

Inheritance diagram for lexer::InputNodeId:



Collaboration diagram for lexer::InputNodeId:



Public Attributes

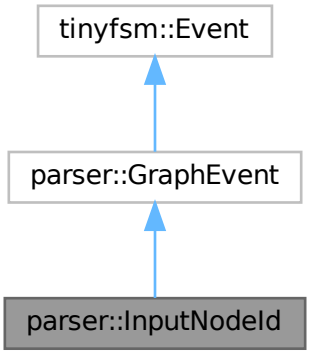
- std::string **NodeId**

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

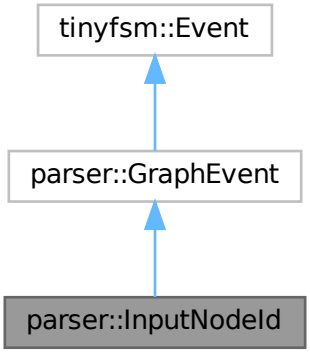
- src/lexer/lexer.hpp

6.63 parser::InputNodeId Struct Reference

Inheritance diagram for parser::InputNodeId:



Collaboration diagram for parser::InputNodeId:



Public Attributes

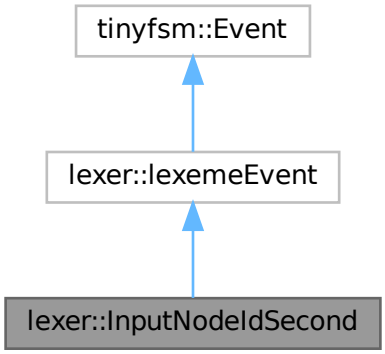
- std::string **NodeID**

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

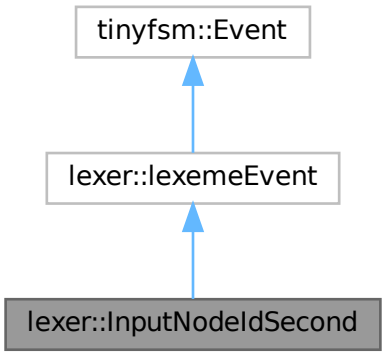
- src/parser/parser.hpp

6.64 lexer::InputNodeIdSecond Struct Reference

Inheritance diagram for lexer::InputNodeIdSecond:



Collaboration diagram for lexer::InputNodeIdSecond:



Public Attributes

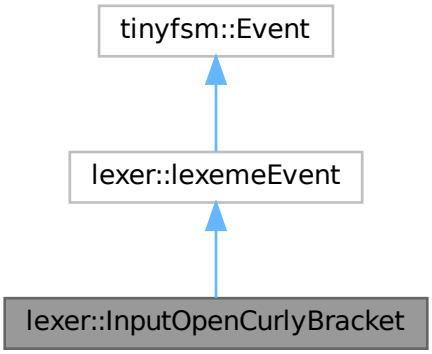
- std::string **NodeIdSecond**

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

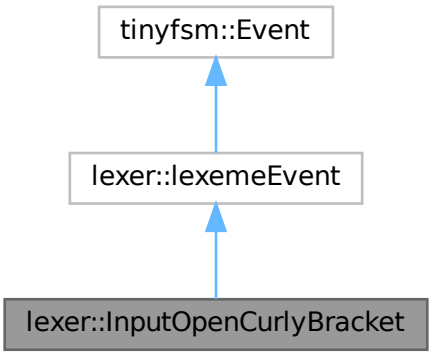
- src/lexer/lexer.hpp

6.65 lexer::InputOpenCurlyBracket Struct Reference

Inheritance diagram for lexer::InputOpenCurlyBracket:



Collaboration diagram for lexer::InputOpenCurlyBracket:

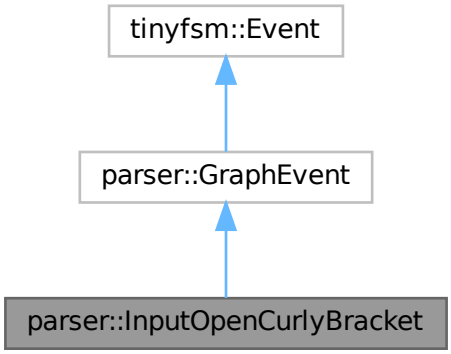


The documentation for this struct was generated from the following file:

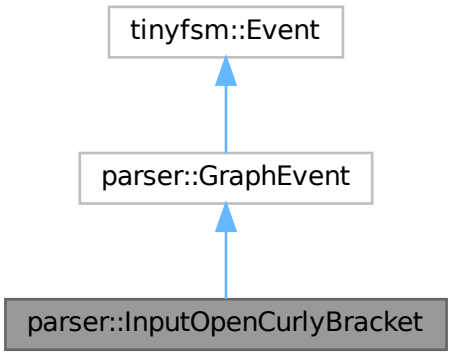
- src/lexer/lexer.hpp

6.66 parser::InputOpenCurlyBracket Struct Reference

Inheritance diagram for parser::InputOpenCurlyBracket:



Collaboration diagram for parser::InputOpenCurlyBracket:

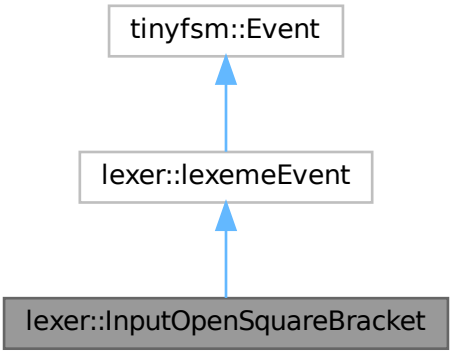


The documentation for this struct was generated from the following file:

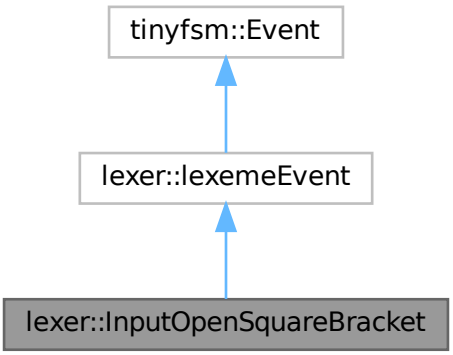
- src/parser/parser.hpp

6.67 lexer::InputOpenSquareBracket Struct Reference

Inheritance diagram for lexer::InputOpenSquareBracket:



Collaboration diagram for lexer::InputOpenSquareBracket:

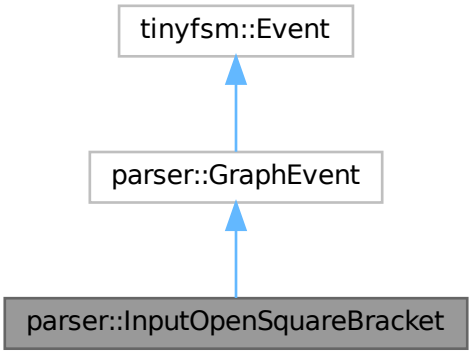


The documentation for this struct was generated from the following file:

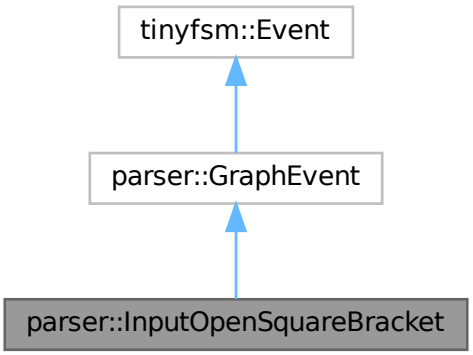
- src/lexer/lexer.hpp

6.68 parser::InputOpenSquareBracket Struct Reference

Inheritance diagram for parser::InputOpenSquareBracket:



Collaboration diagram for parser::InputOpenSquareBracket:

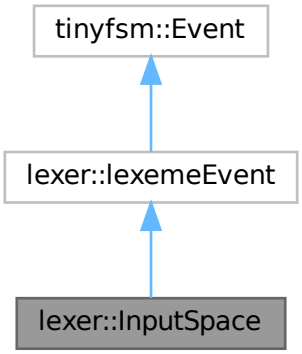


The documentation for this struct was generated from the following file:

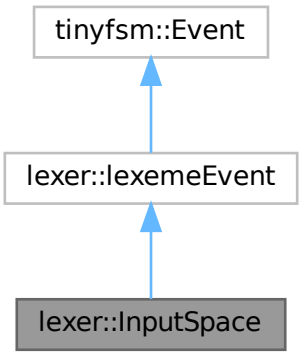
- src/parser/parser.hpp

6.69 lexer::InputSpace Struct Reference

Inheritance diagram for lexer::InputSpace:



Collaboration diagram for lexer::InputSpace:

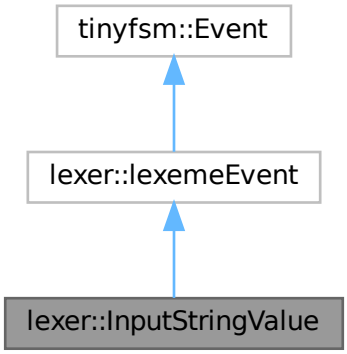


The documentation for this struct was generated from the following file:

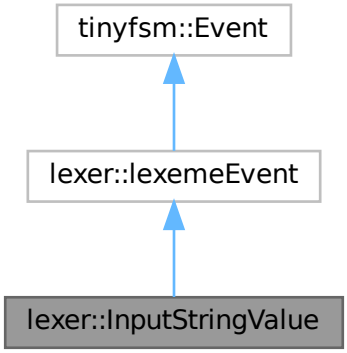
- src/lexer/lexer.hpp

6.70 lexer::InputStringValue Struct Reference

Inheritance diagram for lexer::InputStringValue:



