

# TankGame

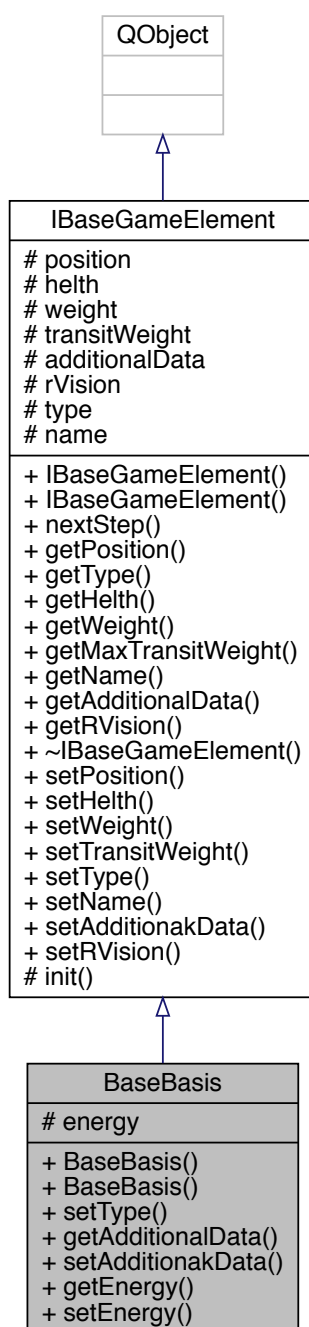
Generated by Doxygen 1.8.13

## Contents

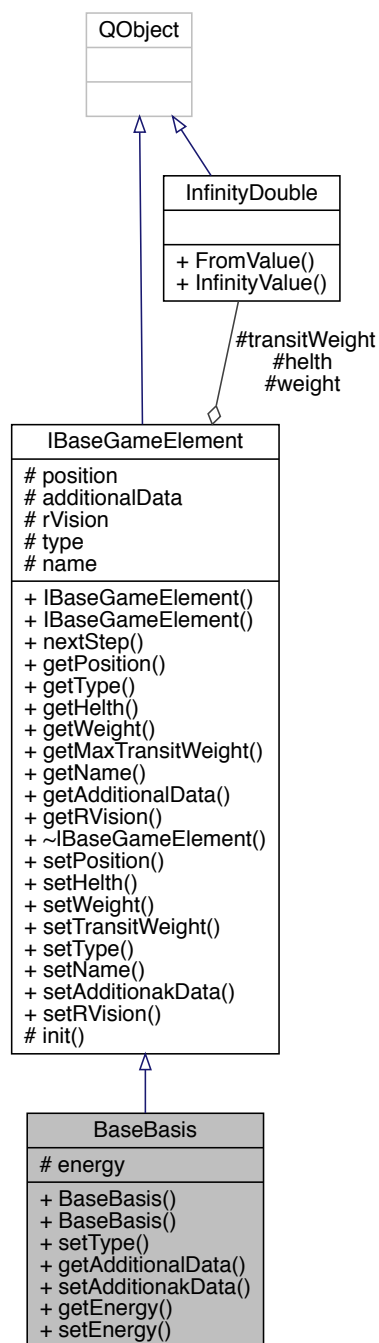
### 1 Class Documentation

#### 1.1 BaseBasis Class Reference

Inheritance diagram for BaseBasis:



Collaboration diagram for BaseBasis:



#### Public Member Functions

- **BaseBasis** ( **GameElementData** &data)
- virtual void **setType** (int value) override
- virtual QByteArray \* **getAdditionalData** () const
- virtual void **setAdditionalData** (QByteArray \*data) override
- virtual int **getEnergy** () const

- virtual void **setEnergy** (int \_energy)
- virtual void **nextStep** ()
- virtual QVector3D \* **getPosition** () const
- virtual int **getType** () const
- virtual **InfinityDouble** \* **getHelth** () const
- virtual **InfinityDouble** \* **getWeight** () const
- virtual **InfinityDouble** \* **getMaxTransitWeight** () const
- virtual QString **getName** () const
- virtual int **getRVision** () const
- virtual void **setPosition** (QVector3D \*value)
- virtual void **setHelth** ( **InfinityDouble** \*value)
- virtual void **setWeight** ( **InfinityDouble** \*value)
- virtual void **setTransitWeight** ( **InfinityDouble** \*value)
- virtual void **setName** (QString name)
- virtual void **setRVision** (int \_rVison)

#### Protected Member Functions

- virtual void **init** ( **GameElementData** &data)

#### Protected Attributes

- int **energy** = 100
- QVector3D \* **position** = nullptr
- **InfinityDouble** \* **helth** = nullptr
- **InfinityDouble** \* **weight** = nullptr
- **InfinityDouble** \* **transitWeight** = nullptr
- QByteArray \* **additionalData** = nullptr
- int **rVision** = 1
- int **type** = -1
- QString **name**

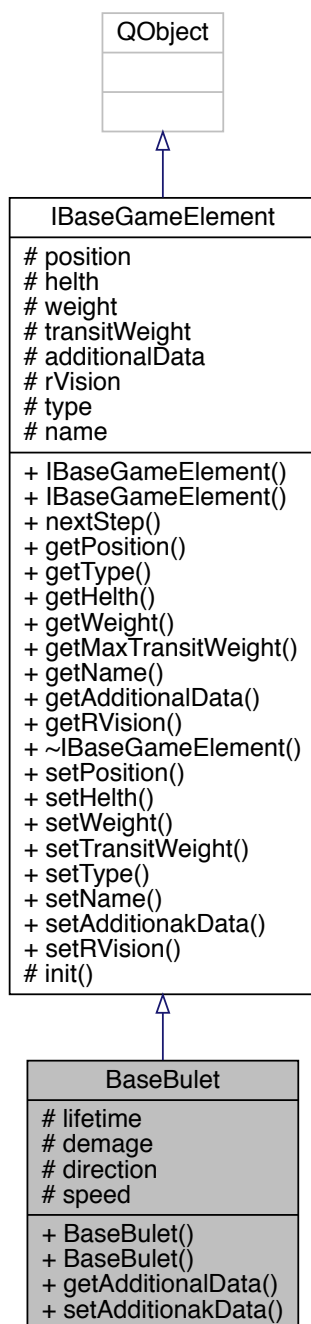
#### 1.1.1 Detailed Description

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

- Core/GameElements/basebasis.h
- Core/GameElements/basebasis.cpp

## 1.2 BaseBulet Class Reference

Inheritance diagram for BaseBulet:





- virtual int **getType** () const
- virtual **InfinityDouble** \* **getHelth** () const
- virtual **InfinityDouble** \* **getWeight** () const
- virtual **InfinityDouble** \* **getMaxTransitWeight** () const
- virtual QString **getName** () const
- virtual int **getRVision** () const
- virtual void **setPosition** (QVector3D \*value)
- virtual void **setHelth** ( **InfinityDouble** \*value)
- virtual void **setWeight** ( **InfinityDouble** \*value)
- virtual void **setTransitWeight** ( **InfinityDouble** \*value)
- virtual void **setType** (int value)
- virtual void **setName** (QString name)
- virtual void **setRVision** (int \_rVison)

#### Protected Member Functions

- virtual void **init** ( **GameElementData** &data)

#### Protected Attributes

- int **lifetime** = 0
- double **damage** = 0
- double **direction**
- double **speed**
- QVector3D \* **position** = nullptr
- **InfinityDouble** \* **helth** = nullptr
- **InfinityDouble** \* **weight** = nullptr
- **InfinityDouble** \* **transitWeight** = nullptr
- QByteArray \* **additionalData** = nullptr
- int **rVision** = 1
- int **type** = -1
- QString **name**

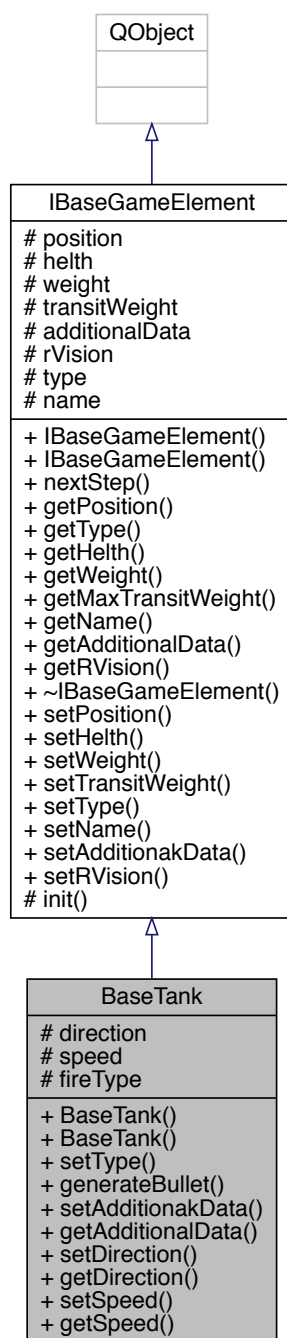
#### 1.2.1 Detailed Description

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

- Core/GameElements/basebulet.h
- Core/GameElements/basebulet.cpp

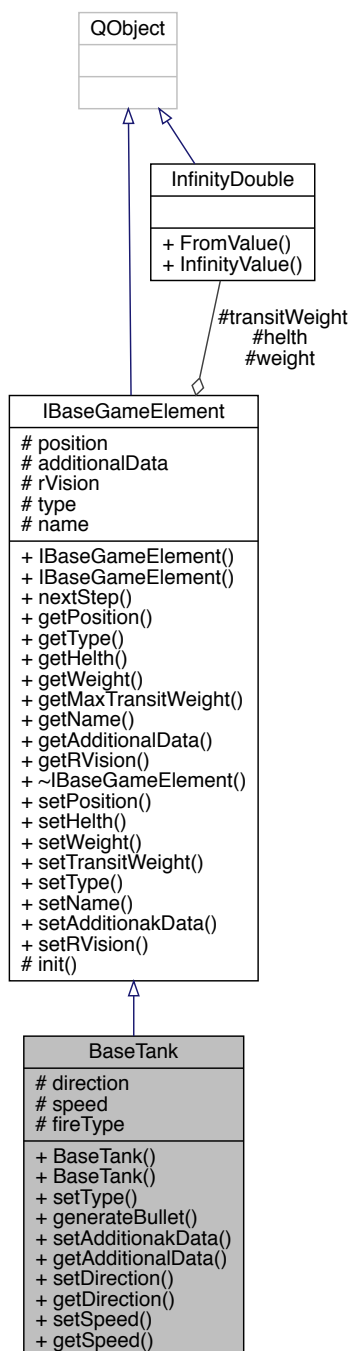
## 1.3 BaseTank Class Reference

Inheritance diagram for BaseTank:





Collaboration diagram for BaseTank:



#### Public Member Functions

- **BaseTank** ( **GameElementData** &data)
- virtual void **setType** (int value) override
- virtual **BaseBulet generateBullet** () const
- virtual void **setAdditionalData** (QByteArray \*data) override
- virtual QByteArray \* **getAdditionalData** () const

- virtual void **setDirection** (double \_direction)
- virtual double **getDirection** () const
- virtual void **setSpeed** (double \_speed)
- virtual double **getSpeed** () const
- virtual void **nextStep** ()
- virtual QVector3D \* **getPosition** () const
- virtual int **getType** () const
- virtual **InfinityDouble** \* **getHelth** () const
- virtual **InfinityDouble** \* **getWeight** () const
- virtual **InfinityDouble** \* **getMaxTransitWeight** () const
- virtual QString **getName** () const
- virtual int **getRVision** () const
- virtual void **setPosition** (QVector3D \*value)
- virtual void **setHelth** ( **InfinityDouble** \*value)
- virtual void **setWeight** ( **InfinityDouble** \*value)
- virtual void **setTransitWeight** ( **InfinityDouble** \*value)
- virtual void **setName** (QString name)
- virtual void **setRVision** (int \_rVison)

#### Protected Member Functions

- virtual void **init** ( **GameElementData** &data)

#### Protected Attributes

- double **direction** = 0
- double **speed** = 0
- int **fireType** = 0  
*fireType 0 for non fire -1 for single fire if fireType > 0 then fire will be call evry fireType tik of game*
- QVector3D \* **position** = nullptr
- **InfinityDouble** \* **helth** = nullptr
- **InfinityDouble** \* **weight** = nullptr
- **InfinityDouble** \* **transitWeight** = nullptr
- QByteArray \* **additionalData** = nullptr
- int **rVision** = 1
- int **type** = -1
- QString **name**

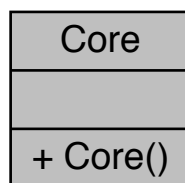
#### 1.3.1 Detailed Description

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

- Core/GameElements/basetank.h
- Core/GameElements/basetank.cpp

## 1.4 Core Class Reference

Collaboration diagram for Core:



