

ASECourseWork

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

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MyServer	20
QThread	
checkOnline	6
handleMessageThread	7
ListenThread	13
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Chapter 2

Class Index

2.1 Class List

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

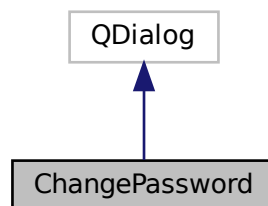
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Chapter 3

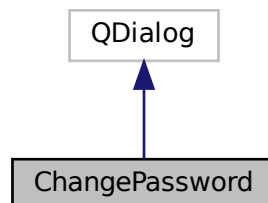
Class Documentation

3.1 ChangePassword Class Reference

Inheritance diagram for ChangePassword:



Collaboration diagram for ChangePassword:



Public Member Functions

- **ChangePassword** (QWidget *parent=nullptr)
ChangePassword::ChangePassword (p. 6).
- **~ChangePassword** ()
ChangePassword::~~ChangePassword (p. 6).

3.1.1 Constructor & Destructor Documentation

3.1.1.1 ChangePassword()

```
ChangePassword::ChangePassword (
    QWidget * parent = nullptr ) [explicit]
```

ChangePassword::ChangePassword (p. 6).

Parameters

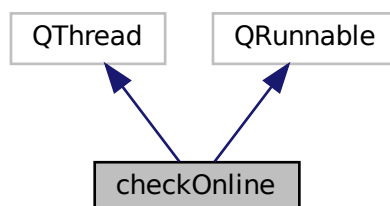
<i>parent</i>	
---------------	--

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

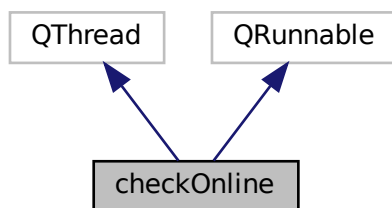
- ASECW/changepassword.h
- ASECW/changepassword.cpp

3.2 checkOnline Class Reference

Inheritance diagram for checkOnline:



Collaboration diagram for checkOnline:



Public Member Functions

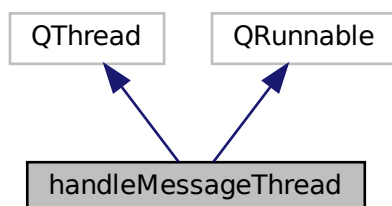
- **checkOnline** (QTcpSocket *socket, QObject *parent=0)

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

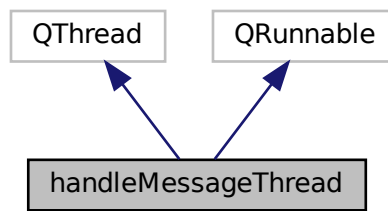
- ASECW/checkonline.h
- ASECW/checkonline.cpp

3.3 handleMessageThread Class Reference

Inheritance diagram for handleMessageThread:



Collaboration diagram for `handleMessageThread`:



Signals

- void **error** (QTcpSocket::SocketError socketError)
- void **ReturnResult** (QStringList Result)
- void **ReturnMessage** (QStringList Message)

Public Member Functions

- **handleMessageThread** (int socketDescriptor, QByteArray Buffer, QObject *parent=0)
handleMessageThread::handleMessageThread (p. 9)
- void **run** ()
handleMessageThread::run (p. 8)
- QString **decryptpassword** (QString password)
- QStringList **regAccount** (QString name, QString username, QString password)
handleMessageThread::regAccount (p. 11)
- QStringList **retrieveContacts** (QString User)
handleMessageThread::retrieveContacts (p. 11)
- QStringList **login** (QString username, QString password)
handleMessageThread::login (p. 10)
- QStringList **logout** (QString username)
handleMessageThread::logout (p. 10)
- QStringList **searchUsers** (QString User, QString criteria)
handleMessageThread::searchUsers (p. 12)
- QStringList **addContact** (QString contact, QString User)
handleMessageThread::addContact (p. 9)
- QStringList **retrieveMessages** (QString chatName)
handleMessageThread::retrieveMessages (p. 12)
- QStringList **createGroup** (QStringList participants)
handleMessageThread::createGroup (p. 9)
- void **sendMessage** (QStringList MessageInfo)
handleMessageThread::sendMessage (p. 12)
- void **handleMessage** (QByteArray Data)
handleMessageThread::handleMessage (p. 10)

Public Attributes

- QByteArray **Data**

3.3.1 Constructor & Destructor Documentation

3.3.1.1 handleMessageThread()

```
handleMessageThread::handleMessageThread (
    int socketDescriptor,
    QByteArray Buffer,
    QObject * parent = 0 ) [explicit]
```

handleMessageThread::handleMessageThread (p. 9)

