CppLox

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Chapter 1

Class Index

1.1 Class List

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

ErrorHandler
ErrorHandler::ErrorInfo
FileReader
Scanner
Token

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Chapter 2

Class Documentation

2.1 ErrorHandler Class Reference

Classes

• struct ErrorInfo

Public Member Functions

```
    auto report () const -> void
reports the error encountered.
```

auto add (int line, const string &where, const string &msg) -> void
 add information about an error encountered which will be included in the error_list

auto clear () -> void
 clears the data of error_list

Public Attributes

bool has_found_error {}
 helper function that tells whether an error has occurred

2.1.1 Detailed Description

Definition at line 10 of file ErrorHandler.h.

2.1.2 Member Function Documentation

2.1.2.1 add()

```
auto ErrorHandler::add (
    int line,
    const string & where,
    const string & msg ) -> void
```

add information about an error encountered which will be included in the error_list

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Parameters

line	
where	
msg	

2.1.2.2 clear()

```
auto ErrorHandler::clear ( ) -> void
```

clears the data of error_list

2.1.2.3 report()

```
auto ErrorHandler::report ( ) const -> void
```

reports the error encountered.

2.1.3 Member Data Documentation

2.1.3.1 has_found_error

```
bool ErrorHandler::has_found_error {}
```

helper function that tells whether an error has occurred

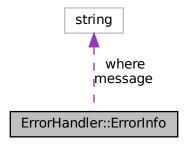
Definition at line 46 of file ErrorHandler.h.

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

• /mnt/c/Users/amianadave/Documents/cpp/Lexer/include/ErrorHandler.h

2.2 ErrorHandler::ErrorInfo Struct Reference

Collaboration diagram for ErrorHandler::ErrorInfo:



Public Attributes

- int line {}
- string where
- string message

2.2.1 Detailed Description

Definition at line 13 of file ErrorHandler.h.

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

/mnt/c/Users/amianadave/Documents/cpp/Lexer/include/ErrorHandler.h

2.3 FileReader Class Reference

Public Member Functions

- FileReader (std::string_view fname)
- auto content () -> std::string

returns the content of fname

2.3.1 Detailed Description

Definition at line 7 of file FileReader.h.

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2.3.2 Member Function Documentation

2.3.2.1 content()

```
auto FileReader::content ( ) -> std::string
returns the content of fname
Returns
    std::string
```

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

• /mnt/c/Users/amianadave/Documents/cpp/Lexer/include/FileReader.h

2.4 Scanner Class Reference

Public Member Functions

- Scanner (std::string_view source, ErrorHandler &error)
- auto scan_and_get_tokens () -> vector< Token >

scan and adds each lexeme encountered in a vector of tokens

• auto is_keyword (std::string_view token) const -> bool

returns if the passed argument is a keyword

2.4.1 Detailed Description

Definition at line 16 of file Scanner.h.

2.4.2 Member Function Documentation

2.4.2.1 is_keyword()

returns if the passed argument is a keyword

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Parameters

token

Returns

true

false

2.4.2.2 scan_and_get_tokens()

```
auto Scanner::scan_and_get_tokens ( ) -> vector< \ensuremath{\texttt{Token}}\xspace >
```

scan and adds each lexeme encountered in a vector of tokens

Returns

vector<Token>

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

• /mnt/c/Users/amianadave/Documents/cpp/Lexer/include/Scanner.h

2.5 Token Class Reference

Public Member Functions

- Token (TokenType type, const string &lexeme, const string &literal, int line)
- auto to_string () const -> string
 converts token type into a printable format

2.5.1 Detailed Description

Definition at line 104 of file Token.h.

2.5.2 Member Function Documentation

2.5.2.1 to_string()

```
auto Token::to_string ( ) const -> string
```

converts token type into a printable format

Returns

string

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

/mnt/c/Users/amianadave/Documents/cpp/Lexer/include/Token.h

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