# Yaxl Appendix B

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# **Contents**

Index

| 1 | Hiera | Hierarchical Index                                      |    |  |  |  |
|---|-------|---|----|--|--|--|
|   | 1.1   | Class Hierarchy   | 1  |  |  |  |
| 2 | Clas  | s Index   | 3  |  |  |  |
|   | 2.1   | Class List  | 3  |  |  |  |
| 3 | Clas  | s Documentation   | 5  |  |  |  |
|   | 3.1   | yaxl::file::AbstractFile Class Reference                | 5  |  |  |  |
|   | 3.2   | yaxl::concurrency::CachedCondition Class Reference      | 6  |  |  |  |
|   | 3.3   | yaxl::concurrency::ConcurrencyException Class Reference | 6  |  |  |  |
|   | 3.4   | yaxl::concurrency::Condition Class Reference            | 7  |  |  |  |
|   | 3.5   | yaxl::socket::DisconnectedException Class Reference     | 7  |  |  |  |
|   | 3.6   | yaxl::file::FileException Class Reference               | 7  |  |  |  |
|   | 3.7   | yaxl::socket::InputStream Class Reference               | 8  |  |  |  |
|   | 3.8   | yaxl::file::MD5 Class Reference                         | 8  |  |  |  |
|   | 3.9   | yaxl::concurrency::Mutex Class Reference                | 8  |  |  |  |
|   | 3.10  | yaxl::socket::OutputStream Class Reference              | 9  |  |  |  |
|   | 3.11  | yaxl::file::PosixFileImpl Class Reference               | 9  |  |  |  |
|   | 3.12  | yaxl::concurrency::Queue< T > Class Template Reference  | 10 |  |  |  |
|   | 3.13  | yaxl::concurrency::Runnable Class Reference             | 10 |  |  |  |
|   | 3.14  | yaxl::concurrency::ScopedLock Class Reference           | 10 |  |  |  |
|   | 3.15  | yaxl::concurrency::Semaphore Class Reference            | 10 |  |  |  |
|   | 3.16  | yaxl::socket::ServerSocket Class Reference              | 11 |  |  |  |
|   | 3.17  | yaxl::socket::Socket Class Reference                    | 11 |  |  |  |
|   | 3.18  | yaxl::socket::SocketException Class Reference           | 12 |  |  |  |
|   | 3.19  | SomeRunnable Class Reference                            | 12 |  |  |  |
|   | 3.20  | SomeThread Class Reference                              | 12 |  |  |  |
|   | 3.21  | yaxl::concurrency::Stack< T > Class Template Reference  | 13 |  |  |  |
|   | 3.22  | yaxl::concurrency::Thread Class Reference               | 13 |  |  |  |
|   | 3.23  | yaxl::YaxlException Class Reference                     | 14 |  |  |  |

14

# Chapter 1

# **Hierarchical Index**

# 1.1 Class Hierarchy

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

| yaxl::file::AbstractFile                |
|---|
| yaxl::file::PosixFileImpl               |
| yaxl::concurrency::CachedCondition      |
| yaxl::concurrency::Condition            |
| exception                               |
| yaxl::YaxlException                     |
| yaxl::concurrency::ConcurrencyException |
| yaxl::file::FileException               |
| yaxl::socket::SocketException           |
| yaxl::socket::DisconnectedException     |
| yaxl::socket::InputStream               |
| yaxl::file::MD5                         |
| yaxl::concurrency::Mutex                |
| yaxl::socket::OutputStream              |
| yaxl::concurrency::Queue < T >          |
| yaxl::concurrency::Runnable             |
| SomeRunnable                            |
| yaxl::concurrency::Thread               |
| SomeThread                              |
| yaxl::concurrency::ScopedLock           |
| yaxl::concurrency::Semaphore            |
| yaxl::socket::ServerSocket              |
| yaxl::socket::Socket                    |
| yaxl::concurrency::Stack < T >          |

2 **Hierarchical Index** 

# **Chapter 2**

# **Class Index**

# 2.1 Class List

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

| yaxl::file::AbstractFile   | . 5  |
|--|------|
| yaxl::concurrency::CachedCondition   | . 6  |
| yaxl::concurrency::ConcurrencyException  | . 6  |
| yaxl::concurrency::Condition   | . 7  |
| yaxl::socket::DisconnectedException  | . 7  |
| yaxl::file::FileException  | . 7  |
| yaxl::socket::InputStream  | . 8  |
| yaxl::file::MD5  | . 8  |
| yaxl::concurrency::Mutex   | . 8  |
| yaxl::socket::OutputStream   | . 9  |
| yaxl::file::PosixFileImpl  | . 9  |
| yaxl::concurrency::Queue < T >   | . 10 |
| yaxl::concurrency::Runnable  | . 10 |
| yaxl::concurrency::ScopedLock  | . 10 |
| yaxl::concurrency::Semaphore   | . 10 |
| yaxl::socket::ServerSocket   | . 11 |
| yaxl::socket::Socket   | . 11 |
| yaxl::socket::SocketException  | . 12 |
| SomeRunnable   | . 12 |
| SomeThread   | . 12 |
| $yaxl::concurrency::Stack < T > \dots \dots$ | . 13 |
| yaxl::concurrency::Thread  | . 13 |
| vaxIVaxIExcention  | 14   |