Parameters

<i>socketDescriptor</i>	
<i>Buffer</i>	
<i>parent</i>	

3.3.2 Member Function Documentation

3.3.2.1 addContact()

```
QStringList handleMessageThread::addContact (
    QString contact,
    QString User )
```

handleMessageThread::addContact (p. 9)

Parameters

<i>contact</i>	
<i>User</i>	

Returns

3.3.2.2 createGroup()

```
QStringList handleMessageThread::createGroup (
    QStringList participants )
```

handleMessageThread::createGroup (p. 9)

Parameters

<i>participants</i>	
---------------------	--

Returns

3.3.2.3 handleMessage()

```
void handleMessageThread::handleMessage (
    QByteArray Data )
```

handleMessageThread::handleMessage (p. 10)

Parameters

<i>Data</i>	
-------------	--

3.3.2.4 login()

```
QStringList handleMessageThread::login (
    QString username,
    QString password )
```

handleMessageThread::login (p. 10)

Parameters

<i>username</i>	
<i>password</i>	

Returns

3.3.2.5 logout()

```
QStringList handleMessageThread::logout (
    QString username )
```

handleMessageThread::logout (p. 10)

Parameters

<i>username</i>	
-----------------	--

Returns

3.3.2.6 regAccount()

```
QStringList handleMessageThread::regAccount (
    QString name,
    QString username,
    QString password )
```

handleMessageThread::regAccount (p. 11)

Parameters

<i>name</i>	
<i>username</i>	
<i>password</i>	

Returns

3.3.2.7 retrieveContacts()

```
QStringList handleMessageThread::retrieveContacts (
    QString User )
```

handleMessageThread::retrieveContacts (p. 11)

Parameters

<i>User</i>	
-------------	--

Returns

3.3.2.8 retrieveMessages()

```
QStringList handleMessageThread::retrieveMessages (
    QString chatName )
```

handleMessageThread::retrieveMessages (p. 12)

Parameters

<i>chatName</i>	
-----------------	--

Returns

3.3.2.9 searchUsers()

```
QStringList handleMessageThread::searchUsers (
    QString user,
    QString criteria )
```

handleMessageThread::searchUsers (p. 12)

Parameters

<i>user</i>	
<i>criteria</i>	

Returns

3.3.2.10 sendMessage()

```
void handleMessageThread::sendMessage (
    QStringList MessageInfo )
```

handleMessageThread::sendMessage (p. 12)

Parameters

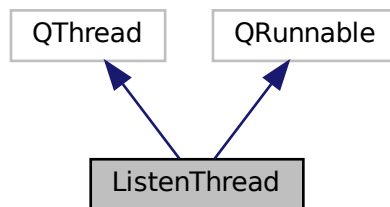
<i>MessageInfo</i>	
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The documentation for this class was generated from the following files:

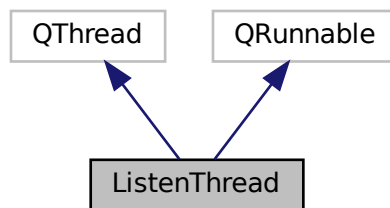
- Server/handlemessagethread.h
- Server/handlemessagethread.cpp

3.4 ListenThread Class Reference

Inheritance diagram for ListenThread:



Collaboration diagram for ListenThread:



Public Slots

- void **readyRead** ()
ListenThread::readyRead (p. 13).
- void **disconnected** ()
ListenThread::disconnected (p. 13).
- void **ReturnResult** (QStringList Result)
ListenThread::ReturnResult (p. 15).
- void **ReturnMessage** (QStringList Result)
ListenThread::ReturnMessage (p. 14).

Signals

- void **error** (QTcpSocket::SocketError socketError)
- void **Result** (QByteArray)
- void **update** (QString update)
- void **sendMessage** (QStringList message)

Public Member Functions

- **ListenThread** (QTcpSocket *socket, int ID, QObject *parent=0)
ListenThread::ListenThread (p. 14).
- void **run** ()
ListenThread::run (p. 14).

3.4.1 Constructor & Destructor Documentation

3.4.1.1 ListenThread()

```
ListenThread::ListenThread (
    QTcpSocket * socket,
    int ID,
    QObject * parent = 0 ) [explicit]
```

ListenThread::ListenThread (p. 14).

Parameters

<i>socket</i>	
<i>ID</i>	
<i>parent</i>	

3.4.2 Member Function Documentation

3.4.2.1 ReturnMessage

```
void ListenThread::ReturnMessage (
    QStringList Result ) [slot]
```

ListenThread::ReturnMessage (p. 14).

Parameters

<i>Result</i>	
---------------	--

3.4.2.2 ReturnResult

```
void ListenThread::ReturnResult (
    QStringList Result ) [slot]
```

ListenThread::ReturnResult (p. 15).