Collaboration diagram for lexer::InputStringValue:



Public Attributes

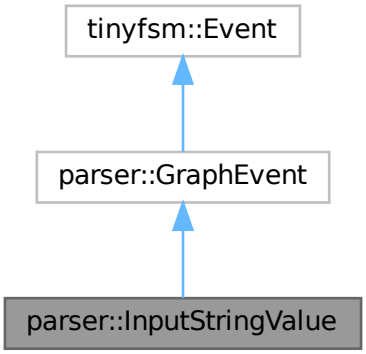
- std::string **StringValue**

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

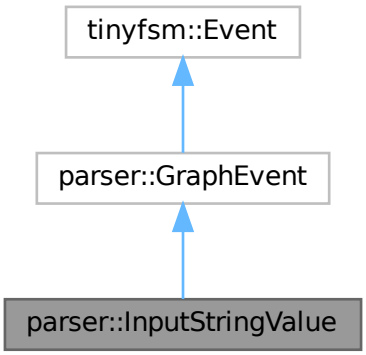
- src/lexer/lexer.hpp

6.71 parser::InputStringValue Struct Reference

Inheritance diagram for parser::InputStringValue:



Collaboration diagram for parser::InputStringValue:



Public Attributes

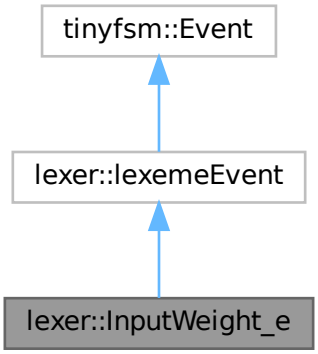
- std::string **label**

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

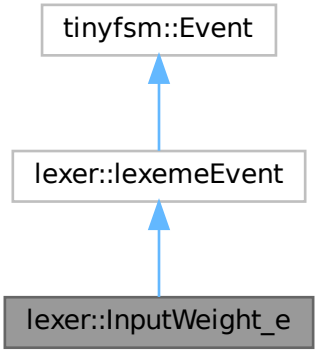
- src/parser/parser.hpp

6.72 lexer::InputWeight_e Struct Reference

Inheritance diagram for lexer::InputWeight_e:



Collaboration diagram for lexer::InputWeight_e:

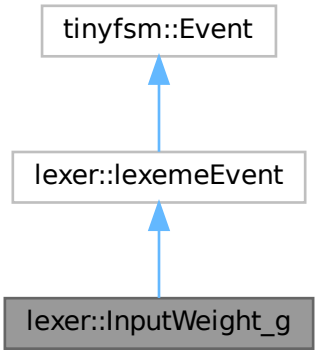


The documentation for this struct was generated from the following file:

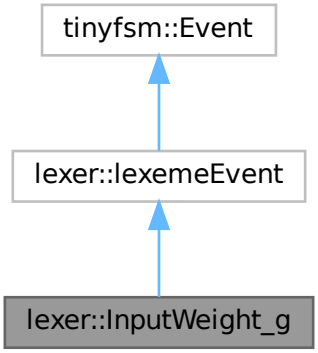
- src/lexer/lexer.hpp

6.73 lexer::InputWeight_g Struct Reference

Inheritance diagram for lexer::InputWeight_g:



Collaboration diagram for lexer::InputWeight_g:

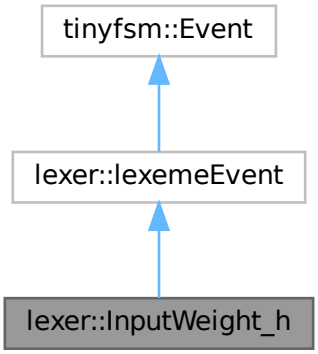


The documentation for this struct was generated from the following file:

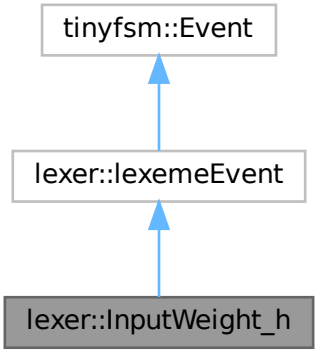
- src/lexer/lexer.hpp

6.74 lexer::InputWeight_h Struct Reference

Inheritance diagram for lexer::InputWeight_h:



Collaboration diagram for lexer::InputWeight_h:

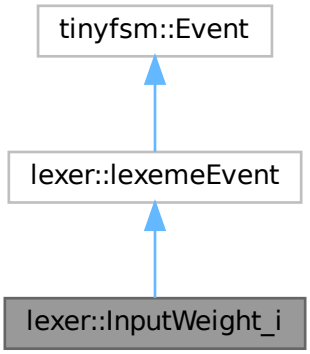


The documentation for this struct was generated from the following file:

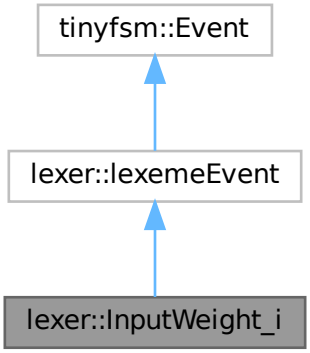
- src/lexer/lexer.hpp

6.75 lexer::InputWeight_i Struct Reference

Inheritance diagram for lexer::InputWeight_i:



Collaboration diagram for lexer::InputWeight_i:

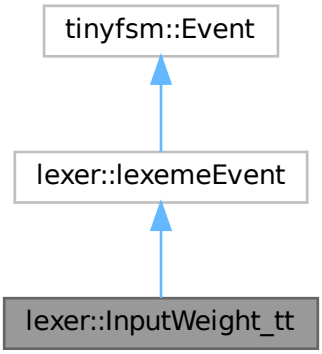


The documentation for this struct was generated from the following file:

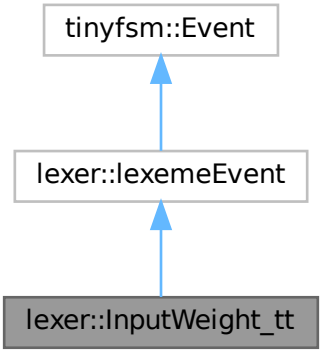
- src/lexer/lexer.hpp

6.76 lexer::InputWeight_tt Struct Reference

Inheritance diagram for lexer::InputWeight_tt:



Collaboration diagram for lexer::InputWeight_tt:

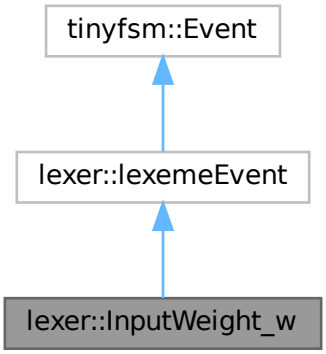


The documentation for this struct was generated from the following file:

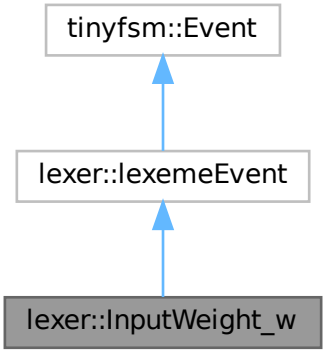
- src/lexer/lexer.hpp

6.77 lexer::InputWeight_w Struct Reference

Inheritance diagram for lexer::InputWeight_w:



Collaboration diagram for lexer::InputWeight_w:

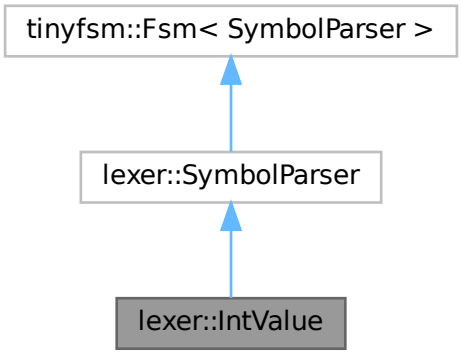


The documentation for this struct was generated from the following file:

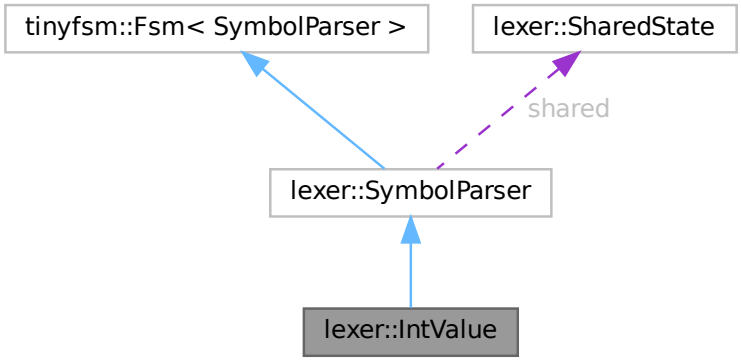
- src/lexer/lexer.hpp

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

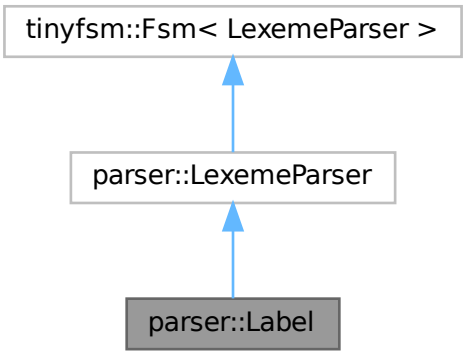
- static SharedState **shared** {}

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

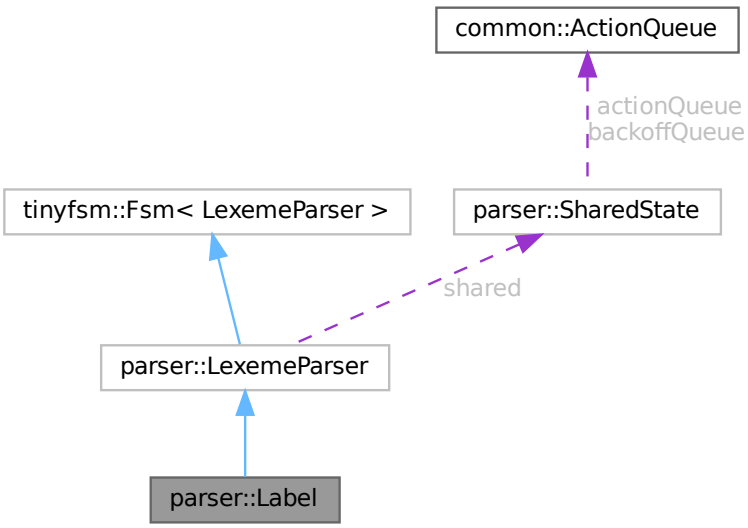
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