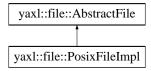
Class Index

# **Chapter 3**

# **Class Documentation**

# 3.1 yaxl::file::AbstractFile Class Reference

Inheritance diagram for yaxl::file::AbstractFile:



#### **Public Member Functions**

- virtual bool isDirectory (void)=0
- virtual bool **isFile** (void)=0
- virtual bool exists (void)=0
- virtual long lastModified (void)=0
- virtual vector< string > list (void)=0
- virtual vector< File > listFiles ()=0
- virtual int size ()
- virtual string readAll ()
- virtual string readLine ()
- · virtual string readLine (const char &delimiter)
- · virtual string readSome (int len)
- virtual string **getName** (void)
- virtual void mkDir (void)
- · virtual void mkDirs (void)
- · virtual void write (const string &data)
- virtual void write (const char \*data, const size\_t length)
- virtual void append (const string &data)
- virtual void append (const char \*data, const size\_t length)
- · virtual void reset ()
- virtual bool createNewFile (void)
- string computeMD5 (void)
- · virtual bool remove (void)

#### **Protected Member Functions**

- AbstractFile (string path)
- virtual string getCanonicalName ()
- void closeStreams (void)
- void openInputFileStream (bool createFile=false)
- int getRemainingSize (void)
- virtual void mkDir (const string &dirName)=0

#### **Protected Attributes**

- string \_path
- ifstream \* \_inputFileStream

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

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/AbstractFile.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/AbstractFile.cpp

# 3.2 yaxl::concurrency::CachedCondition Class Reference

#### **Public Member Functions**

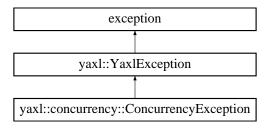
- · void wait (long milliseconds)
- void wait ()
- void signal ()

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/CachedCondition.h

# 3.3 yaxl::concurrency::ConcurrencyException Class Reference

Inheritance diagram for yaxl::concurrency::ConcurrencyException:



#### **Public Member Functions**

ConcurrencyException (string error)

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

C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/ConcurrencyException.h

# 3.4 yaxl::concurrency::Condition Class Reference

#### **Public Member Functions**

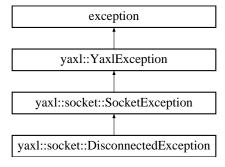
- · void wait (long milliseconds)
- · void wait ()
- · void signal ()

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Condition.h

# 3.5 yaxl::socket::DisconnectedException Class Reference

Inheritance diagram for yaxl::socket::DisconnectedException:



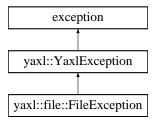
#### **Additional Inherited Members**

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/DisconnectException.h

# 3.6 yaxl::file::FileException Class Reference

Inheritance diagram for yaxl::file::FileException:



#### **Public Member Functions**

• FileException (string error)

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/FileException.h

## 3.7 yaxl::socket::InputStream Class Reference

#### **Public Member Functions**

- InputStream (Socket &socket)
- char **read** (void)
- string **read** (const int bytes)
- size\_t available (void)
- · void skip (const int amount)
- void setBlocking (bool isBlocking)
- · bool ensureAvailable (size t byteCount)
- void forceQuit (void)

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

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/InputStream.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/InputStream.cpp

### 3.8 yaxl::file::MD5 Class Reference

#### **Public Types**

· typedef unsigned int size\_type

#### **Public Member Functions**

- MD5 (const std::string &text)
- void update (const unsigned char \*buf, size\_type length)
- void **update** (const char \*buf, size\_type length)
- MD5 & finalize ()
- · std::string hexdigest () const

#### **Friends**

std::ostream & operator<< (std::ostream &, MD5 md5)</li>

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

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/md5.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/md5.cpp

#### 3.9 yaxl::concurrency::Mutex Class Reference

#### **Public Member Functions**

- void lock (void)
- · void unlock (void)
- · bool tryLock (void)

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Mutex.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Mutex.cpp

## 3.10 yaxl::socket::OutputStream Class Reference

#### **Public Member Functions**

- OutputStream (Socket &socket)
- void write (const stringstream ssToSend)
- void write (const string stringToSend)
- void write (const char \*bytes)
- void write (const char \*bytes, const int len)

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

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/OutputStream.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/OutputStream.cpp

## 3.11 yaxl::file::PosixFileImpl Class Reference

Inheritance diagram for yaxl::file::PosixFileImpl:



#### **Public Member Functions**

- PosixFileImpl (string path)
- virtual bool isDirectory (void)
- virtual bool isFile (void)
- virtual bool exists (void)
- virtual long lastModified (void)
- virtual vector< string > list (void)
- virtual vector< File > listFiles ()
- virtual int size ()

#### **Protected Member Functions**

• virtual void mkDir (const string &dirName)

#### **Additional Inherited Members**

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/PosixFileImpl.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/file/PosixFileImpl.cpp