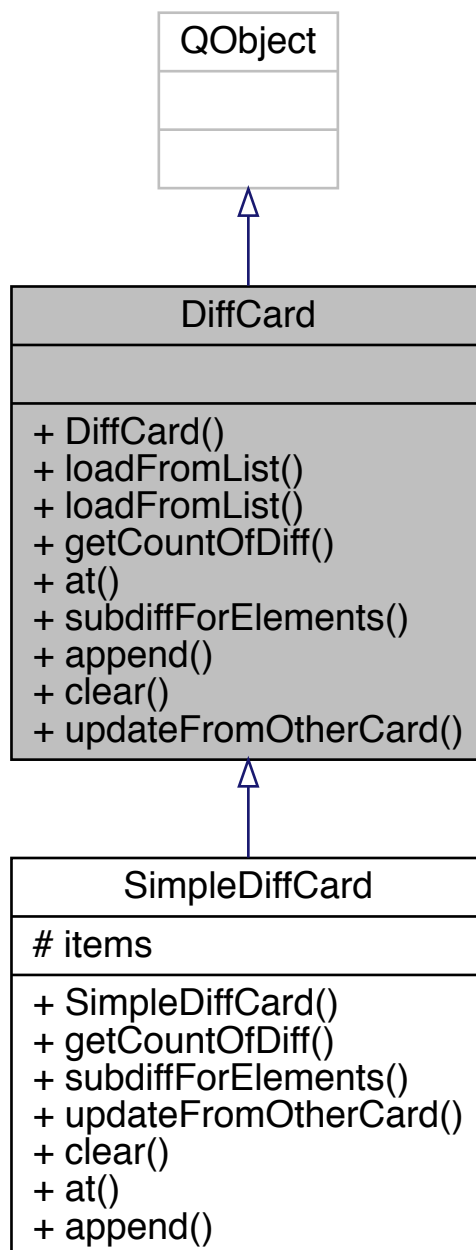
### 1.4.1 Detailed Description

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

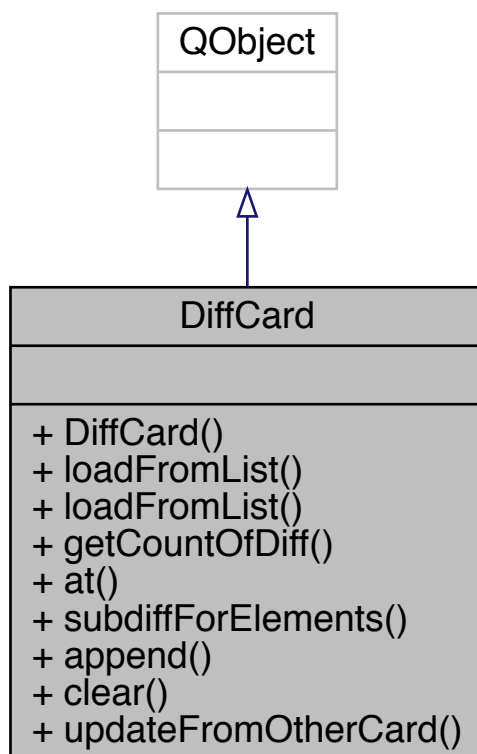
- `Core/core.h`
- `Core/core.cpp`

## 1.5 DiffCard Class Reference

Inheritance diagram for DiffCard:



Collaboration diagram for DiffCard:



#### Public Member Functions

- **DiffCard** (QObject \*parent=0)
- virtual void **loadFromList** (QList< **DiffElement** \*> &newItems)
- virtual void **loadFromList** (QList< **DiffElement** \*> \*newItems)
- virtual int **getCountOfDiff** ()=0
- virtual **DiffElement** \* **at** (int i)=0
- virtual **DiffCard** \* **subdiffForElements** (QList< **IBaseGameElement** \*> items)=0
- virtual void **append** ( **DiffElement** \*diff)=0
- virtual void **clear** ()=0
- virtual void **updateFromOtherCard** ( **DiffCard** \*card)=0

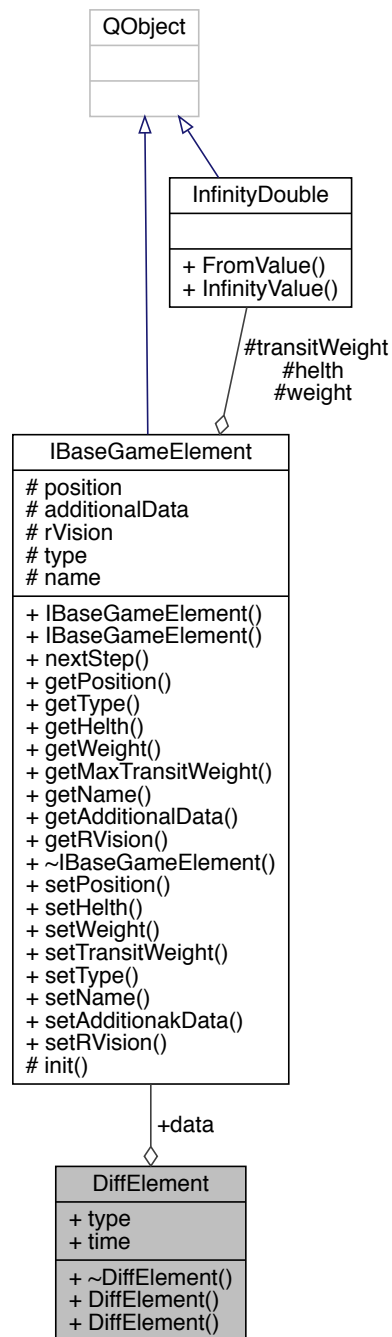
#### 1.5.1 Detailed Description

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

- Core/diffs/diffcard.h
- Core/diffs/diffcard.cpp

## 1.6 DiffElement Class Reference

Collaboration diagram for DiffElement:



## Public Member Functions

- **DiffElement** (eDiffType type, **IBaseGameElement** \*data)

#### Public Attributes

- `eDiffType` **type**
- `IBaseGameElement * data`
- `uint64_t time`

#### Friends

- `QDataStream & operator<< (QDataStream &stream, const DiffElement &myclass)`
- `QDataStream & operator>> (QDataStream &stream, DiffElement &myclass)`

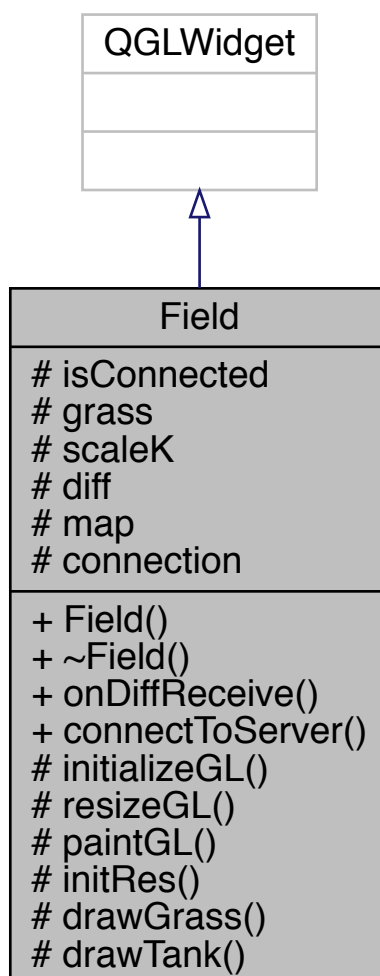
#### 1.6.1 Detailed Description

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

- `Core/diffs/diffelement.h`
- `Core/diffs/diffelement.cpp`

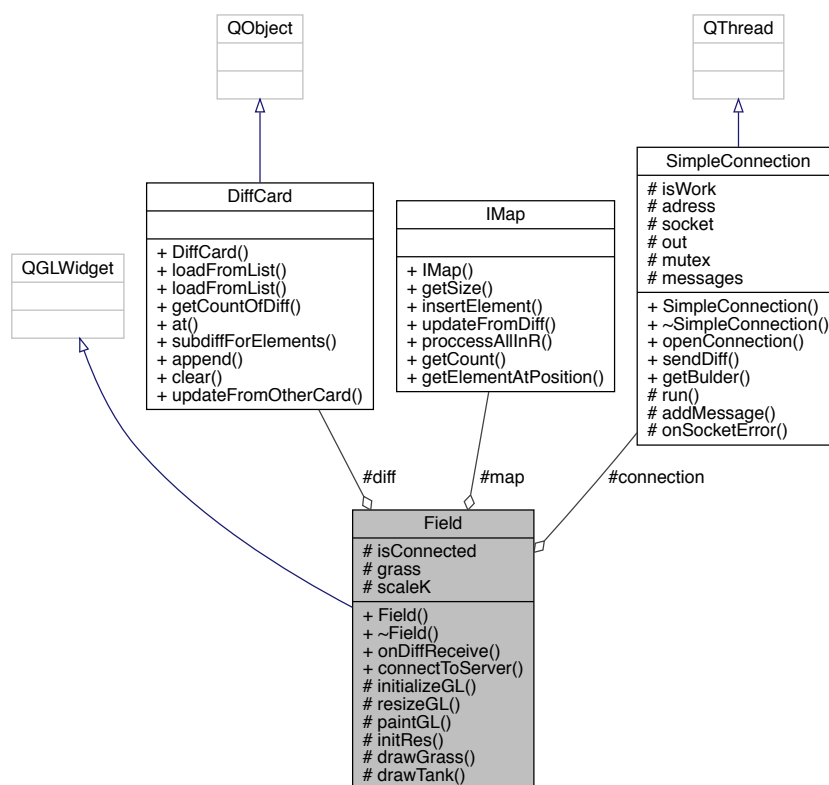
## 1.7 Field Class Reference

Inheritance diagram for Field:





Collaboration diagram for Field:



#### Public Slots

- void **onDiffReceive** (QList< **DiffElement** \*> \*diff)
- void **connectToServer** ()

#### Public Member Functions

- **Field** (QWidget \*parent=0)

#### Protected Member Functions

- void **initializeGL** () Q\_DECL\_OVERRIDE
- void **resizeGL** (int w, int h) Q\_DECL\_OVERRIDE
- void **paintGL** () Q\_DECL\_OVERRIDE
- void **initRes** ()
- void **drawGrass** (float x, float y)
- void **drawTank** (float x, float y)

#### Protected Attributes

- bool **isConnected** = false
- GLuint **grass**
- float **scaleK** = 0.02
- **DiffCard** \* **diff**
- **IMap** \* **map**
- **SimpleConnection** **connection**

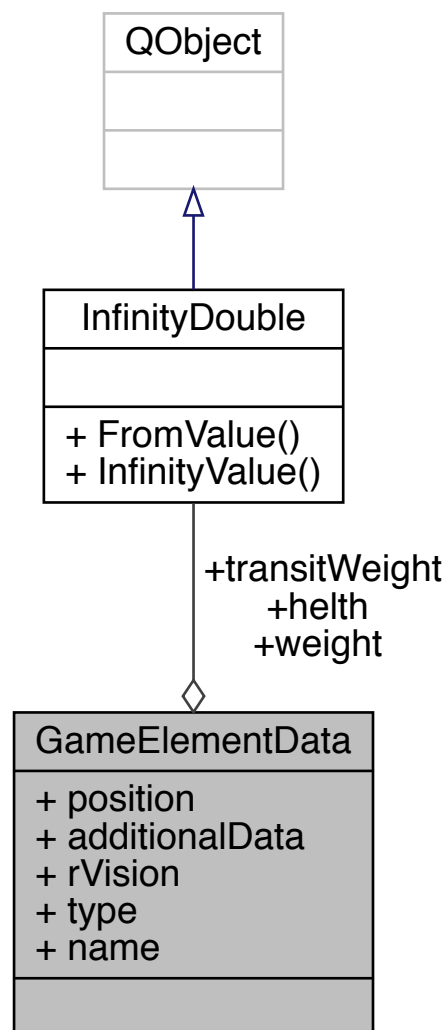
## 1.7.1 Detailed Description

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

- GameView/field.h
- GameView/field.cpp

## 1.8 GameElementData Struct Reference

Collaboration diagram for GameElementData:



## Public Attributes

- `QVector3D * position` = `new QVector3D(0, 0, 0)`
- `InfinityDouble * helth` = `InfinityDouble::FromValue(1)`
- `InfinityDouble * weight` = `InfinityDouble::FromValue(0)`
- `InfinityDouble * transitWeight` = `InfinityDouble::FromValue(0)`
- `QByteArray * additionalData` = `new QByteArray()`
- `qint32 rVision` = `1`
- `qint32 type` = `-1`
- `QString name` = `""`