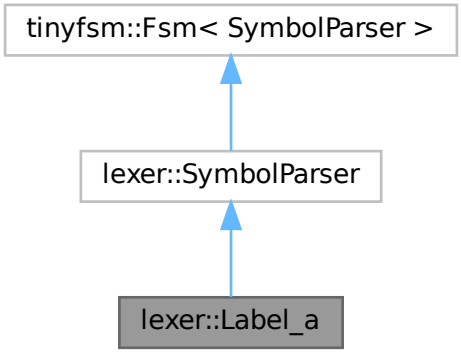
- static SharedState **shared** {}

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

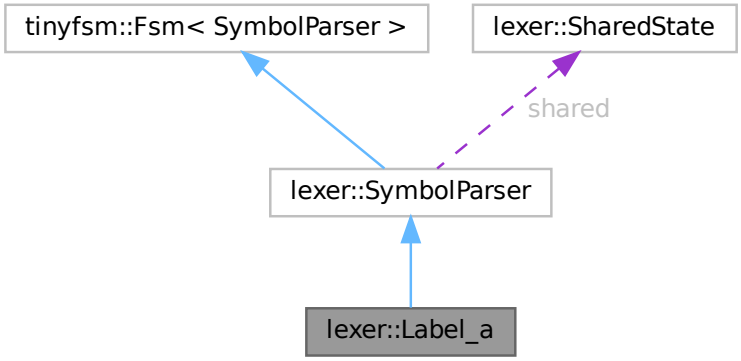
- src/parser/parser.hpp
- src/parser/parser.cpp

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

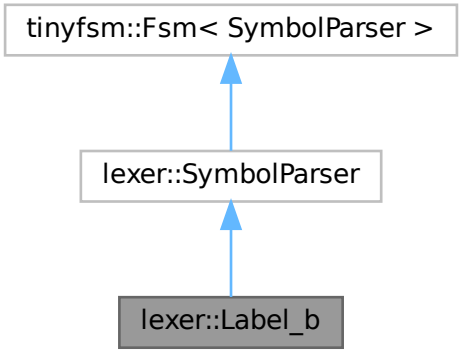
- static SharedState **shared** {}

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

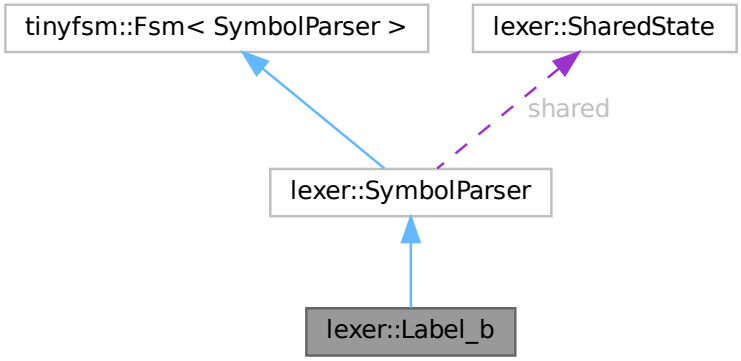
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

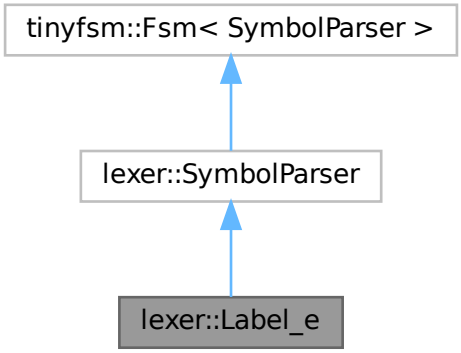
- static SharedState **shared** {}

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

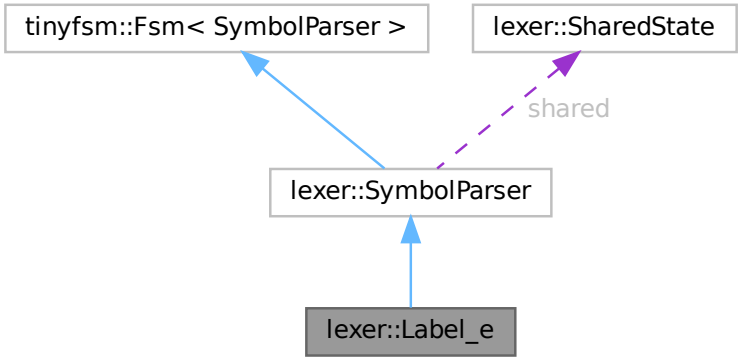
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

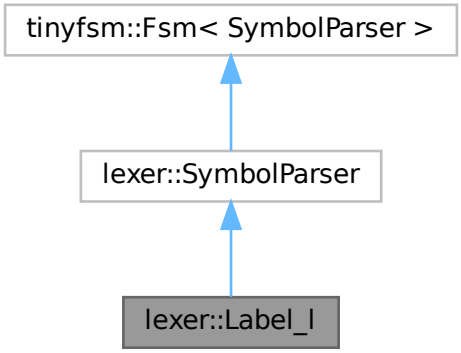
- static SharedState **shared** {}

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

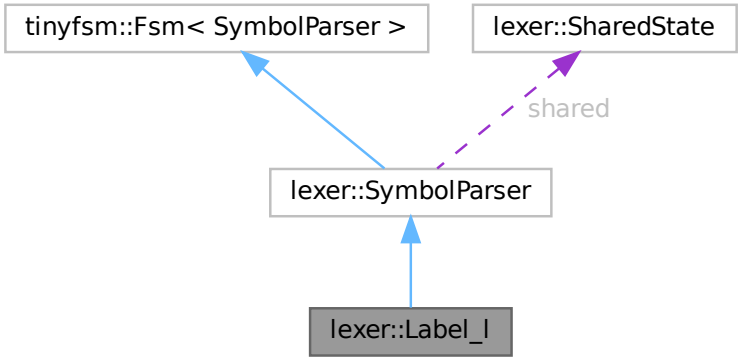
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

6.83 lexer::Label_I Class Reference

Inheritance diagram for lexer::Label_I:



Collaboration diagram for lexer::Label_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** (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

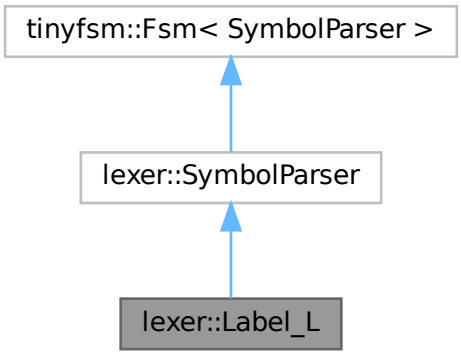
- static SharedState **shared** {}

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

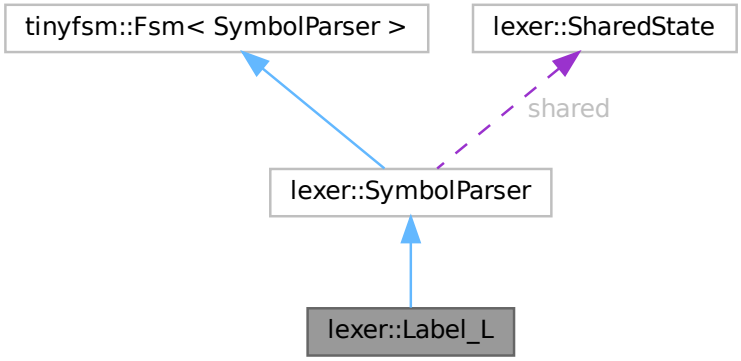
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

6.84 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

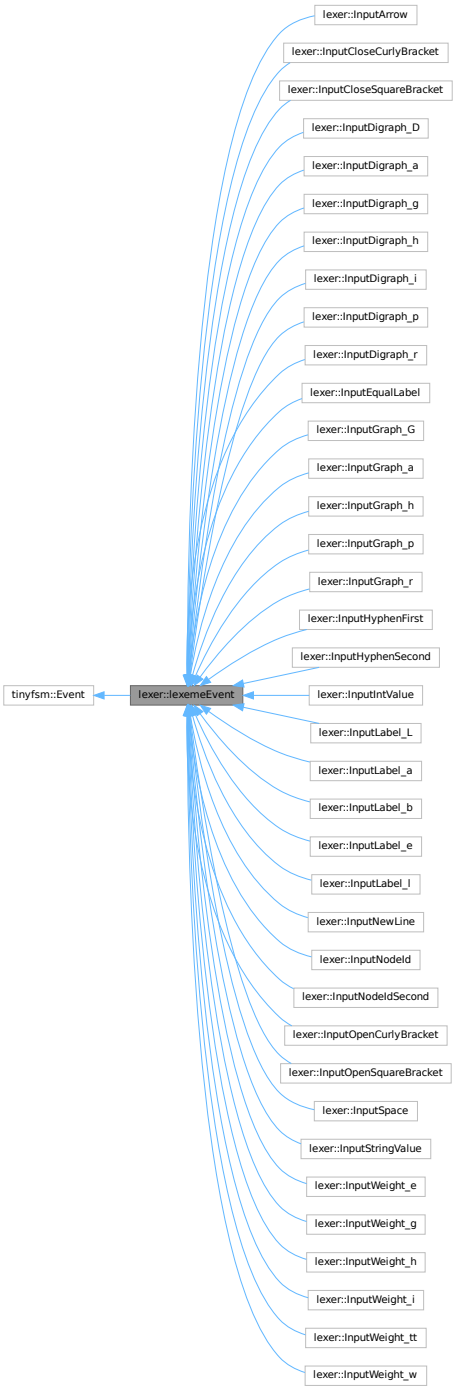
Lexeme Represents single unit of lexer output.