Parameters

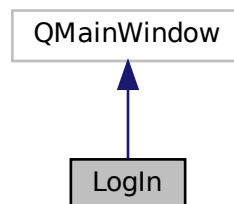
<i>Result</i>	
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The documentation for this class was generated from the following files:

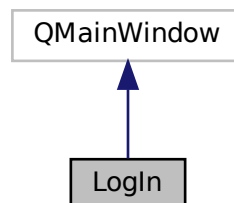
- Server/listenthread.h
- Server/listenthread.cpp

3.5 LogIn Class Reference

Inheritance diagram for LogIn:



Collaboration diagram for LogIn:



Public Slots

- void **connected** ()
LogIn::connected (p. 16).
- void **readyRead** ()
LogIn::readyRead (p. 16).
- void **disconnected** ()
LogIn::disconnected (p. 16).

Public Member Functions

- **LogIn** (QWidget *parent=0)
LogIn::LogIn (p. 16).
- void **sendToServer** (QString)
LogIn::sendToServer (p. 17).
- void **handleServerResponse** (QByteArray)
LogIn::handleServerResponse (p. 16).
- **~LogIn** ()
LogIn::~LogIn (p. 16).

3.5.1 Constructor & Destructor Documentation

3.5.1.1 LogIn()

```
LogIn::LogIn (
    QWidget * parent = 0 )
```

LogIn::LogIn (p. 16).

Parameters

<i>parent</i>	
---------------	--

3.5.2 Member Function Documentation

3.5.2.1 handleServerResponse()

```
void LogIn::handleServerResponse (
    QByteArray Response )
```

LogIn::handleServerResponse (p. 16).

Parameters

<i>Response</i>	
-----------------	--

3.5.2.2 sendToServer()

```
void LogIn::sendToServer (  
    QString message )
```

LogIn::sendToServer (p. 17).

Parameters

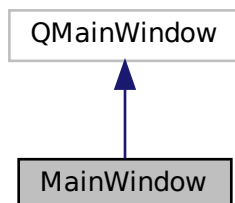
<i>message</i>	
----------------	--

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

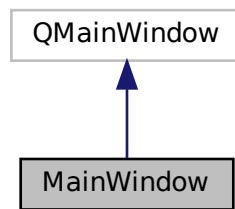
- ASECW/login.h
- ASECW/login.cpp

3.6 MainWindow Class Reference

Inheritance diagram for MainWindow:



Collaboration diagram for MainWindow:



Public Slots

- void **connected** ()
**
- void **disconnected** ()
**

Public Member Functions

- **MainWindow** (QTcpSocket *socket, QString user, QString UserID, QWidget *parent=nullptr)
MainWindow::MainWindow (p. 18).
- void **retrieveContacts** (QString user)
MainWindow::retrieveContacts (p. 19).
- void **handleServerResponse** (QByteArray Result)
MainWindow::handleServerResponse (p. 19).
- **~MainWindow** ()
MainWindow::~MainWindow (p. 18) Deconstructor for the *MainWindow* (p. 17) Class.

3.6.1 Constructor & Destructor Documentation

3.6.1.1 MainWindow()

```

MainWindow::MainWindow (
    QTcpSocket * lsocket,
    QString user,
    QString UserID,
    QWidget * parent = nullptr ) [explicit]
  
```

MainWindow::MainWindow (p. 18).

Parameters

<i>Issocket</i>	
<i>user</i>	
<i>UserID</i>	
<i>parent</i>	Constructor for the MainWindow (p. 17) class.

3.6.2 Member Function Documentation

3.6.2.1 handleServerResponse()

```
void MainWindow::handleServerResponse (
    QByteArray Result )
```

MainWindow::handleServerResponse (p. 19).

Parameters

<i>Result</i>	
---------------	--

3.6.2.2 retrieveContacts()

```
void MainWindow::retrieveContacts (
    QString user )
```

MainWindow::retrieveContacts (p. 19).

Parameters

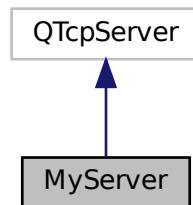
<i>user</i>	
-------------	--

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

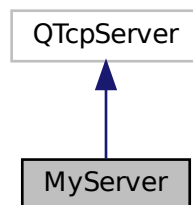
- ASECW/mainwindow.h
- ASECW/mainwindow.cpp

3.7 MyServer Class Reference

Inheritance diagram for MyServer:



Collaboration diagram for MyServer:



Public Slots

- void **returnMessage** (QStringList)
MyServer::returnMessage (p. 21).