### 1.8.1 Detailed Description

### 1.8.2 Member Data Documentation

#### 1.8.2.1 additionalData

```
QByteArray* GameElementData::additionalData = new QByteArray()
```

#### 1.8.2.2 helth

```
InfinityDouble* GameElementData::helth = InfinityDouble::FromValue(1)
```

#### 1.8.2.3 name

```
QString GameElementData::name = ""
```

#### 1.8.2.4 position

```
QVector3D* GameElementData::position = new QVector3D(0, 0, 0)
```

#### 1.8.2.5 rVision

```
qint32 GameElementData::rVision = 1
```

#### 1.8.2.6 transitWeight

```
InfinityDouble* GameElementData::transitWeight = InfinityDouble::FromValue(0)
```

## 1.8.2.7 type

```
qint32 GameElementData::type = -1
```

## 1.8.2.8 weight

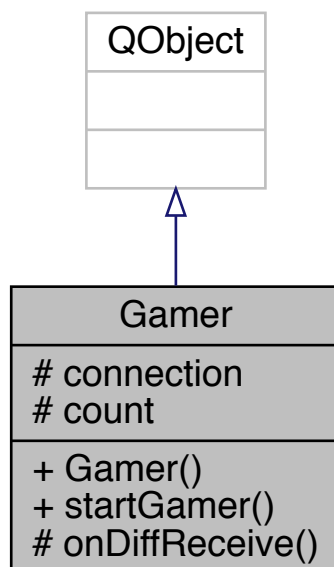
```
InfinityDouble* GameElementData::weight = InfinityDouble::FromValue(0)
```

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

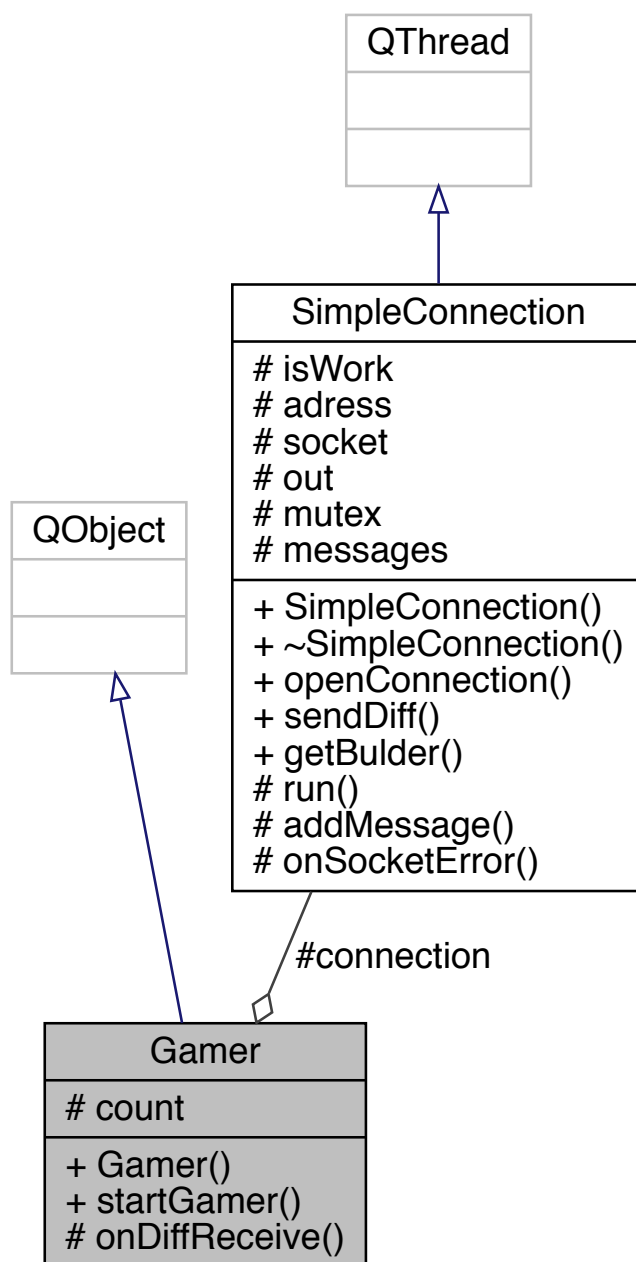
- Core/ibasegameelement.h

## 1.9 Gamer Class Reference

Inheritance diagram for Gamer:



Collaboration diagram for Gamer:



#### Public Member Functions

- **Gamer** (QObject \*parent=0)
- void **startGamer** ()

#### Protected Slots

- void **onDiffReceive** (QList< **DiffElement** \*> \*)

## Protected Attributes

- **SimpleConnection** connection
- int **count** = 0

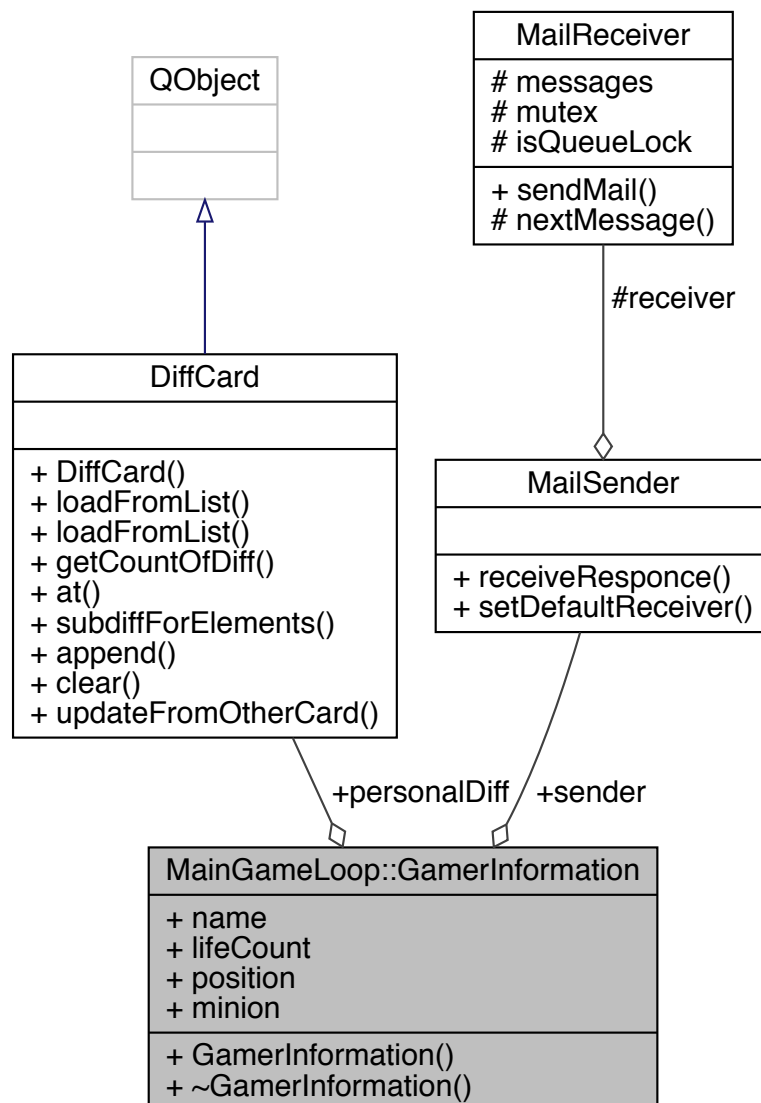
## 1.9.1 Detailed Description

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

- simpleGamer/gamer.h
- simpleGamer/gamer.cpp

## 1.10 MainGameLoop::GamerInformation Class Reference

Collaboration diagram for MainGameLoop::GamerInformation:



### Public Member Functions

- **GamerInformation** ( **IMap** \*map)

### Public Attributes

- **QString** **name**
- **uint64\_t** **lifeCount**
- **QVector3D** **position**
- **MailSender** \* **sender**
- **QList**< **IBaseGameElement** \* > \* **minion**
- **DiffCard** \* **personalDiff**

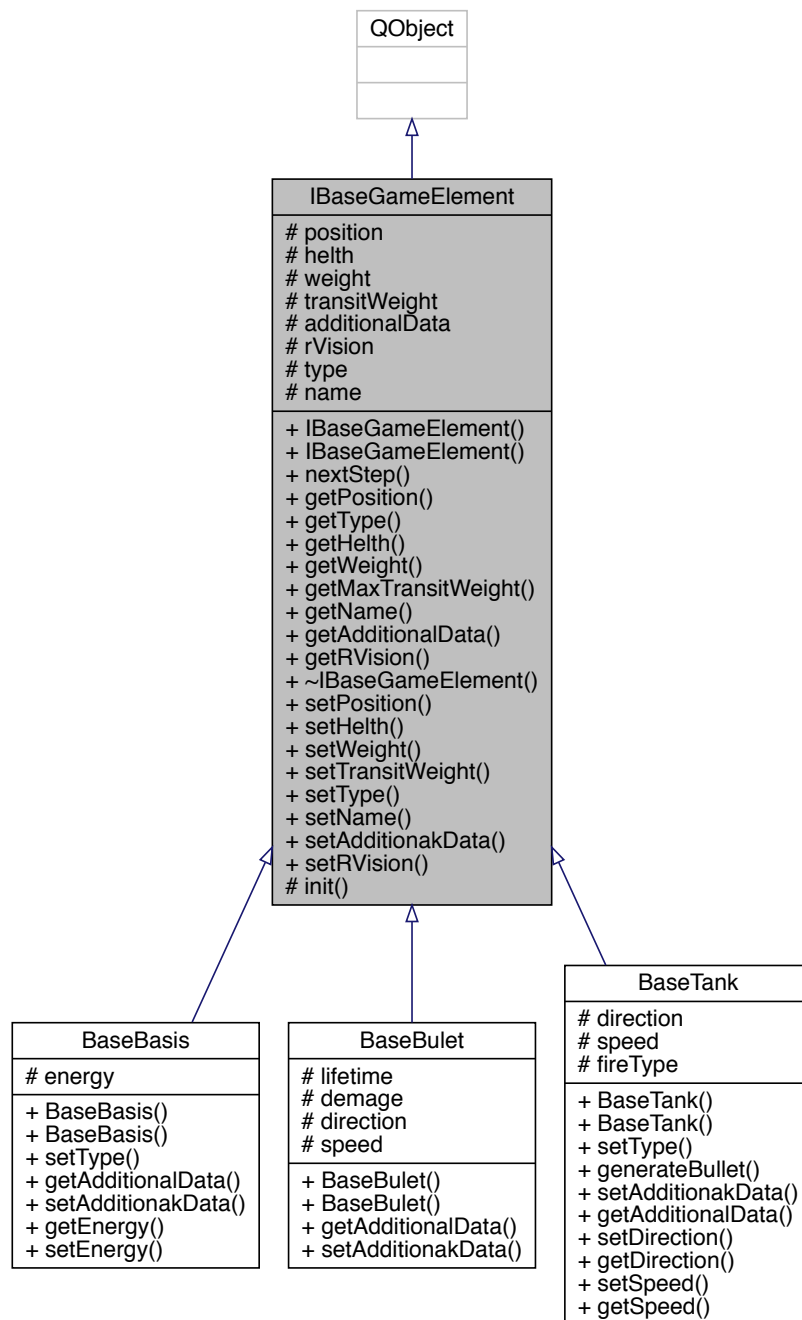
#### 1.10.1 Detailed Description

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

- Server/maingameloop.h
- Server/maingameloop.cpp

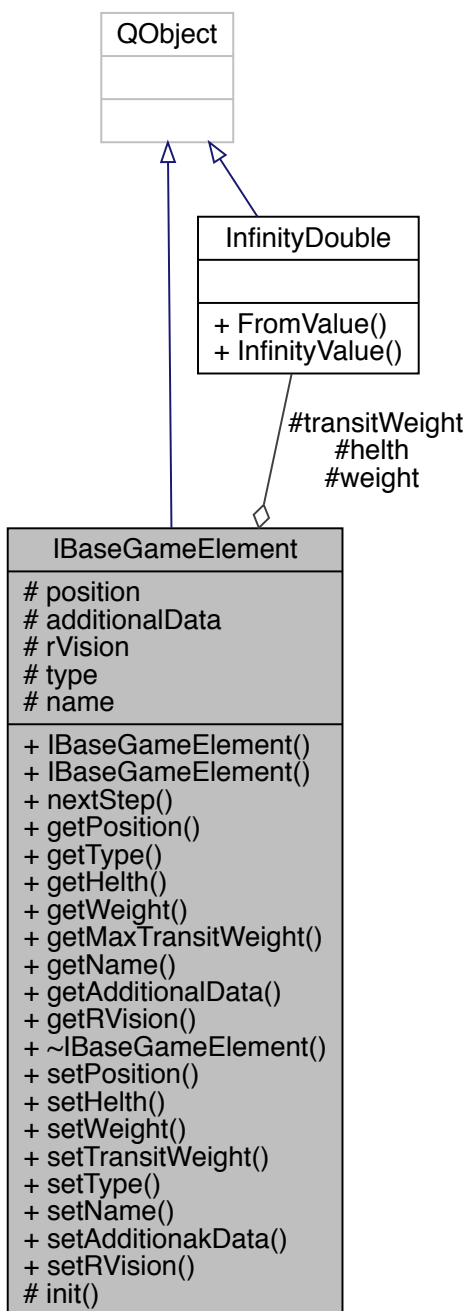
## 1.11 IBaseGameElement Class Reference