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

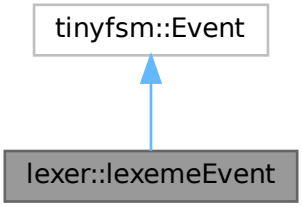
- src/common/common.hpp

6.86 lexer::lexemeEvent Struct Reference

Inheritance diagram for lexer::lexemeEvent:



Collaboration diagram for lexer::lexemeEvent:

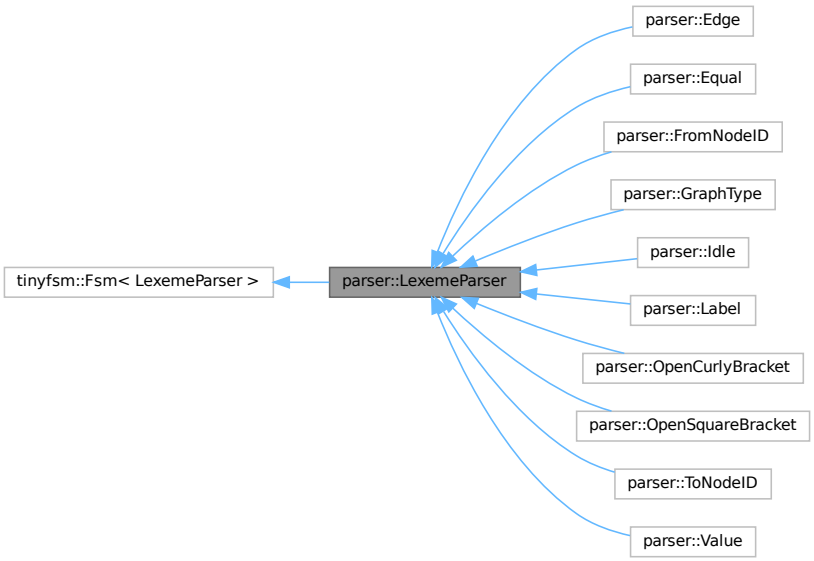


The documentation for this struct was generated from the following file:

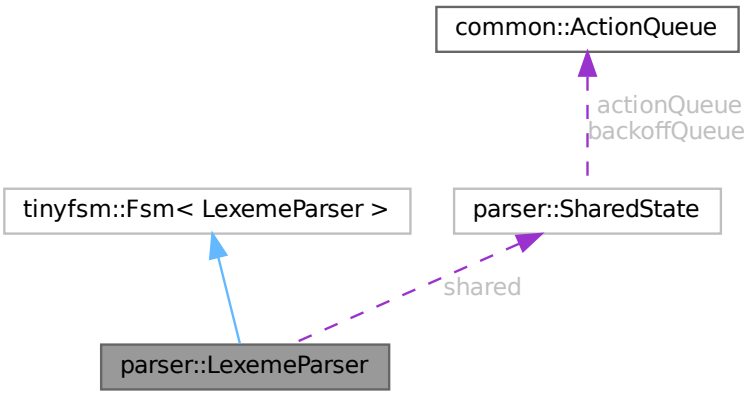
- src/lexer/lexer.hpp

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

input	lexemes

Returns

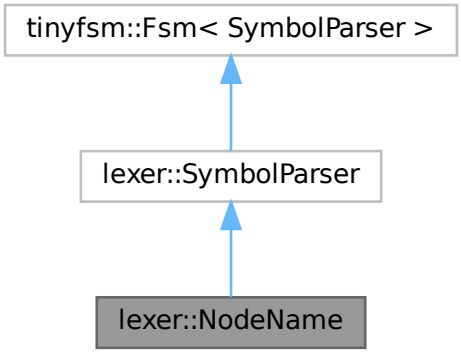
std::shared_ptr<common::Graph> output object

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

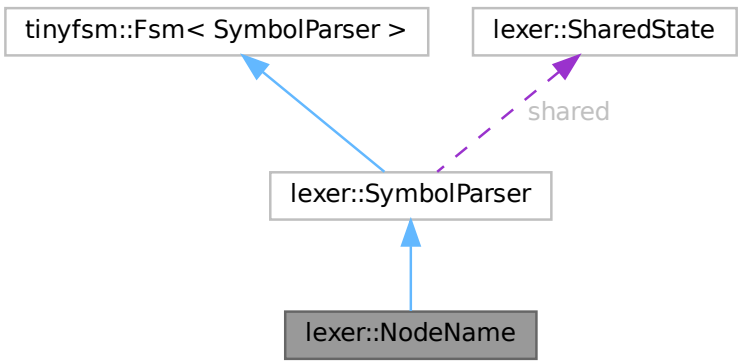
- src/parser/parser.hpp
- src/parser/parser.cpp

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

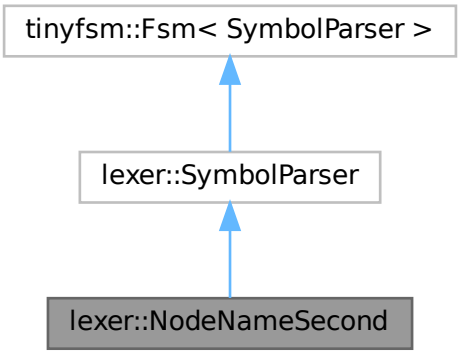
- static SharedState **shared** {}

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

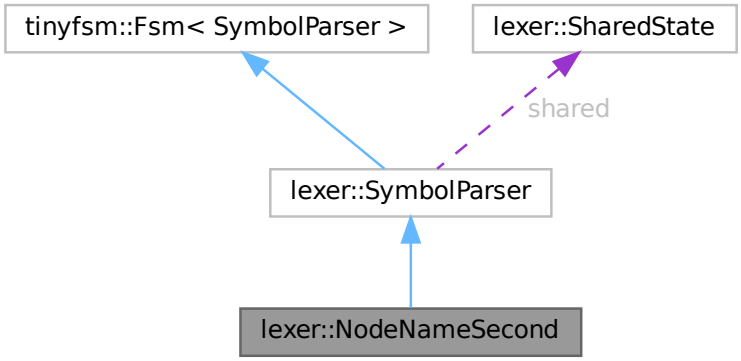
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

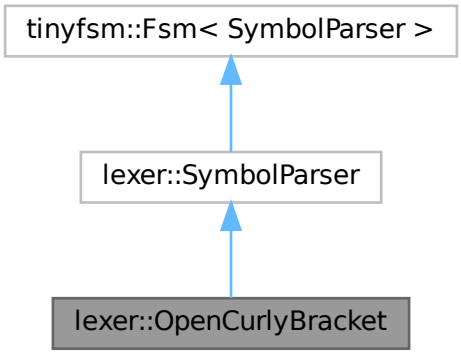
- static SharedState **shared** {}

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

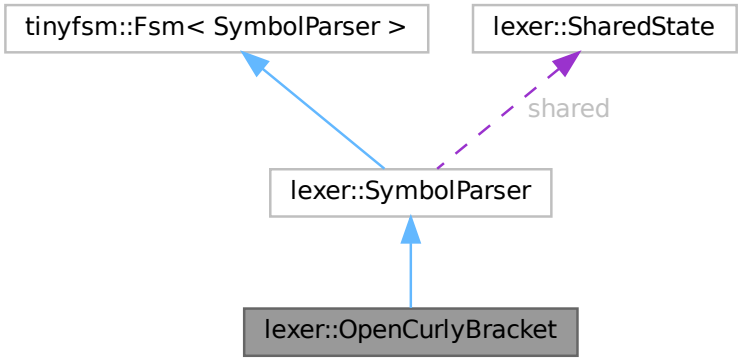
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

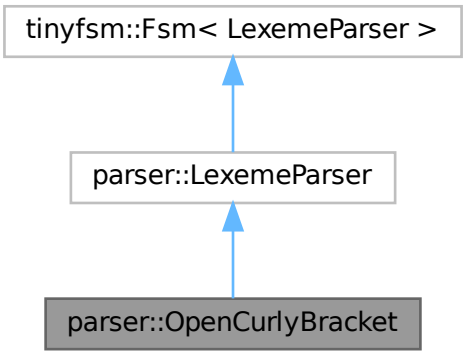
- static SharedState **shared** {}

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

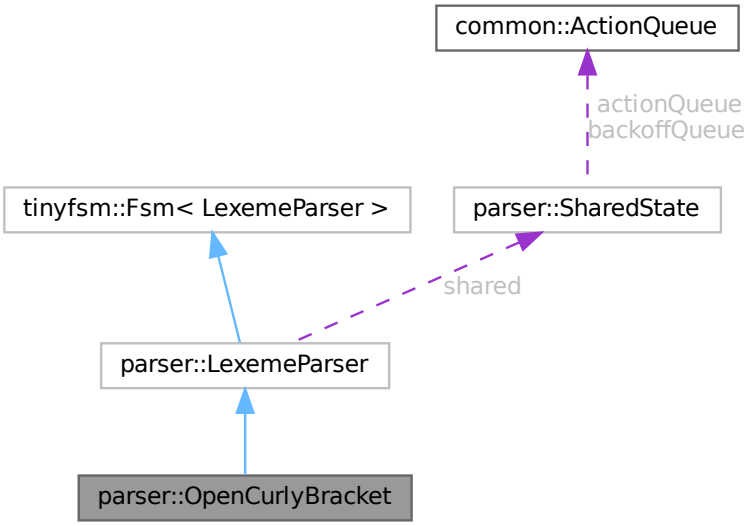
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