Public Member Functions

- **MyServer** (QObject *parent=0)
MyServer::MyServer (p. 21).
- void **createDatabase** ()
MyServer::createDatabase (p. 20).
- void **StartServer** ()
MyServer::StartServer (p. 20).

Protected Member Functions

- void **incomingConnection** (qintptr socketDescriptor)
MyServer::incomingConnection (p. 21).

3.7.1 Constructor & Destructor Documentation

3.7.1.1 MyServer()

```
MyServer::MyServer (  
    QObject * parent = 0 ) [explicit]
```

MyServer::MyServer (p. 21).

Parameters

<i>parent</i>	
---------------	--

3.7.2 Member Function Documentation

3.7.2.1 incomingConnection()

```
void MyServer::incomingConnection (  
    qintptr socketDescriptor ) [protected]
```

MyServer::incomingConnection (p. 21).

Parameters

<i>socketDescriptor</i>	
-------------------------	--

3.7.2.2 returnMessage

```
void MyServer::returnMessage (  
    QStringList message ) [slot]
```

MyServer::returnMessage (p. 21).

Parameters

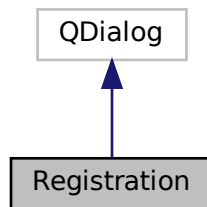
<i>message</i>	
----------------	--

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

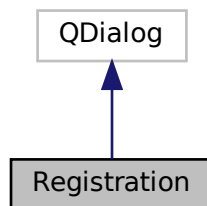
- Server/myserver.h
- Server/myserver.cpp

3.8 Registration Class Reference

Inheritance diagram for Registration:



Collaboration diagram for Registration:



Public Slots

- void **connected** ()
Registration::connected (p. 22).
- void **disconnected** ()
Registration::disconnected (p. 22).

Public Member Functions

- **Registration** (QTcpSocket *socket, QWidget *parent=nullptr)
Registration::Registration (p. 23).
- void **sendToServer** (QString message)
Registration::sendToServer (p. 23).
- void **handleServerResponse** (QByteArray Response)
Registration::handleServerResponse (p. 23).
- **~Registration** ()
Registration::~~Registration (p. 23).

3.8.1 Constructor & Destructor Documentation

3.8.1.1 Registration()

```
Registration::Registration (
    QTcpSocket * lsocket,
    QWidget * parent = nullptr ) [explicit]
```

Registration::Registration (p. 23).

Parameters

<i>lsocket</i>	
<i>parent</i>	

3.8.2 Member Function Documentation

3.8.2.1 handleServerResponse()

```
void Registration::handleServerResponse (
    QByteArray Response )
```

Registration::handleServerResponse (p. 23).

Parameters

<i>Response</i>	
-----------------	--

3.8.2.2 sendToServer()

```
void Registration::sendToServer (
    QString message )
```

Registration::sendToServer (p. 23).

Parameters

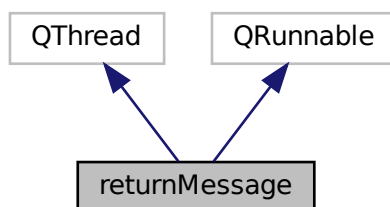
<i>message</i>	
----------------	--

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

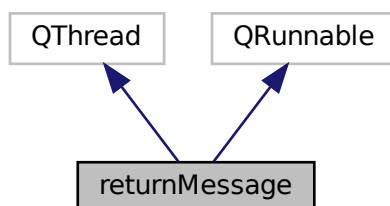
- ASECW/registration.h
- ASECW/registration.cpp

3.9 returnMessage Class Reference

Inheritance diagram for returnMessage:



Collaboration diagram for returnMessage:



Public Member Functions

- **returnMessage** (QTcpSocket *socket, QStringList message, QObject *parent=0)
returnMessage::returnMessage (p. 25)
- void **run** ()
returnMessage::run (p. 25)

3.9.1 Constructor & Destructor Documentation

3.9.1.1 returnMessage()

```
returnMessage::returnMessage (
    QTcpSocket * lsocket,
    QStringList message,
    QObject * parent = 0 ) [explicit]
```

returnMessage::returnMessage (p. 25)

Parameters

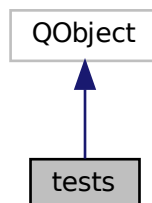
<i>lsocket</i>	
<i>message</i>	
<i>parent</i>	

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

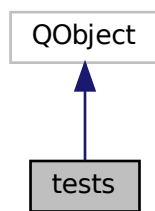
- Server/returnmessage.h
- Server/returnmessage.cpp

3.10 tests Class Reference

Inheritance diagram for tests:



Collaboration diagram for tests:



Public Member Functions

- **tests** (QObject *parent=NULLPTR)

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

- Server/tests.h
- Server/tests.cpp

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