Inheritance diagram for IBaseGameElement:





Collaboration diagram for IBaseGameElement:



#### Public Member Functions

- **IBaseGameElement** ( **GameElementData** &data)
- virtual void **nextStep** ()
- virtual QVector3D \* **getPosition** () const
- virtual int **getType** () const
- virtual **InfinityDouble** \* **getHelth** () const

- virtual **InfinityDouble** \* **getWeight** () const
- virtual **InfinityDouble** \* **getMaxTransitWeight** () const
- virtual QString **getName** () const
- virtual QByteArray \* **getAdditionalData** () const
- virtual int **getRVision** () const
- virtual void **setPosition** (QVector3D \*value)
- virtual void **setHelth** ( **InfinityDouble** \*value)
- virtual void **setWeight** ( **InfinityDouble** \*value)
- virtual void **setTransitWeight** ( **InfinityDouble** \*value)
- virtual void **setType** (int value)
- virtual void **setName** (QString name)
- virtual void **setAdditionalData** (QByteArray \*data)
- virtual void **setRVision** (int \_rVison)

#### Protected Member Functions

- virtual void **init** ( **GameElementData** &data)

#### Protected Attributes

- QVector3D \* **position** = nullptr
- **InfinityDouble** \* **helth** = nullptr
- **InfinityDouble** \* **weight** = nullptr
- **InfinityDouble** \* **transitWeight** = nullptr
- QByteArray \* **additionalData** = nullptr
- int **rVision** = 1
- int **type** = -1
- QString **name**

#### Friends

- QDataStream & **operator**<< (QDataStream &stream, const **IBaseGameElement** &myclass)

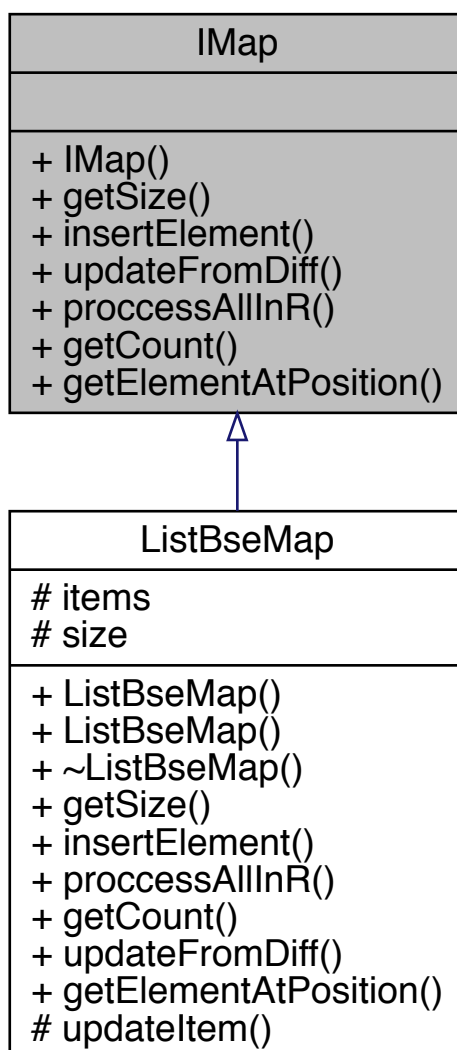
#### 1.11.1 Detailed Description

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

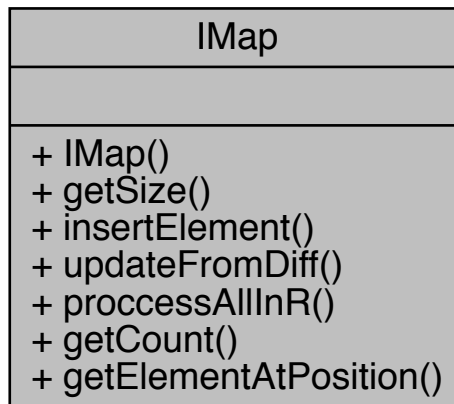
- Core/ibasegameelement.h
- Core/ibasegameelement.cpp

## 1.12 IMap Class Reference

Inheritance diagram for IMap:



Collaboration diagram for IMap:



#### Public Member Functions

- virtual QSizeF \* **getSize** ()=0
- virtual void **insertElement** ( **IBaseGameElement** \*element)=0
- virtual void **updateFromDiff** ( **DiffCard** \*diff)=0
- virtual void **proccessAllInR** ( **IBaseGameElement** \*element, double r, mapOperator)=0
- virtual int **getCount** ()=0
- virtual **IBaseGameElement** \* **getElementAtPosition** (int pos)=0

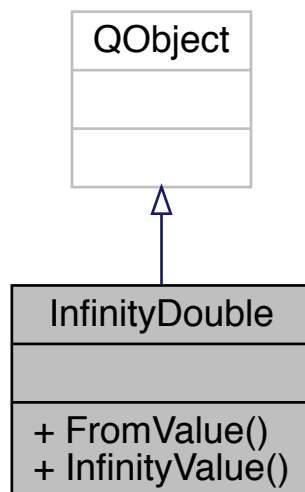
#### 1.12.1 Detailed Description

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

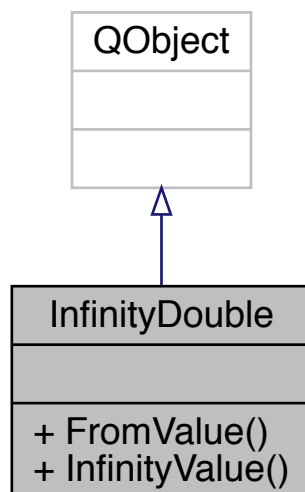
- Core/imap.h
- Core/imap.cpp

### 1.13 InfinityDouble Class Reference

Inheritance diagram for InfinityDouble:



Collaboration diagram for InfinityDouble:



#### Static Public Member Functions

- static **InfinityDouble** \* **FromValue** (double w)
- static **InfinityDouble** \* **InfinityValue** ()

## Friends

- QDataStream & **operator**<< (QDataStream &stream, const **InfinityDouble** &myclass)
- QDataStream & **operator**>> (QDataStream &stream, **InfinityDouble** &myclass)

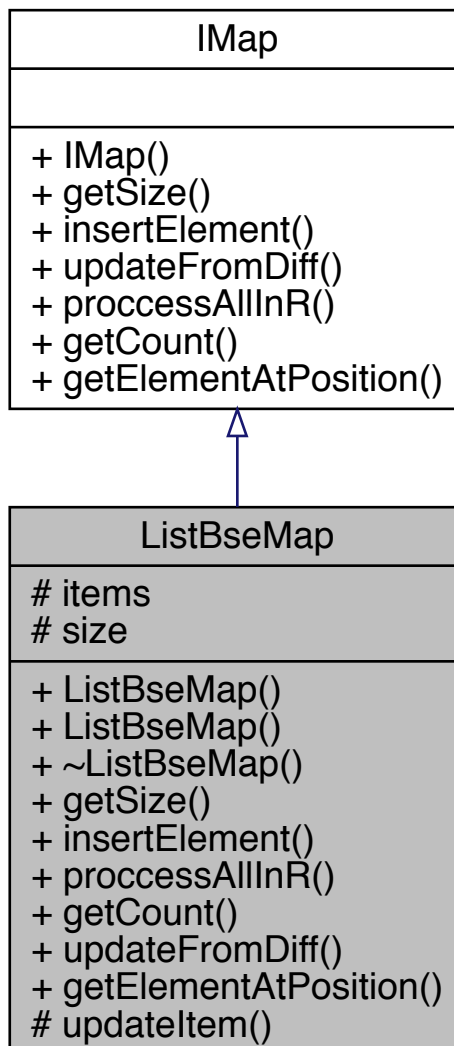
## 1.13.1 Detailed Description

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

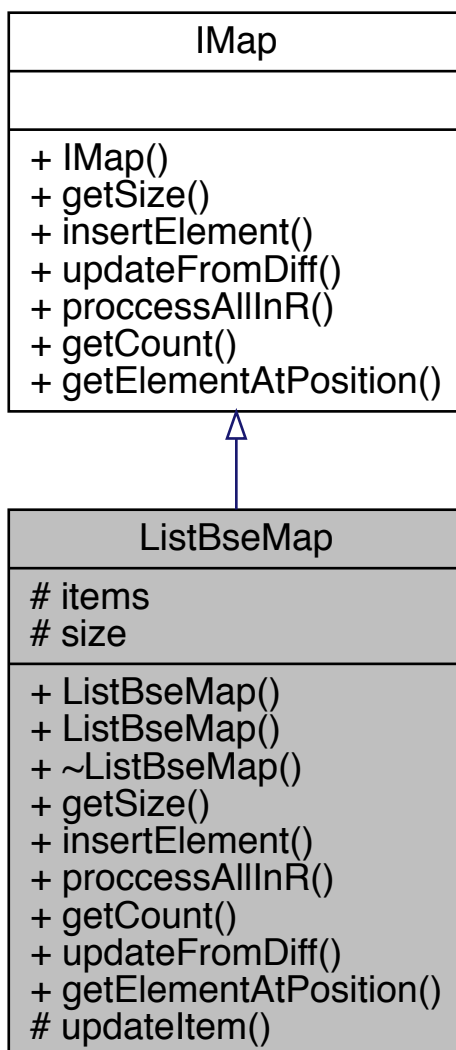
- Core/infinitydouble.h
- Core/infinitydouble.cpp

## 1.14 ListBseMap Class Reference

Inheritance diagram for ListBseMap:



Collaboration diagram for ListBseMap:



#### Public Member Functions

- **ListBseMap** (double width, double heighth)
- virtual QSizeF \* **getSize** ()
- virtual void **insertElement** ( **IBaseGameElement** \*element)
- virtual void **proccessAllInR** ( **IBaseGameElement** \*element, double r, mapOperator op)
- virtual int **getCount** ()
- virtual void **updateFromDiff** ( **DiffCard** \*diff)
- **IBaseGameElement** \* **getElementAtPosition** (int pos)

#### Protected Member Functions

- void **updateItem** ( **IBaseGameElement** \*gameEleement, bool isReplace=true)  
*updateItem update items in map*

## Protected Attributes

- `QList< IBaseGameElement * > * items`
- `QSizeF * size`

## 1.14.1 Detailed Description

## 1.14.2 Member Function Documentation

## 1.14.2.1 updateItem()

```
void ListBseMap::updateItem (
    IBaseGameElement * gameElement,
    bool isReplace = true ) [protected]
```

updateItem update items in map

## Parameters

<i>gameElement</i>	element with information for update
<i>isReplace</i>	if true than replace old item with . Otherway delete from map list

```
00062                                     {
00063     for (int i = 0; i < items->size(); i++) {
00064         if ((items->at(i)->getName()) == (gameElement->getName())) {
00065             delete items->at(i);
00066             items->removeAt(i);
00067             if (isReplace)
00068                 items->append(gameElement);
00069             else
00070                 delete gameElement;
00071         }
00072     }
00073 }
```

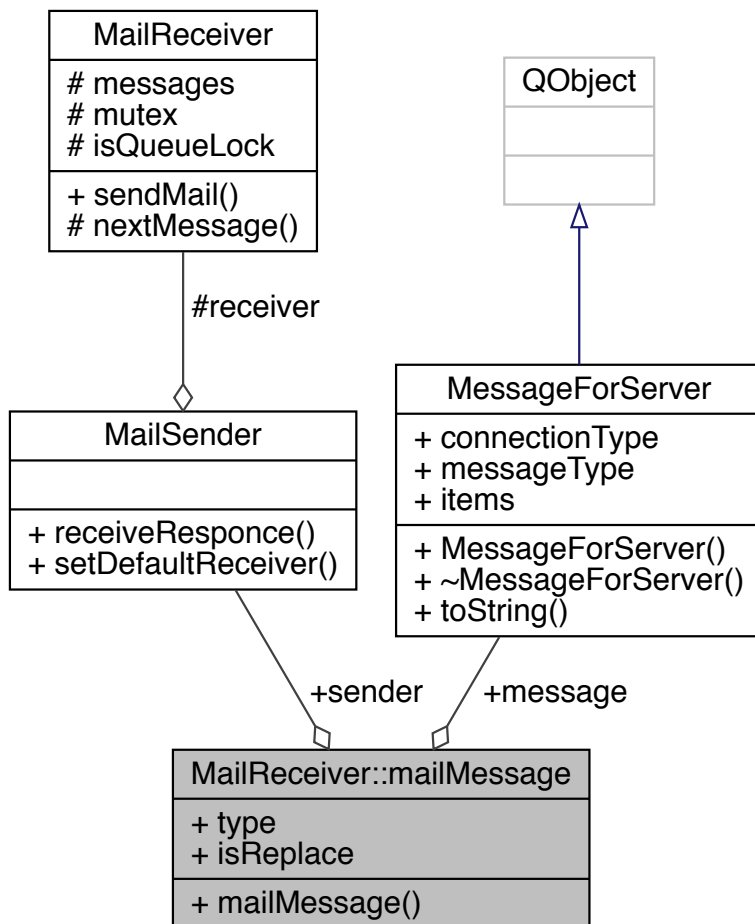
The documentation for this class was generated from the following files:

- `Core/maps/listbsemap.h`
- `Core/maps/listbsemap.cpp`



### 1.15 MailReceiver::mailMessage Class Reference

Collaboration diagram for MailReceiver::mailMessage:



#### Public Member Functions

- **mailMessage** ( **MessageForServer** \*message, **MailSender** \*sender, int type, bool isReplace=true)

#### Public Attributes

- **MessageForServer** \* message
- **MailSender** \* sender
- int type
- bool isReplace

#### Friends

- QDebug **operator**<< (QDebug debug, const **mailMessage** &c)

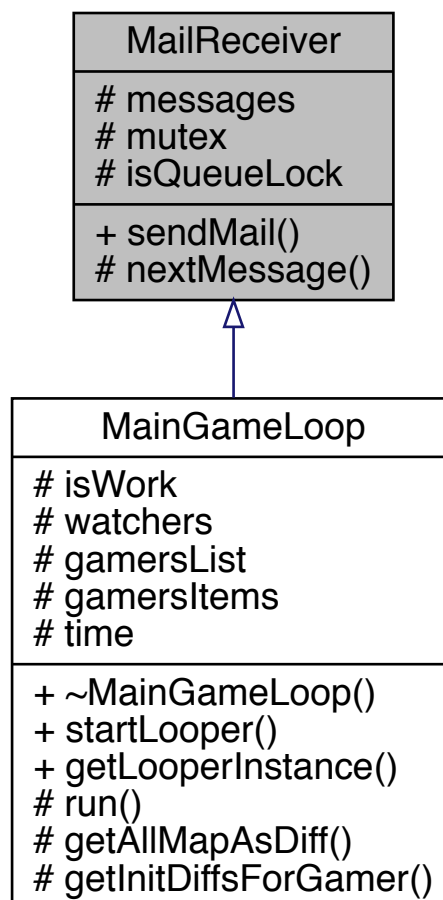
## 1.15.1 Detailed Description

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

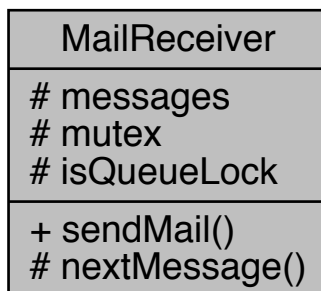
- Core/connection/mailboxelement.h
- Core/connection/mailboxelement.cpp

## 1.16 MailReceiver Class Reference

Inheritance diagram for MailReceiver:



Collaboration diagram for MailReceiver:



#### Classes

- class **mailMessage**

#### Public Member Functions

- virtual void **sendMail** ( **MessageForServer** \*message, **MailSender** \*sender, int type, bool isReplace=true)

#### Protected Member Functions

- virtual **mailMessage** \* **nextMessage** ()

#### Protected Attributes

- QQueue< **mailMessage** \* > **messages**
- QMutex **mutex**
- volatile bool **isQueueLock** = false

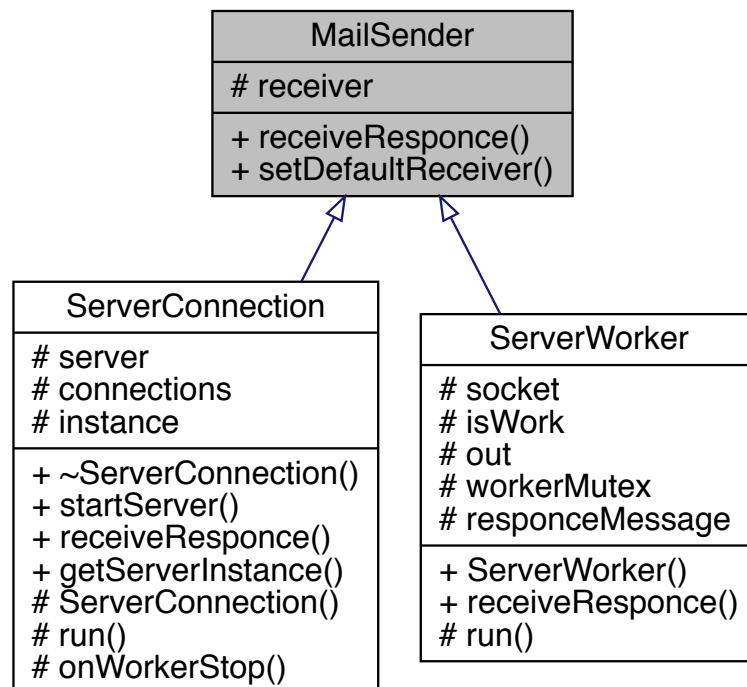
#### 1.16.1 Detailed Description

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

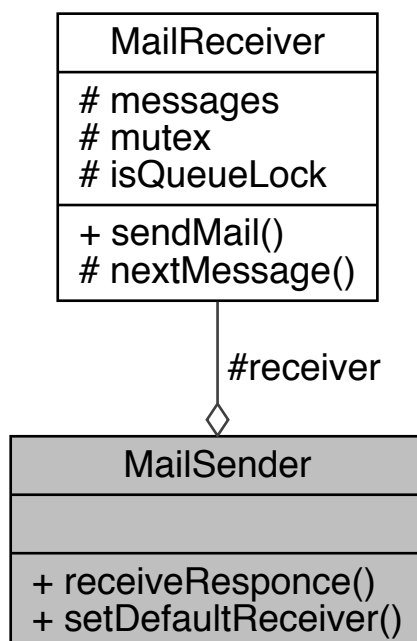
- Core/connection/mailboxelement.h
- Core/connection/mailboxelement.cpp

## 1.17 MailSender Class Reference

Inheritance diagram for MailSender:



Collaboration diagram for MailSender:



#### Public Member Functions

- virtual void **receiveResponse** ( **DiffCard** \*diff, **MessageForServer** \*message)=0
- virtual void **setDefaultReceiver** ( **MailReceiver** \*receiver)

#### Protected Attributes

- **MailReceiver** \* **receiver**

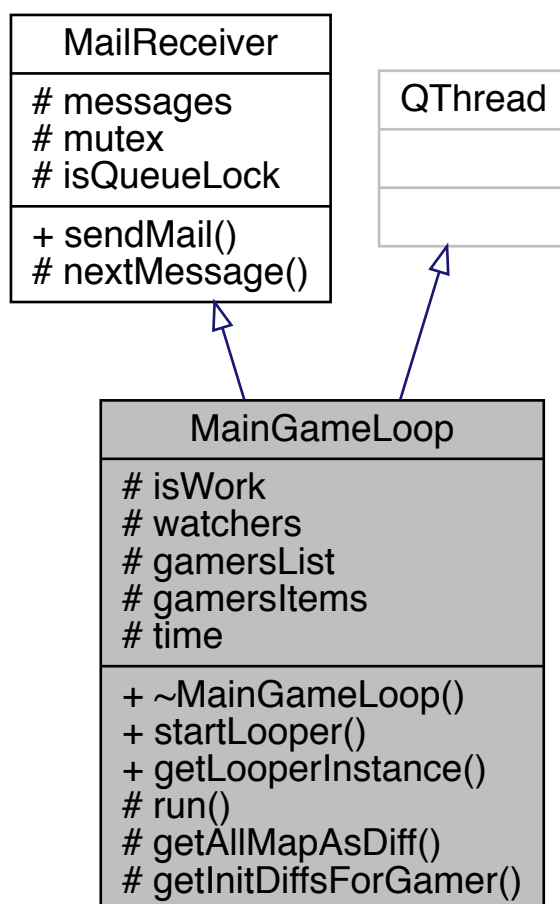
#### 1.17.1 Detailed Description

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

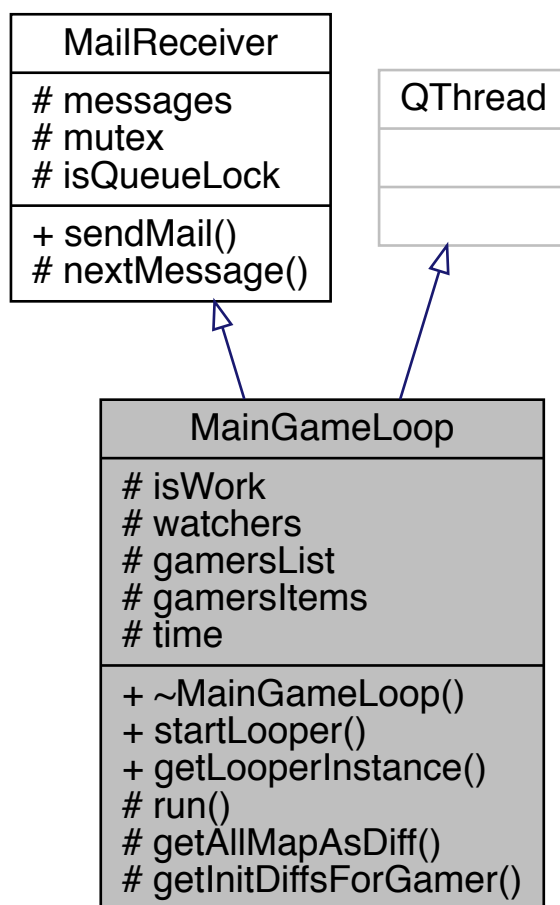
- Core/connection/mailboxelement.h

## 1.18 MainGameLoop Class Reference

Inheritance diagram for MainGameLoop:



Collaboration diagram for MainGameLoop:



#### Classes

- class **GamerInformation**
- class **WathcerInformation**

#### Public Member Functions

- void **startLooper** ()
- virtual void **sendMail** ( **MessageForServer** \*message, **MailSender** \*sender, int type, bool isReplace=true)

#### Static Public Member Functions

- static **MainGameLoop** \* **getLooperInstance** ()

## Protected Member Functions

- void **run** ()
- **DiffCard \* getAllMapAsDiff** ()
- QList< **DiffElement \* > \* getInitDiffsForGamer** ( **BaseBasis \*basis**)
- virtual **mailMessage \* nextMessage** ()

## Protected Attributes

- bool **isWork** = true
- QList< **WathcerInformation \* > watchers**
- QList< **GamerInformation \* > gamersList**  
*gamersList*
- QList< QList< **IBaseGameElement \* > \* > gamersItems**  
*gamersItems*
- uint64\_t **time**
- QQueue< **mailMessage \* > messages**
- QMutex **mutex**
- volatile bool **isQueueLock** = false

## 1.18.1 Detailed Description

## 1.18.2 Member Data Documentation

## 1.18.2.1 gamersItems

```
QList<QList< IBaseGameElement*>*> MainGameLoop::gamersItems [protected]
```

gamersItems

list of gamer object; Each list represent game element of each gamer; firs element of each gamer object is basis

## 1.18.2.2 gamersList

```
QList< GamerInformation*> MainGameLoop::gamersList [protected]
```

gamersList

list of client as gamers

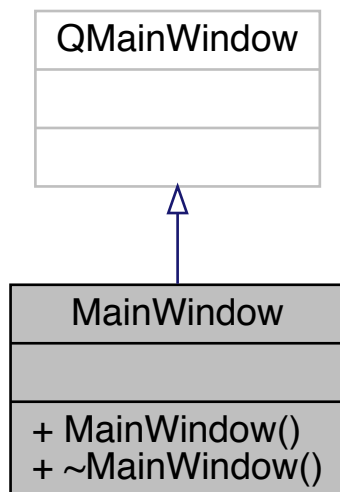
The documentation for this class was generated from the following files:

- Server/maingameloop.h
- Server/maingameloop.cpp

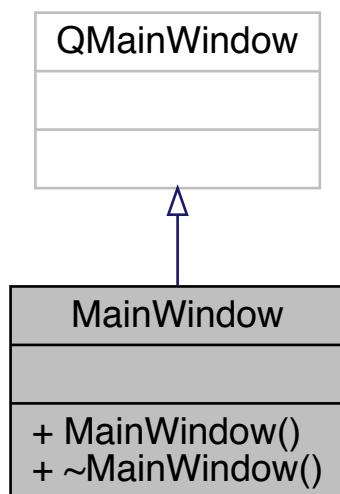


### 1.19 MainWindow Class Reference

Inheritance diagram for MainWindow:



Collaboration diagram for MainWindow:



#### Public Member Functions

- **MainWindow** (QWidget \*parent=0)

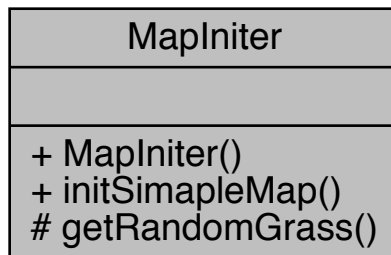
### 1.19.1 Detailed Description

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

- GameView/mainwindow.h
- GameView/mainwindow.cpp

## 1.20 MapIniter Class Reference

Collaboration diagram for MapIniter:



### Public Member Functions

- **IMap \* initSimapleMap ()**

### Protected Member Functions

- **IBaseGameElement \* getRandomGrass** (double maxWidth, double maxHeigth)

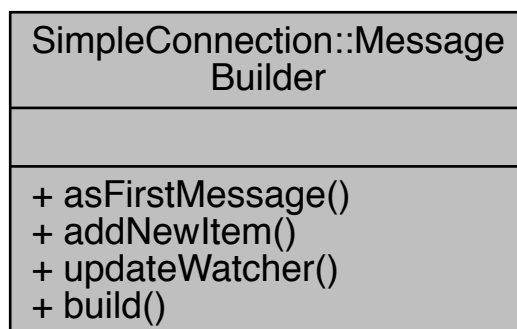
### 1.20.1 Detailed Description

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

- Server/mapiniter.h
- Server/mapiniter.cpp

## 1.21 SimpleConnection::MessageBuilder Class Reference

Collaboration diagram for SimpleConnection::MessageBuilder:



### Public Member Functions

- **MessageBuilder \* asFirstMessage** (eConnectionType type)
- **MessageBuilder \* addNewItem** (QList< **IBaseGameElement** \*> \*newElements)
- **MessageBuilder \* updateWatcher** ()
- void **build** ()

### Friends

- class **SimpleConnection**

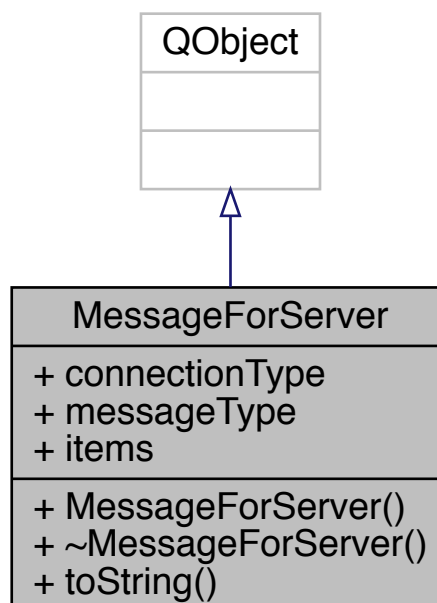
### 1.21.1 Detailed Description

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

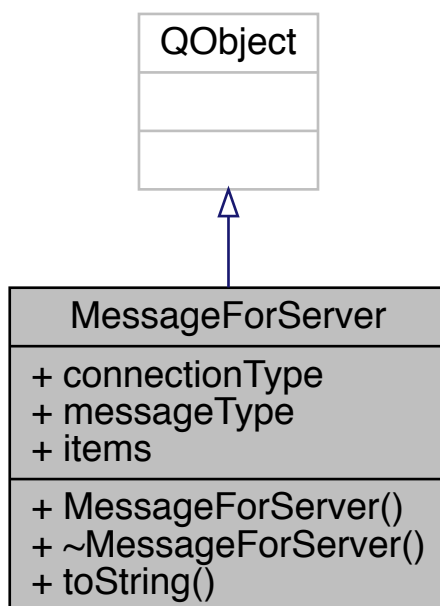
- Core/connection/simpleconnection.h
- Core/connection/simpleconnection.cpp

## 1.22 MessageForServer Class Reference

Inheritance diagram for MessageForServer:



Collaboration diagram for MessageForServer:



#### Public Member Functions

- QString **toString** ()

#### Public Attributes

- eConnectionType **connectionType**
- eMessageType **messageType**
- QList< **IBaseGameElement** \* > \* **items**

#### Friends

- QDataStream & **operator**<< (QDataStream &stream, const **MessageForServer** &myclass)
- QDataStream & **operator**>> (QDataStream &stream, **MessageForServer** &myclass)
- QDebug **operator**<< (QDebug debug, **MessageForServer** &c)

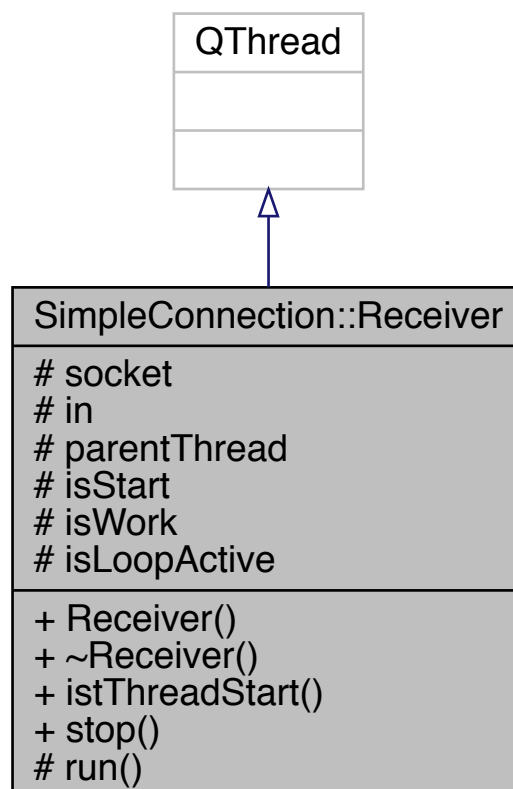
#### 1.22.1 Detailed Description

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

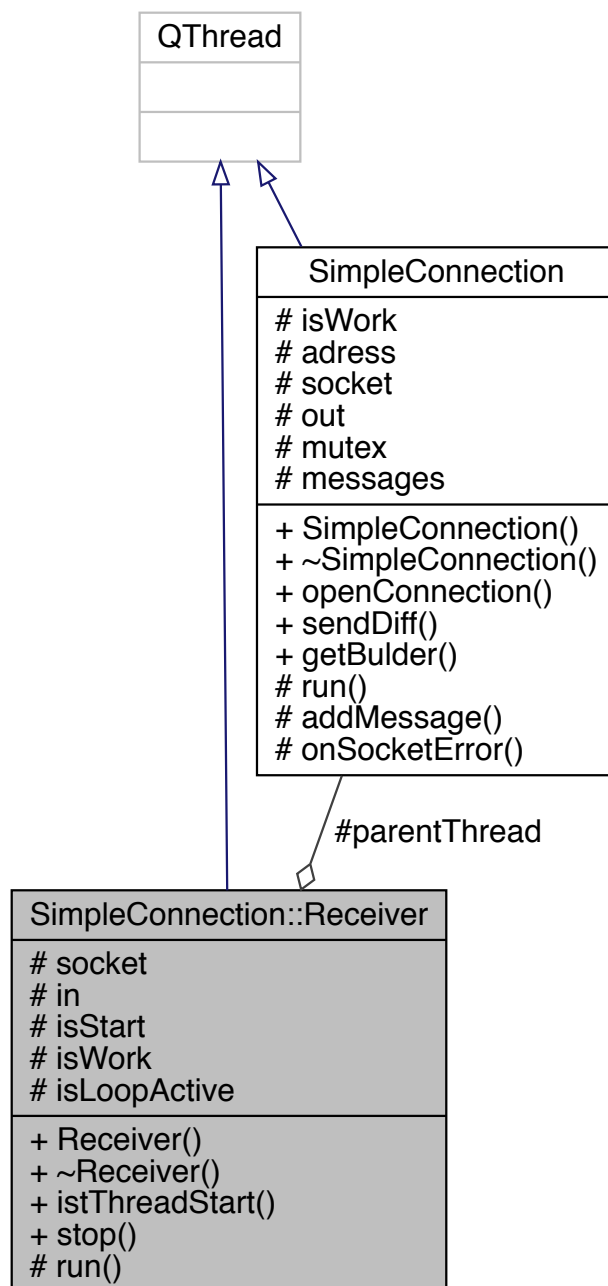
- Core/connection/simpleconnection.h
- Core/connection/simpleconnection.cpp

## 1.23 SimpleConnection::Receiver Class Reference

Inheritance diagram for SimpleConnection::Receiver:



Collaboration diagram for SimpleConnection::Receiver:



#### Public Member Functions

- **Receiver** (QTcpSocket \*socket, **SimpleConnection** \*parentThread, QObject \*parent=0)
- bool **istThreadStart** ()
- void **stop** ()

#### Protected Member Functions

- void **run** ()

## Protected Attributes

- QTcpSocket \* **socket**
- QDataStream \* **in**
- **SimpleConnection** \* **parentThread**
- volatile bool **isStart** = false
- volatile bool **isWork** = true
- volatile bool **isLoopActive** = false

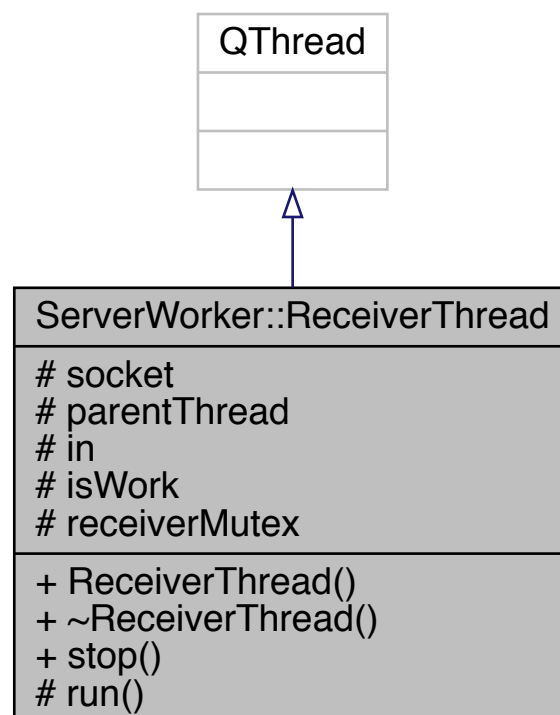
## 1.23.1 Detailed Description

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

- Core/connection/simpleconnection.h
- Core/connection/simpleconnection.cpp

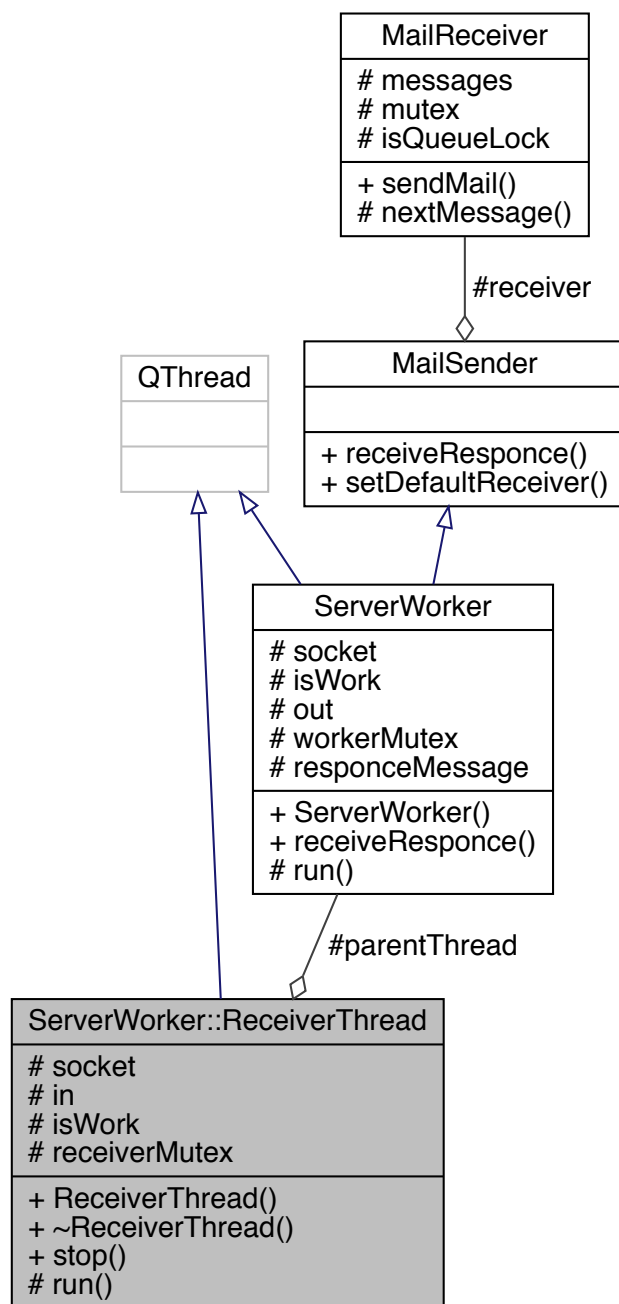
## 1.24 ServerWorker::ReceiverThread Class Reference