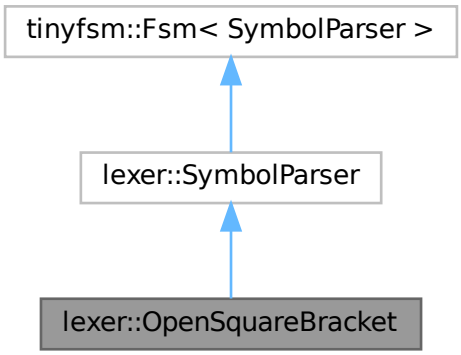
- static SharedState **shared** {}

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

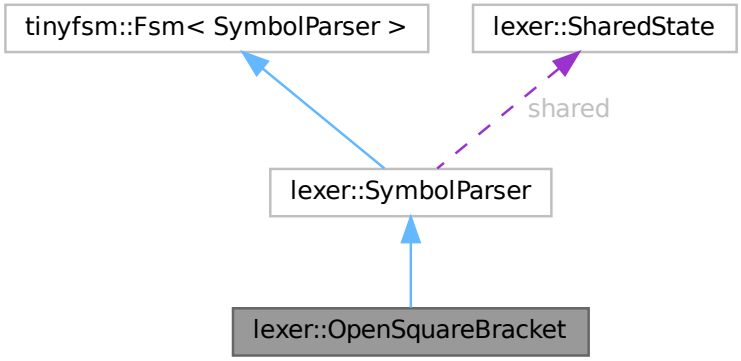
- src/parser/parser.hpp
- src/parser/parser.cpp

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

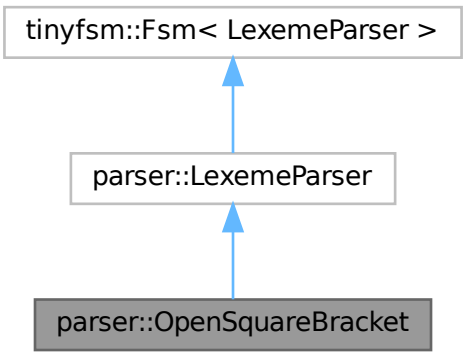
- static SharedState **shared** {}

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

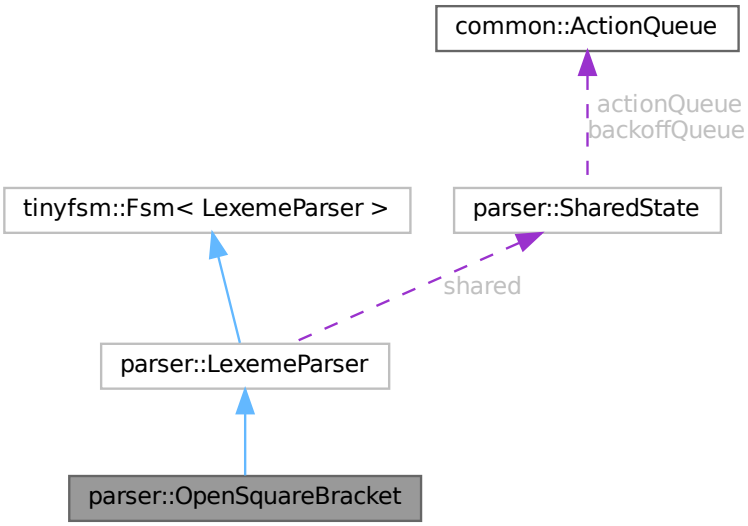
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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:

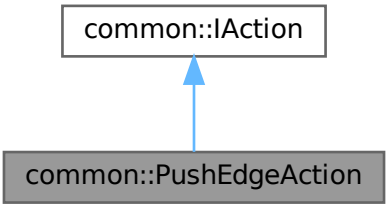
- src/parser/parser.hpp
- src/parser/parser.cpp

6.94 common::PushEdgeAction Class Reference

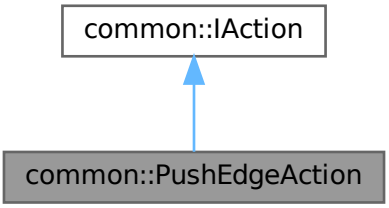
PushEdge action interface implementation.

`#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:

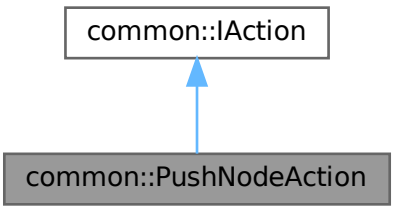
- src/common/action-queue.hpp
- src/common/action-queue.cpp

6.95 common::PushNodeAction Class Reference

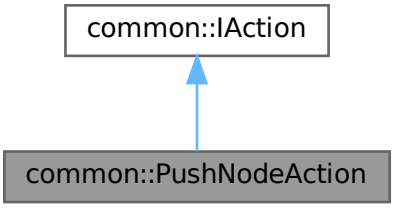
PushNode action interface implementation.

```
#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:

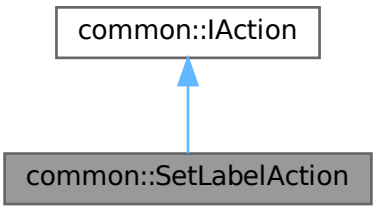
- src/common/action-queue.hpp
- src/common/action-queue.cpp

6.96 common::SetLabelAction Class Reference

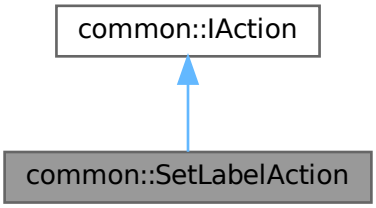
SetLabel action interface implementation.

```
#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

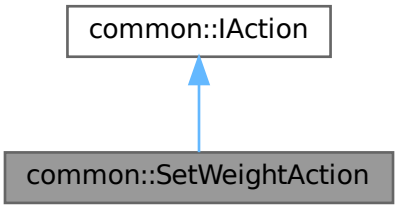
- bool **verboseWrite** = false

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

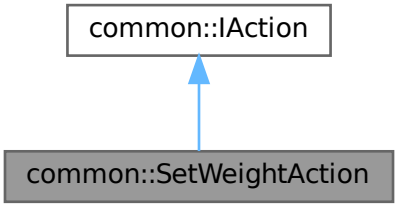
- src/common/reverted.hpp

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

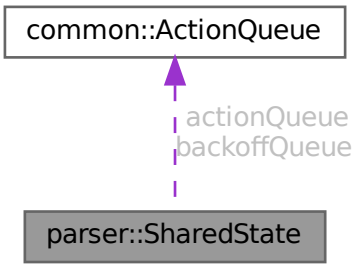
- std::vector< common::Lexeme > **tokens**
- std::string **token**
- int **flag_label** = 0
- int **flag_curly** = 0
- int **flag_square** = 0
- int **flag_hyphen** = 0
- int **flag_label_l** = 0
- int **quotes_count** = 0

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

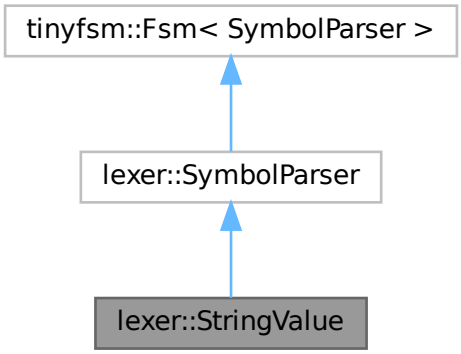
- std::shared_ptr< common::Graph > **graph**
- common::ActionQueue **backoffQueue**
- common::ActionQueue **actionQueue**
- std::string **fromNodeId**
- std::string **toNodeId**
- std::string **label**
- std::string **expectedValue**
- std::uint8_t **flags** = 0x0
- int **weight** = -1