# 3.12 yaxl::concurrency::Queue < T > Class Template Reference

**Public Member Functions** 

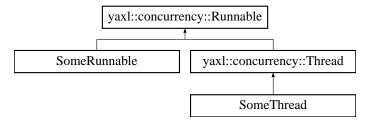
- T \* tryPop (void)
- void push (T \*item)

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Queue.h

# 3.13 yaxl::concurrency::Runnable Class Reference

Inheritance diagram for yaxl::concurrency::Runnable:



#### **Public Member Functions**

• virtual void run ()=0

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Runnable.h

# 3.14 yaxl::concurrency::ScopedLock Class Reference

**Public Member Functions** 

- ScopedLock (Mutex &mutex)
- ScopedLock (Mutex \*mutex)

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

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/ScopedLock.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/ScopedLock.cpp

## 3.15 yaxl::concurrency::Semaphore Class Reference

**Public Member Functions** 

- Semaphore (int count=0)
- void wait ()

• void signal (int count=1)

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Semaphore.h

## 3.16 yaxl::socket::ServerSocket Class Reference

**Public Member Functions** 

- ServerSocket (int port, int backlog=10)
- Socket \* accept (void)
- void setReuseAddress (bool newState)
- void setKeepAlive (bool newState)

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

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/ServerSocket.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/ServerSocket.cpp

### 3.17 yaxl::socket::Socket Class Reference

**Public Member Functions** 

- Socket (const string &address, const string &port)
- Socket (const string &address, int port)
- void close (void)
- OutputStream & getOutputStream (void) const
- InputStream & getInputStream (void) const
- bool isConnected (void)
- void setTcpNoDelay (bool newState)
- void setTcpCork (bool newState)
- const string & getIpv4 ()
- int getPort ()
- int getFd ()

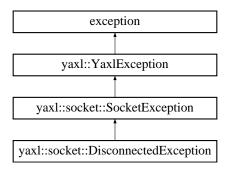
#### **Friends**

- · class OutputStream
- class InputStream
- class ServerSocket

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/Socket.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/Socket.cpp

# 3.18 yaxl::socket::SocketException Class Reference

Inheritance diagram for yaxl::socket::SocketException:



**Public Member Functions** 

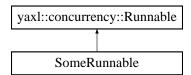
• SocketException (string error)

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/sockets/SocketException.h

#### 3.19 SomeRunnable Class Reference

Inheritance diagram for SomeRunnable:

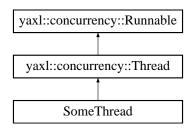


The documentation for this class was generated from the following file:

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/examples/SomeRunnable.h

#### 3.20 SomeThread Class Reference

Inheritance diagram for SomeThread:



#### **Public Member Functions**

• void run ()

#### **Additional Inherited Members**

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/examples/SomeThread.h

# 3.21 yaxl::concurrency::Stack < T > Class Template Reference

## **Public Member Functions**

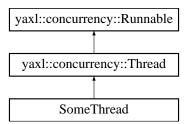
- T tryPop (void)
- · void push (T item)

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Stack.h

# 3.22 yaxl::concurrency::Thread Class Reference

Inheritance diagram for yaxl::concurrency::Thread:



#### **Public Member Functions**

- Thread (Runnable \*runnable)
- virtual void run ()
- · virtual void start ()
- void join ()
- void detach ()
- bool joinable ()

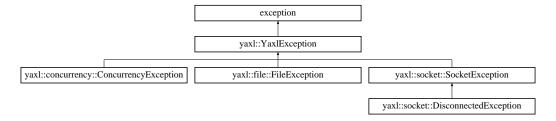
#### **Protected Member Functions**

• void sleep (long milliseconds)

- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Thread.h
- C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/concurrency/Thread.cpp

# 3.23 yaxl::YaxlException Class Reference

Inheritance diagram for yaxl::YaxlException:



#### **Public Member Functions**

- YaxlException (const string error)
- const char \* what () const throw ()

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

• C:/Users/Sander/Documents/Projects/PCCS/libyaxl/libyaxl/common/YaxlException.h

# Index

```
SomeRunnable, 12
SomeThread, 12
yaxl::YaxlException, 14
yaxl::concurrency::CachedCondition, 6
yaxl::concurrency::ConcurrencyException, 6
yaxl::concurrency::Condition, 7
yaxl::concurrency::Mutex, 8
yaxl::concurrency::Queue < T >, 10
yaxl::concurrency::Runnable, 10
yaxl::concurrency::ScopedLock, 10
yaxl::concurrency::Semaphore, 10
yaxl::concurrency::Stack< T >, 13
yaxl::concurrency::Thread, 13
yaxl::file::AbstractFile, 5
yaxl::file::FileException, 7
yaxl::file::MD5, 8
yaxl::file::PosixFileImpl, 9
yaxl::socket::DisconnectedException, 7
yaxl::socket::InputStream, 8
yaxl::socket::OutputStream, 9
yaxl::socket::ServerSocket, 11
yaxl::socket::Socket, 11
yaxl::socket::SocketException, 12
```