Inheritance diagram for ServerWorker::ReceiverThread:





Collaboration diagram for ServerWorker::ReceiverThread:



#### Public Member Functions

- **ReceiverThread** ( **ServerWorker** \*parent, QTcpSocket \*socket)
- void **stop** ()

#### Protected Member Functions

- void **run** ()

## Protected Attributes

- QTcpSocket \* **socket**
- **ServerWorker** \* **parentThread**
- QDataStream \* **in**
- bool **isWork** = true
- QMutex **receiverMutex**

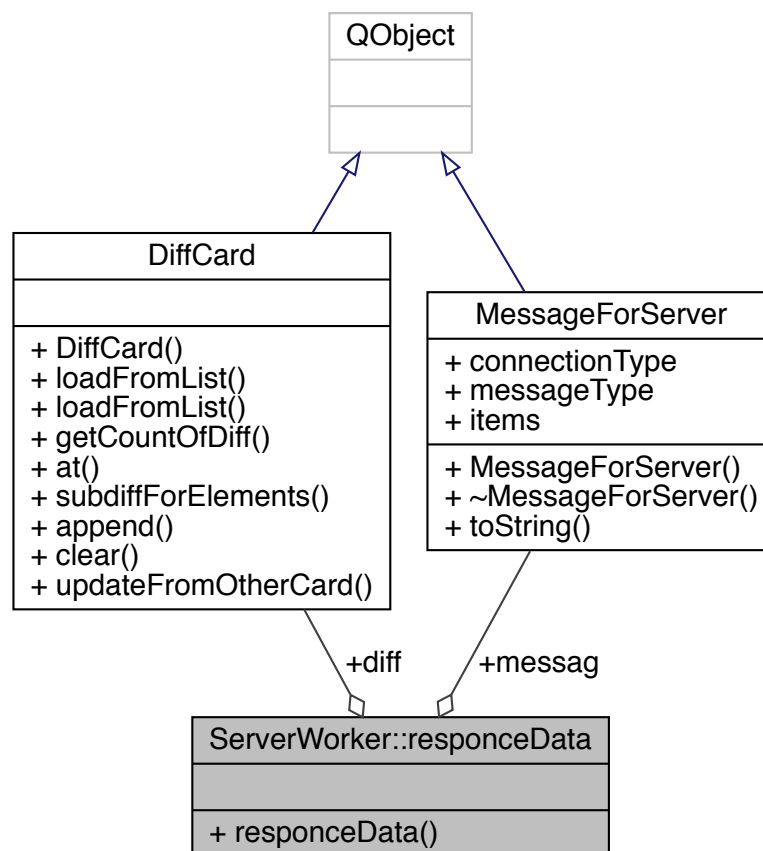
## 1.24.1 Detailed Description

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

- Server/serverworker.h
- Server/serverworker.cpp

## 1.25 ServerWorker::responseData Struct Reference

Collaboration diagram for ServerWorker::responseData:



## Public Member Functions

- **responseData** ( **DiffCard** \*\_diff, **MessageForServer** \*\_messag)

## Public Attributes

- **DiffCard** \* **diff**
- **MessageForServer** \* **messag**

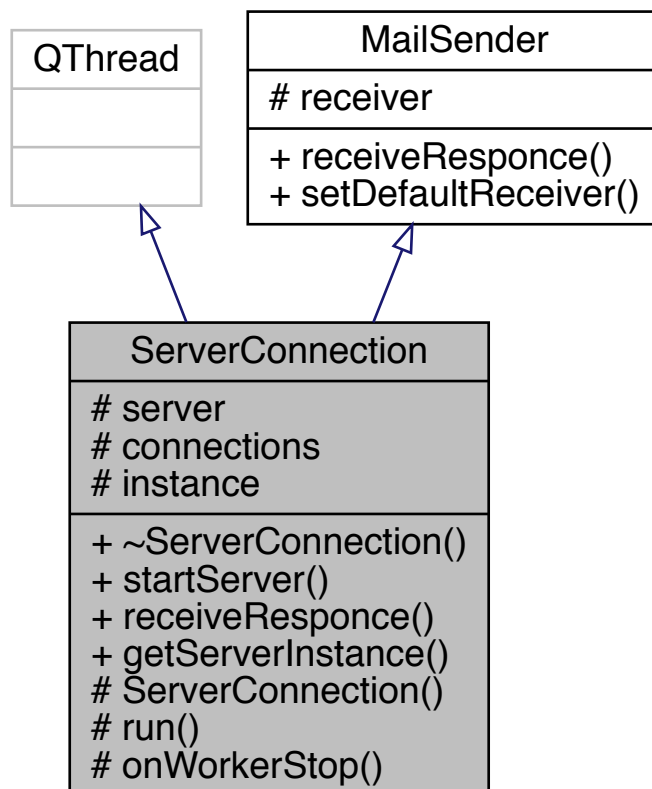
## 1.25.1 Detailed Description

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

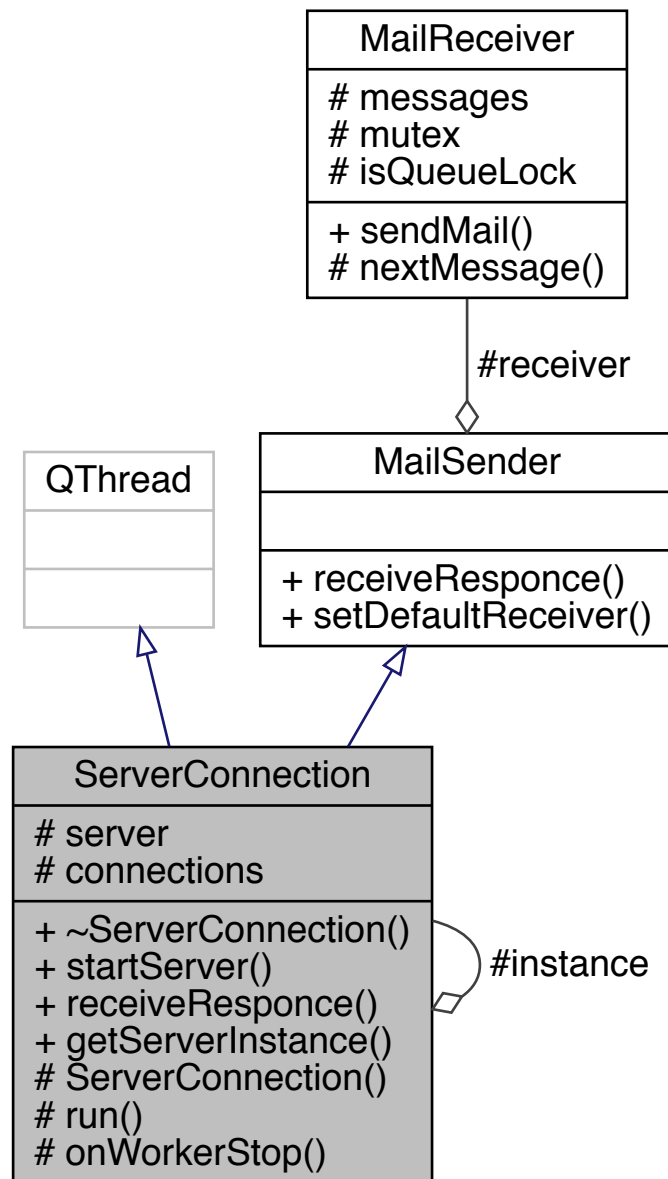
- Server/serverworker.h

## 1.26 ServerConnection Class Reference

Inheritance diagram for ServerConnection:



Collaboration diagram for ServerConnection:



#### Signals

- void **onServerError** (serverError error)

#### Public Member Functions

- void **startServer** ()
- void **receiveResponse** ( DiffCard \*diff, MessageForServer \*message)
- virtual void **setDefaultReceiver** ( MailReceiver \*receiver)

#### Static Public Member Functions

- static **ServerConnection** \* **getServerInstance** ()

#### Protected Slots

- void **onWorkerStop** ( **ServerWorker** \*worker)

#### Protected Member Functions

- void **run** ()

#### Protected Attributes

- QTcpServer \* **server**
- QList< **ServerWorker** \* > \* **connections**
- **MailReceiver** \* **receiver**

#### Static Protected Attributes

- static **ServerConnection** \* **instance** = nullptr

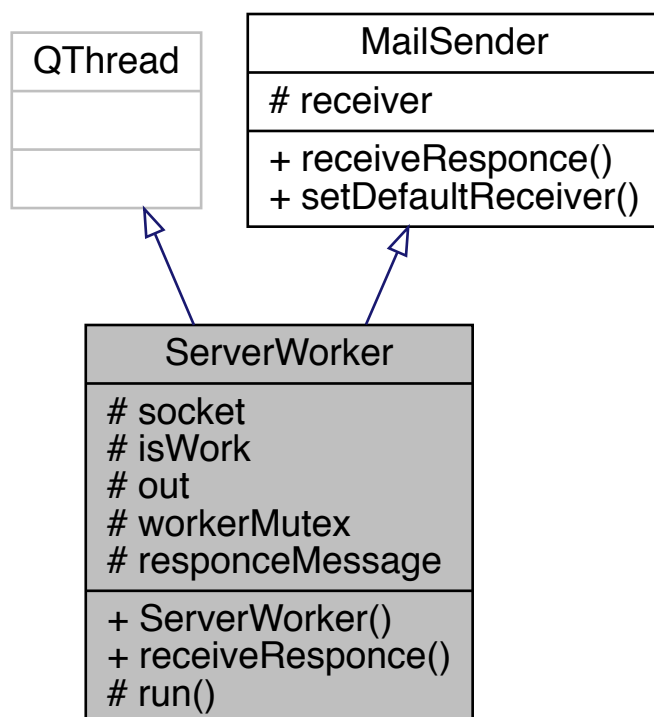
#### 1.26.1 Detailed Description

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

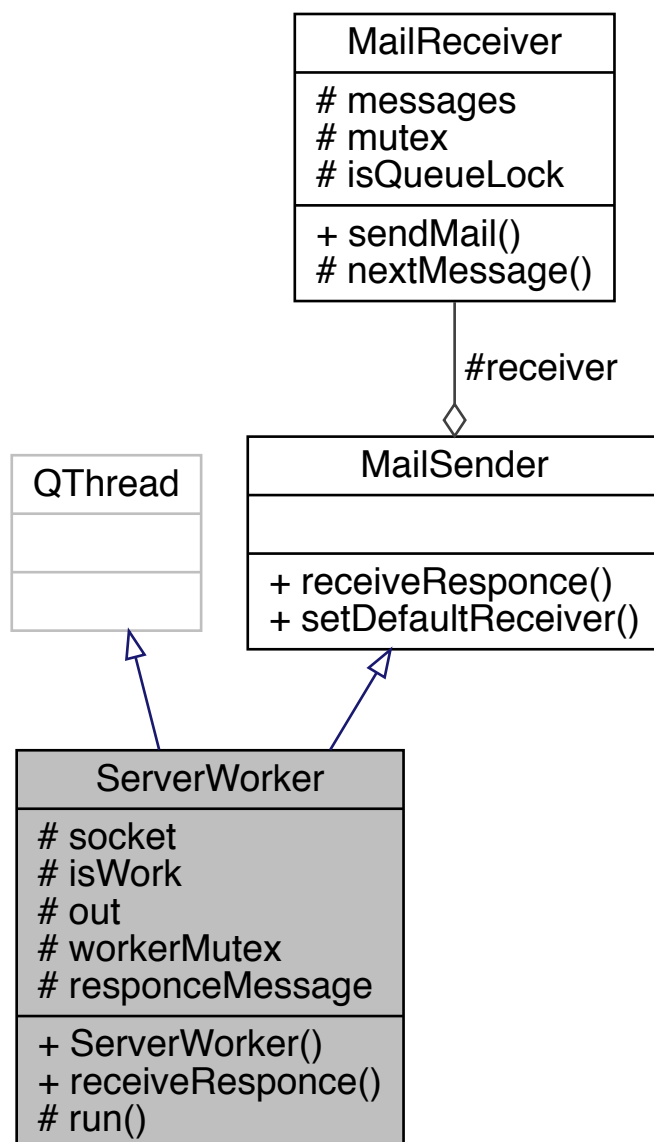
- Server/serverconnection.h
- Server/serverconnection.cpp