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

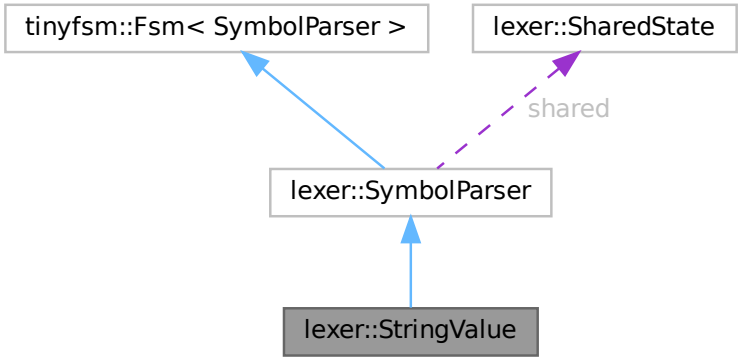
- src/parser/parser.hpp

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

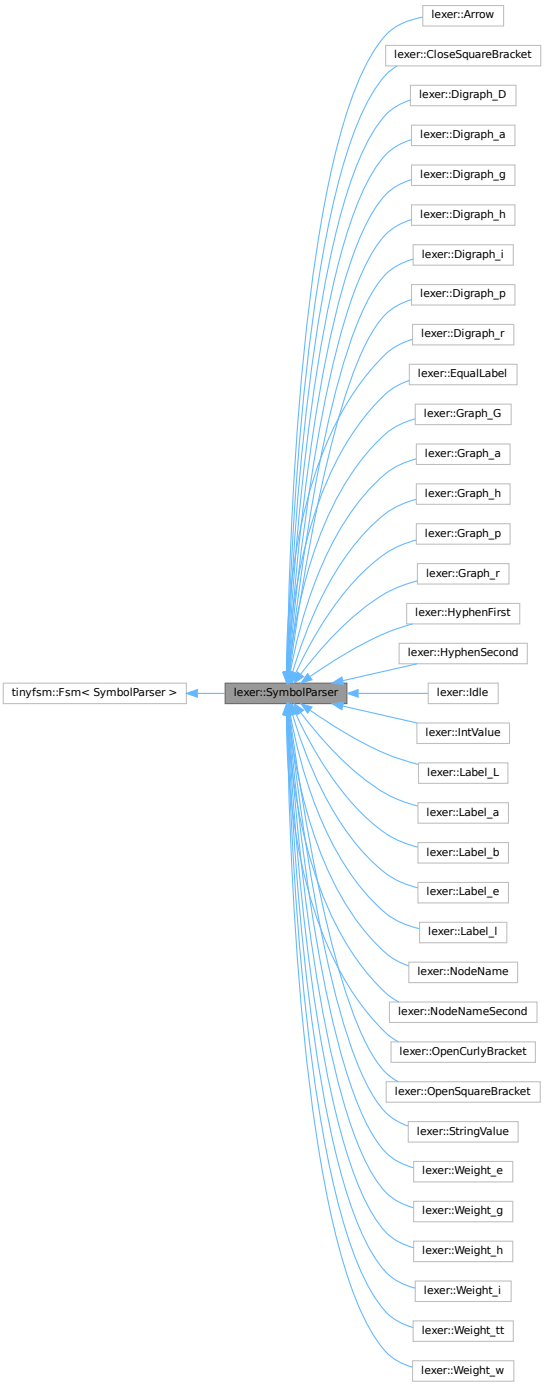
- static SharedState **shared** {}

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

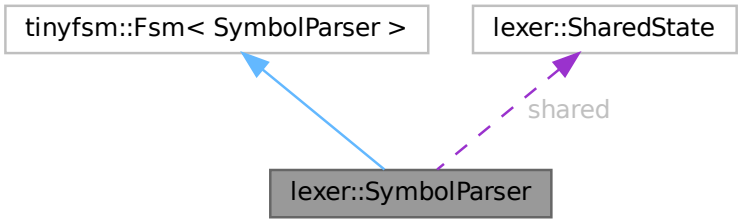
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

input	string to lex

Returns

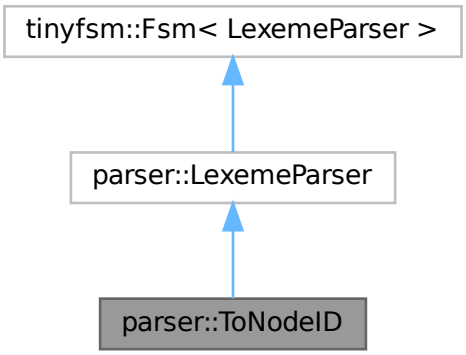
std::vector<common::Lexeme> output lexemes

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

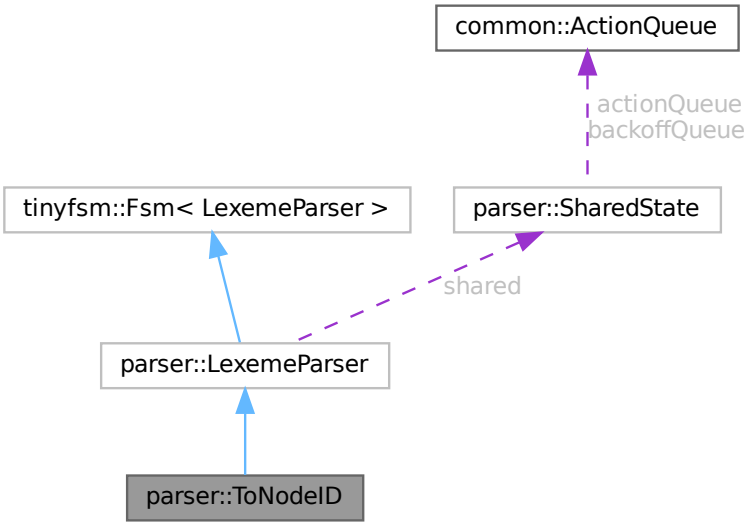
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

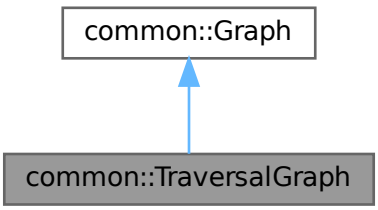
- static SharedState **shared** {}

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

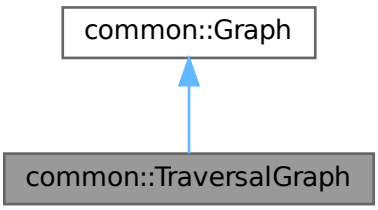
- src/parser/parser.hpp
- src/parser/parser.cpp

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 timestampes 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 timestampes 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

  Inits 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 timestampes for traversal order.

Parameters

node	Current processing node
visited	Set of visited nodes
result	Vector to preserve traversal order
timestamps	Timestamps of current node
discovery_time	Start time of current node
flag_to_quit	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

desired_node	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 timestampes for traversal order.

Parameters

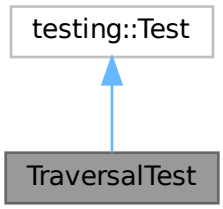
node	Current processing node
visited	Set of visited nodes
result	Vector to preserve traversal order
timestamps	Timestamps of current node
discovery_time	Start time of current node

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

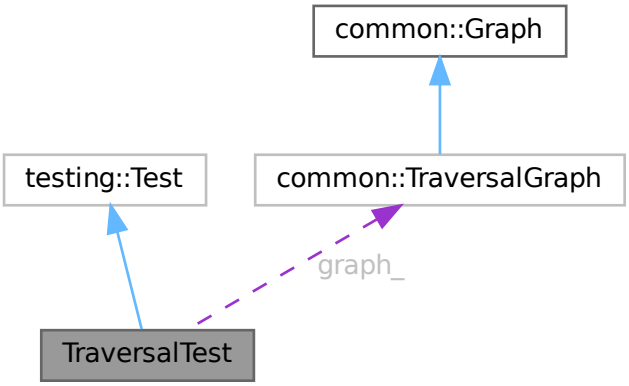
- src/algorithms/traversal.hpp
- src/algorithms/traversal.cpp

6.105 TraversalTest Class Reference

Inheritance diagram for TraversalTest:



Collaboration diagram for TraversalTest:



Protected Member Functions

- void **SetUp** () override

Protected Attributes

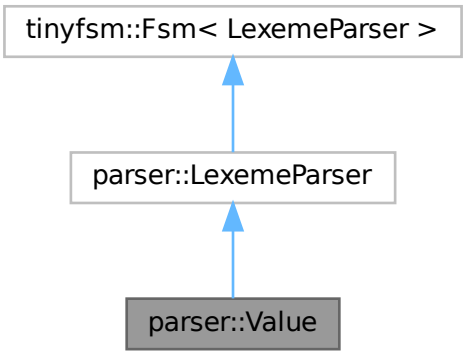
- common::TraversalGraph **graph_**
- std::unordered_set< std::string > **visited_**
- std::vector< std::string > **traversal_order_**
- std::unordered_map< std::string, std::pair< int, int > > **timestamps_**
- int **discovery_time_** = 0

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

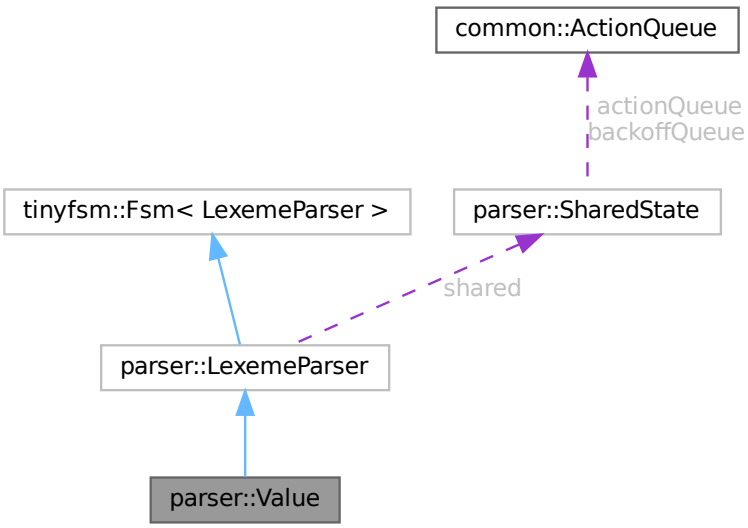
- src/tests/traversal-test.cpp

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

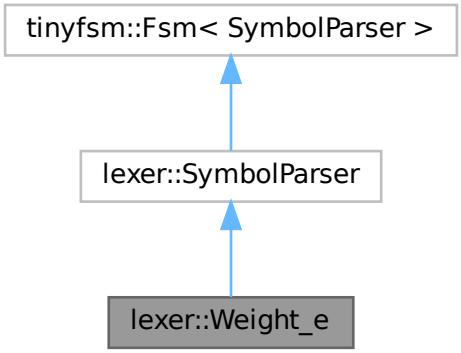
- static SharedState **shared** {}

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

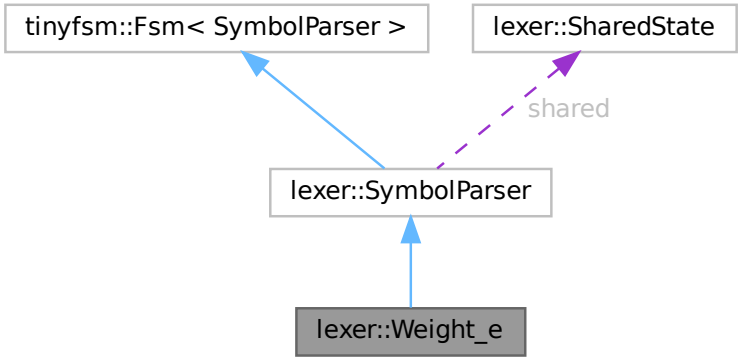
- src/parser/parser.hpp
- src/parser/parser.cpp