## 1.27 ServerWorker Class Reference

Inheritance diagram for ServerWorker:



Collaboration diagram for ServerWorker:



#### Classes

- class **ReceiverThread**
- struct **responseData**

#### Signals

- void **onStop** ( **ServerWorker** \*worker)

### Public Member Functions

- **ServerWorker** (QTcpSocket \*socket)
- void **receiveResponse** ( **DiffCard** \*diff, **MessageForServer** \*message)
- virtual void **setDefaultReceiver** ( **MailReceiver** \*receiver)

### Protected Member Functions

- void **run** ()

### Protected Attributes

- QTcpSocket \* **socket**
- volatile bool **isWork** = true
- QDataStream \* **out**
- QMutex **workerMutex**
- QQueue< **responseData** > **responseMessage**
- **MailReceiver** \* **receiver**

### Friends

- class **receiveResponseThread**

#### 1.27.1 Detailed Description

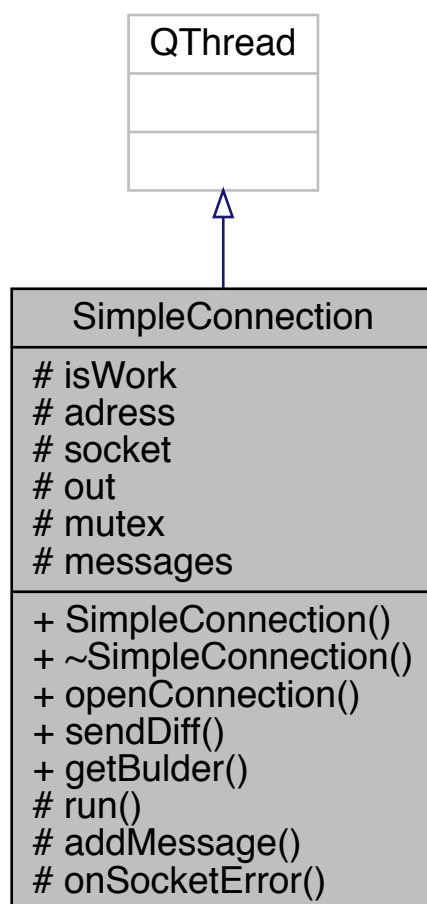
The documentation for this class was generated from the following files:

- Server/serverworker.h
- Server/serverworker.cpp

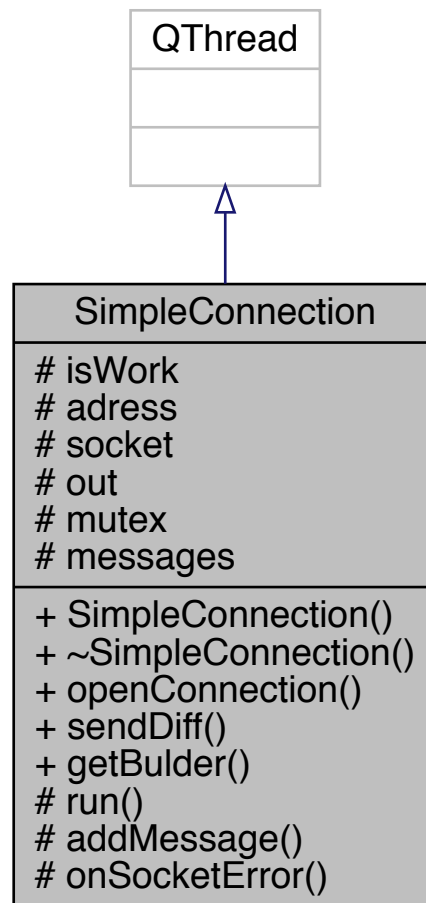


## 1.28 SimpleConnection Class Reference

Inheritance diagram for SimpleConnection:



Collaboration diagram for SimpleConnection:



#### Classes

- class **MessageBuilder**
- class **Receiver**

#### Signals

- void **onDiffReceive** (QList< **DiffElement** \*> \*diffs)

#### Public Member Functions

- **SimpleConnection** (QHostAddress adress, QObject \*parent=0)
- void **openConnection** ()
- void **sendDiff** (QList< **DiffElement** \*> \*diffs)
- **MessageBuilder** \* **getBulder** ()

#### Protected Slots

- void **onSocketError** (QAbstractSocket::SocketError error)

#### Protected Member Functions

- void **run** ()
- void **addMessage** ( **MessageBuilder** \*messages)

#### Protected Attributes

- volatile bool **isWork** = true
- QHostAddress **address**
- QTcpSocket \* **socket**
- QDataStream \* **out**
- QMutex **mutex**
- QQueue< **MessageForServer** \* > **messages**

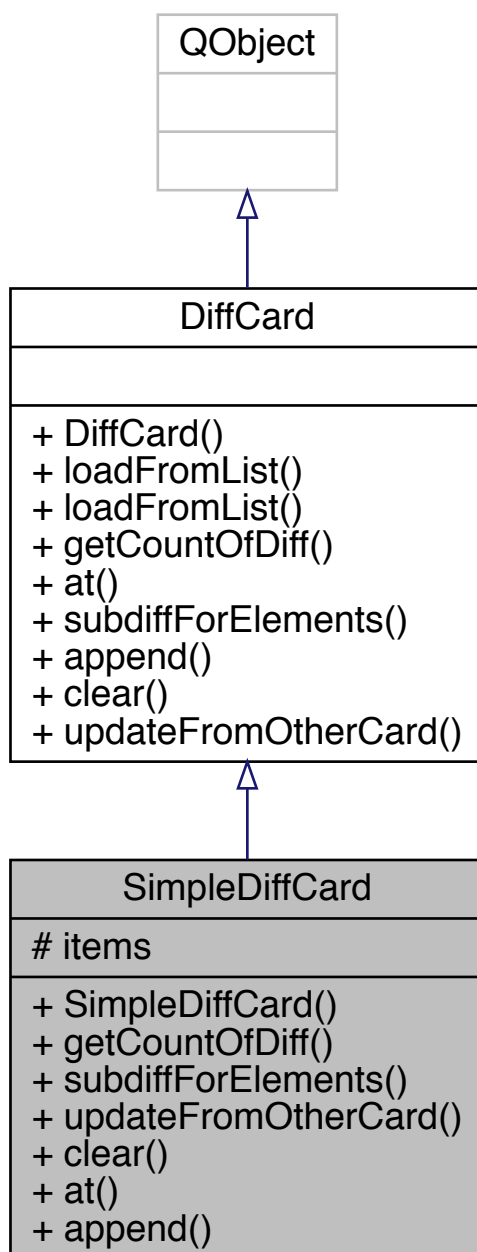
#### 1.28.1 Detailed Description

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

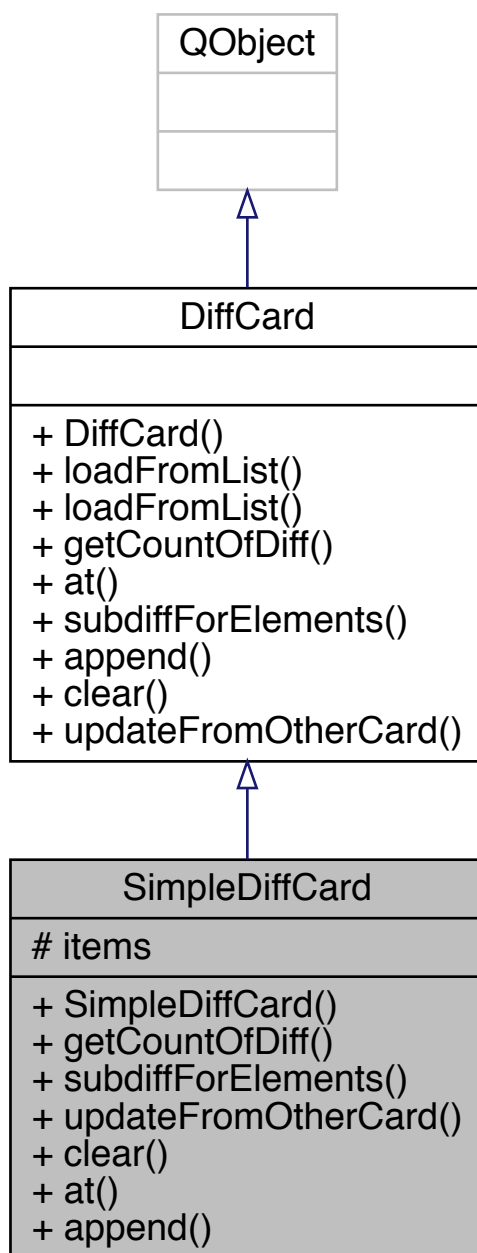
- Core/connection/simpleconnection.h
- Core/connection/simpleconnection.cpp

## 1.29 SimpleDiffCard Class Reference

Inheritance diagram for SimpleDiffCard:



Collaboration diagram for SimpleDiffCard:



#### Public Member Functions

- virtual int **getCountOfDiff** ()
- virtual **DiffCard** \* **subdiffForElements** (QList< **IBaseGameElement** \*> items)
- virtual void **updateFromOtherCard** ( **DiffCard** \*card)
- virtual void **clear** ()
- virtual **DiffElement** \* **at** (int i)

- virtual void **append** ( **DiffElement** \*diff)
- virtual void **loadFromList** (QList< **DiffElement** \*> &newItems)
- virtual void **loadFromList** (QList< **DiffElement** \*> \*newItems)

#### Protected Attributes

- QList< **DiffElement** \* > **items**

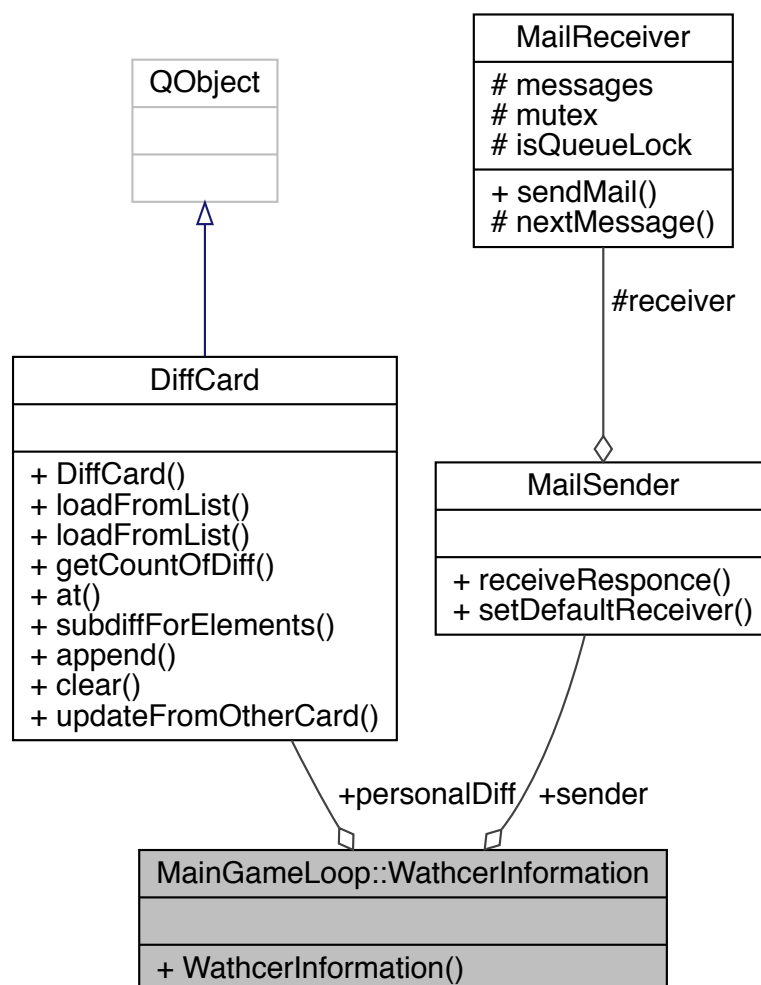
#### 1.29.1 Detailed Description

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

- Core/diffs/simplifiediffcard.h
- Core/diffs/simplifiediffcard.cpp

### 1.30 MainGameLoop::WathcerInformation Class Reference

Collaboration diagram for MainGameLoop::WathcerInformation:



**Public Attributes**

- **MailSender** \* **sender**
- **DiffCard** \* **personalDiff**

**1.30.1 Detailed Description**

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

- Server/maingameloop.h