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

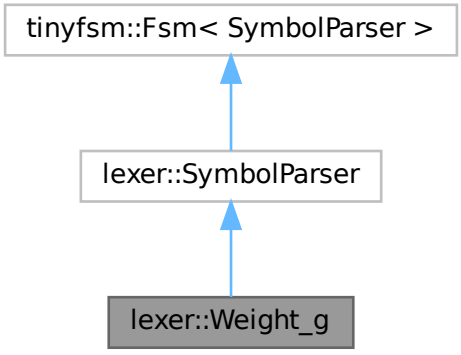
- static SharedState **shared** {}

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

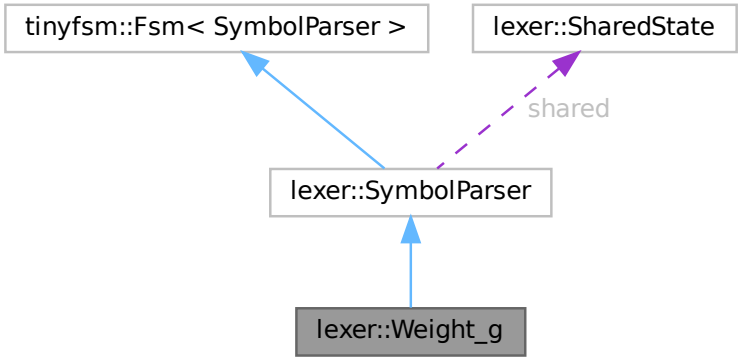
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

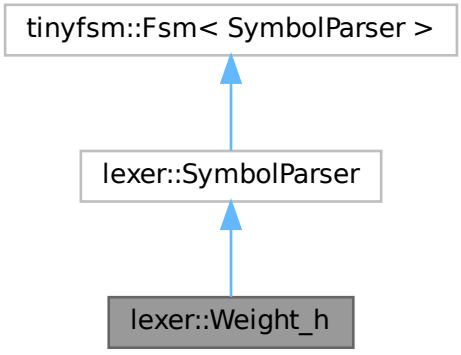
- static SharedState **shared** {}

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

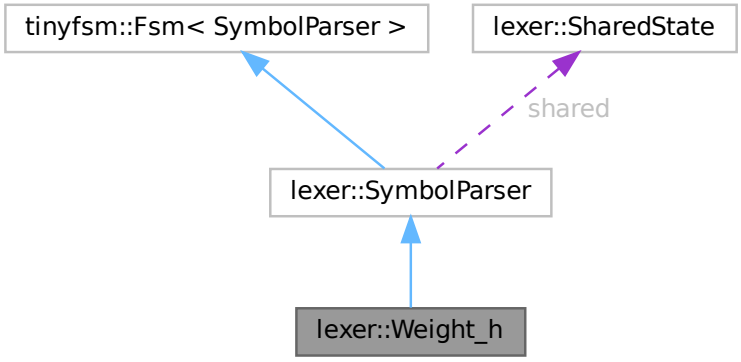
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

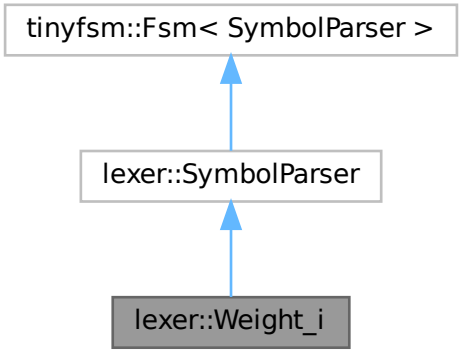
- static SharedState **shared** {}

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

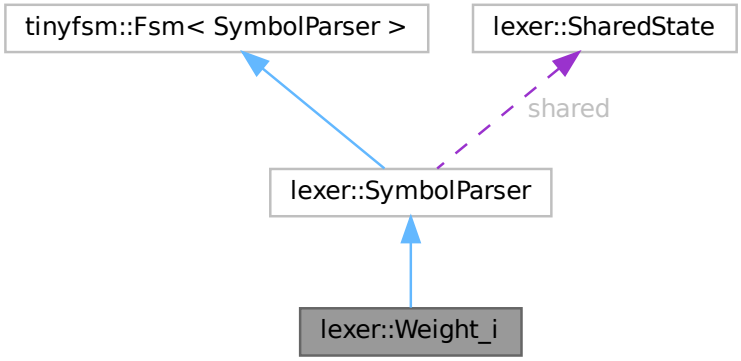
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

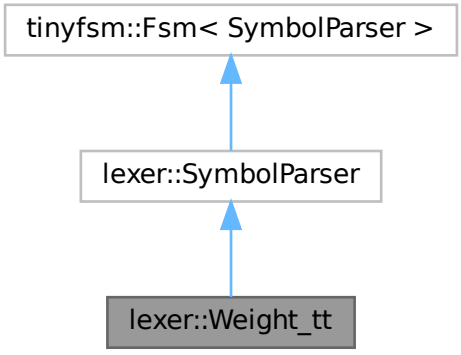
- static SharedState **shared** {}

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

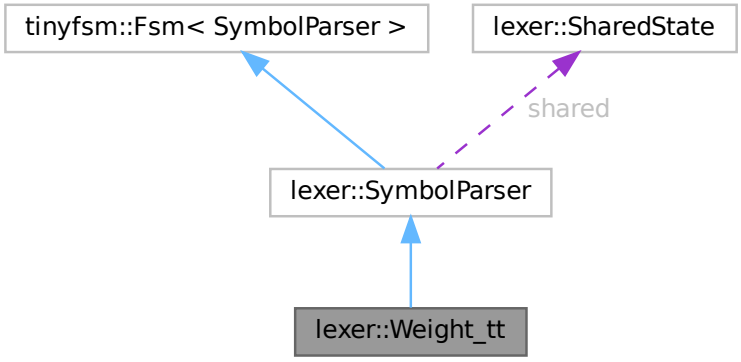
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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

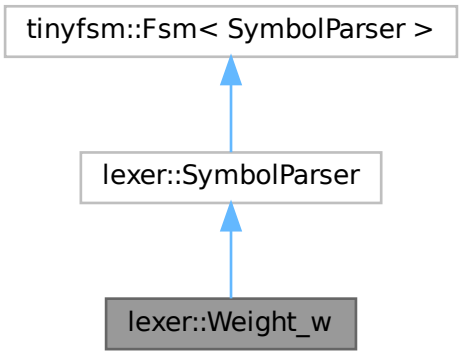
- static SharedState **shared** {}

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

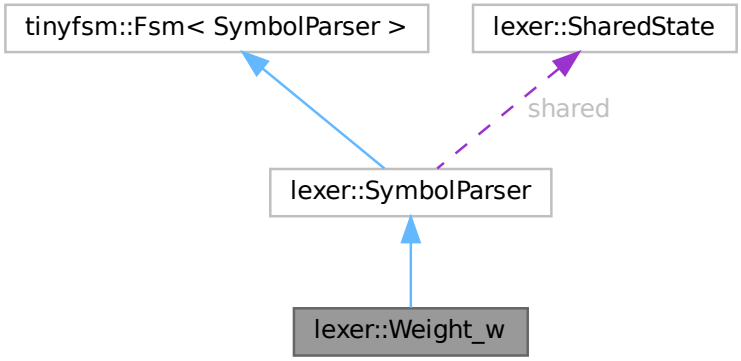
- src/lexer/lexer.hpp
- src/lexer/lexer.cpp

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
00012 namespace common {
00013
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 
00045     class SetLabelAction : public IAction {
00046     public:
00047         using set_node_label = void (common::Graph::*)(std::string, std::string);
00048 
00049         SetLabelAction(set_node_label action, Graph* instance, std::string name, std::string label);
00050         // IAction
00051         virtual void make() override final;
00052 
00053     private:
00054         set_node_label action_;
00055         Graph* this_;
00056         std::string name_;
00057         std::string label_;
00058     };
00059 
00063     class PushEdgeAction : public IAction {
00064     public:
00065         using push_edge_action = void (common::Graph::*)(std::string, Connection);
00066 
00067         PushEdgeAction(push_edge_action action, Graph* instance, std::string name, Connection edge);
00068         // IAction
00069         virtual void make() override final;
00070 
00071     private:
00072         push_edge_action action_;
00073         Graph* this_;
00074         std::string name_;
00075         Connection edge_;
00076     };
00077     class SetWeightAction : public IAction {
00078     public:
00079         using set_weight_proto = void (common::Graph::*)(std::string, std::string, int);
00080 
00081         SetWeightAction(set_weight_proto action, Graph* instance, std::string source, std::string
      target, int weight);
00082         //Iaction
00083         virtual void make() override final;
00084 
00085     private:
00086         set_weight_proto action_;
00087         Graph* this_;
00088         std::string source_;
00089         std::string target_;
00090         int weight_;
00091     };
00092 
00097     class ActionQueue {
00098     public:
00099 
00103         void dumpAllActions();
00104 
00108         void dumpAction();
00109 
00114         void query(std::shared_ptr<IAction> action);
00115 
00116     private:
00117         std::queue<std::shared_ptr<IAction» actions_;
00118     };
00119 
00120 }
```

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
00027     namespace opt {
00028         inline constexpr std::uint8_t drc = 0x01;
00029         inline constexpr std::uint8_t wgh = 0x02;
00030     } // namespace opt
00031
00036     enum class LexemeType : std::uint8_t {
00037         GRAPH_START_LABEL = 0,
00038         OPEN_CURLY_BRACKET = 1,
00039         NODE_ID = 2,
00040         POINTED_ARROW = 3,
00041         FLAT_ARROW = 4,
00042         OPEN_SQUARE_BRACKET = 5,
00043         LABEL_ATTRIBUTE = 6,
00044         EQUALS_SIGN = 7,
00045         ATTRIBUTE_STRING_VALUE = 8,
00046         ATTRIBUTE_INT_VALUE = 9,
00047         CLOSED_CURLY_BRACKET = 10,
00048         CLOSED_SQUARE_BRACKET = 11
00049     };
00050
00055     struct Lexeme {
00056         LexemeType type;
00057         std::any value;
00058     };
00059
00064     struct Connection {
00065         std::optional<int> weight;
00066         std::optional<std::string> label;
00067         std::string peer;
00068
00069         Connection(
00070             std::string peer,
00071             std::optional<int> weight = std::nullopt,
00072             std::optional<std::string> label = std::nullopt
00073         ) noexcept;
00074
00075         bool operator==(const Connection& other) const {
00076             return peer == other.peer
00077                 && weight == other.weight
00078                 && label == other.label;
00079         }
00080     };
00081
00087     class Graph {
00088     public:
00089
00090         using graph_flags_t = std::uint8_t;
00091         using connections_t = std::vector<Connection>;
00092         using label_container_t = std::unordered_map<std::string, std::string>;
00093         using container_t = std::unordered_map<std::string, connections_t>;
00094         using container_value_t = std::pair<std::string, connections_t>;
00095
00099         virtual ~Graph() = default;
00100
00105         Graph() noexcept;
00106
00112         void init(graph_flags_t flags = 0x0) noexcept;
00113
00119         bool isDirectional() const noexcept;
00120
00126         bool isWeighted() const noexcept;
00127
00132         void pushNode(std::string name);
00133
00139         void pushEdge(std::string source, Connection edge);
00140
00146         void setLabel(std::string source, std::string label);
00147
00152         void removeLabel(const std::string& source);
00153
00161         bool areConnected(std::string_view source, std::string_view target) const;
00162
00169         std::optional<int> getWeight(std::string_view source, std::string_view target) const;
00170
```

```
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         void react(InputOpenSquareBracket const &) override;
00184         void react(InputCloseCurlyBracket const &) override;
00185         void react(InputHyphenFirst const &) override;
00186         void react(InputSpace const &) override;
00187         void react(InputNewLine const &) override;
00188     };
00189
00190     class OpenSquareBracket : public SymbolParser {
00191         void react(InputWeight_w const &) override;
00192         void react(InputLabel_L const &) override;
00193         void react(InputSpace const &) override;
00194         void react(InputCloseSquareBracket const &) override;
00195     };
00196
00197     class HyphenFirst : public SymbolParser {
00198         void react(InputHyphenSecond const &) override;
00199         void react(InputArrow const &) override;
00200     };
00201
00202     class HyphenSecond : public SymbolParser {
00203         void react(InputNodeIdSecond const &) override;
00204         void react(InputSpace const &) override;
00205     };
00206
00207     class Arrow : public SymbolParser {
00208         void react(InputNodeIdSecond const &) override;
00209         void react(InputSpace const &) override;
00210     };
00211
00212     class NodeNameSecond : public SymbolParser {
00213         void react(InputOpenSquareBracket const &) override;
00214         void react(InputCloseCurlyBracket const &) override;
00215         void react(InputNewLine const &) override;
00216         void react(InputSpace const &) override;
00217     };
00218
00219
00220     class Label_L : public SymbolParser {
00221         void react(InputLabel_a const &) override;
00222     };
00223     class Label_a : public SymbolParser {
00224         void react(InputLabel_b const &) override;
00225     };
00226     class Label_b : public SymbolParser {
00227         void react(InputLabel_e const &) override;
00228     };
00229     class Label_e : public SymbolParser {
00230         void react(InputLabel_l const &) override;
00231     };
00232     class Label_l : public SymbolParser {
00233         void react(InputEqualLabel const &) override;
00234         void react(InputSpace const &) override;
00235     };
00236     class Weight_w : public SymbolParser {
00237         void react(InputWeight_e const &) override;
00238     };
00239     class Weight_e : public SymbolParser {
00240         void react(InputWeight_i const &) override;
00241     };
00242     class Weight_i : public SymbolParser {
00243         void react(InputWeight_g const &) override;
00244     };
00245     class Weight_g : public SymbolParser {
00246         void react(InputWeight_h const &) override;
00247     };
00248     class Weight_h : public SymbolParser {
00249         void react(InputWeight_tt const &) override;
00250     };
00251     class Weight_tt : public SymbolParser {
00252         void react(InputEqualLabel const &) override;
00253         void react(InputSpace const &) override;
00254     };
00255     class EqualLabel : public SymbolParser {
00256         void react(InputStringValue const &) override;
00257         void react(InputIntValue const &) override;
00258         void react(InputSpace const &) override;
00259     };
00260     class StringValue : public SymbolParser {
00261         void react(InputCloseSquareBracket const &) override;
00262         void react(InputSpace const &) override;
00263     };
00264     class IntValue : public SymbolParser {
00265         void react(InputCloseSquareBracket const &) override;
```

```
00266         void react(InputSpace const &) override;
00267     };
00268
00269     class CloseSquareBracket : public SymbolParser {
00270         void react(InputNodeId const &) override;
00271         void react(InputCloseCurlyBracket const &) override;
00272         void react(InputSpace const &) override;
00273         void react(InputNewLine const &) override;
00274     };
00275
00281     std::vector<common::Lexeme> lex(const std::string& input);
00282 }
```

7.6 parser.hpp

```
00001 #pragma once
00002
00003 // standard
00004 #include <cstdint>
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
00017 namespace parser {
00018     inline void throw_invalid_input(std::string message) {
00019         throw std::runtime_error(message);
00020     }
00021
00022     struct SharedState {
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     // ------------------------------------------------------------------------
00055     // 2. State Machine Base Class Declaration
00056     //
00057     class LexemeParser : public tinyfsm::Fsm<LexemeParser> {
00058     public:
00059         virtual void react(InputGraphType const &)          {};
00060         virtual void react(InputOpenCurlyBracket const &)   { throw_invalid_input(""); };
00061         virtual void react(InputCloseCurlyBracket const &)  { throw_invalid_input(""); };
00062         virtual void react(InputNodeId const &)             { throw_invalid_input(""); };
00063         virtual void react(InputOpenSquareBracket const &)  { throw_invalid_input(""); };
00064         virtual void react(InputCloseSquareBracket const &) { throw_invalid_input(""); };
00065         virtual void react(InputEdge const &)               { throw_invalid_input(""); };
00066         virtual void react(InputLabel const &)              { throw_invalid_input(""); };
00067         virtual void react(InputEqual const &)              { throw_invalid_input(""); };
00068         virtual void react(InputStringValue const &)        { throw_invalid_input(""); };
```

```
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
00078     protected:
00079         inline static SharedState shared {};
00080     };
00081
00082
00083     // ----------------------------------------------------------------------------
00084     // 3. State Declarations
00085     //
00086     class Idle : public LexemeParser {
00087         void react(InputGraphType const &) override;
00088     };
00089
00090     class GraphType : public LexemeParser {
00091         void react(InputOpenCurlyBracket const &) override;
00092     };
00093
00094     class OpenCurlyBracket : public LexemeParser {
00095         void react(InputNodeId const &) override;
00096         void react(InputCloseCurlyBracket const &) override;
00097     };
00098
00099     class FromNodeID : public LexemeParser {
00100         void react(InputCloseCurlyBracket const&) override;
00101         void react(InputOpenSquareBracket const&) override;
00102         void react(InputEdge const&) override;
00103         void react(InputNodeId const&) override;
00104     };
00105
00106     class OpenSquareBracket : public LexemeParser {
00107         void react(InputLabel const &) override;
00108     };
00109
00110     class Edge : public LexemeParser {
00111         void react(InputNodeId const &) override;
00112     };
00113
00114     class ToNodeID : public LexemeParser {
00115         void react(InputOpenSquareBracket const &) override;
00116         void react(InputNodeId const& ) override;
00117         void react(InputCloseCurlyBracket const&) override;
00118     };
00119
00120     class Label : public LexemeParser {
00121         void react(InputEqual const &) override;
00122     };
00123
00124     class Equal : public LexemeParser {
00125         void react(InputStringValue const &) override;
00126         void react(InputIntValue const &) override;
00127     };
00128
00129     class Value : public LexemeParser {
00130         void react(InputCloseSquareBracket const &) override;
00131     };
00132
00138     //std::shared_ptr<common::Graph> parse(std::vector<common::Lexeme>& input);
00139     std::shared_ptr<common::TraversalGraph> parse(std::vector<common::Lexeme>& input);
00140 }
```

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