QLockButton

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

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

QWidget
    QLockButton 5

Chapter 2

Class Index

2.1 Class List

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

QLockButton
QLockButton class 5

Chapter 3

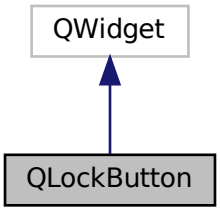
Class Documentation

3.1 QLockButton Class Reference

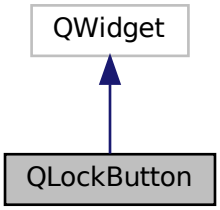
QLockButton class.

`#include <qlockbutton.h>`

Inheritance diagram for QLockButton:



Collaboration diagram for QLockButton:



Public Types

- enum Mode { Mode::SingleShot = 0, Mode::MultiShot }

  LockButton function Mode.
- enum Status { Status::Unlocked = 0, Status::Locked }

  LockButton status.

Signals

- void success (QLockButton::Status status)

  signal successful change in status.
- void fail (int remainingTime)

  signal unsuccessful attempt.
- void lockTimeoutChanged ()

  signal change in lockTimeout property value.
- void unlockTimeoutChanged ()

  signal change in unlockTimeout property value.
- void borderWidthChanged ()

  signal change in borderWidth property value.
- void statusChanged ()

  signal change in status property value.
- void modeChanged ()

  signal change in mode property value.
- void innerColorChanged ()

  signal innerColor in mode property value.
- void backgroundColorChanged ()

  signal backgroundColor in mode property value.
- void borderColorChanged ()

  signal borderColor in mode property value.
- void fillStartColorChanged ()

  signal fillStartColor in mode property value.
- void fillEndColorChanged ()

  signal fillEndColor in mode property value.

Public Member Functions

- QLockButton (QWidget *parent=0)

  Construct a new QLockButton object.
- ~QLockButton ()

  Destroy the QLockButton object.
- int lockTimeout () const

  lockTimeout property getter.
- void setLockTimeout (int lockTimeout)

  lockTimeout property setter.
- int unlockTimeout () const

  unlockTimeout property getter.
- void setUnlockTimeout (int unlockTimeout)

  unlockTimeout property setter.
- int borderWidth () const

borderWidth property getter.

- void setBorderWidth (int borderWidth)

  borderWidth property setter.

- Status status () const

  status property getter.

- void setStatus (Status status)

  status property setter.

- Mode mode () const

  mode property getter.

- void setMode (Mode mode)

  mode property setter.

- void reset ()

  reset internal status.

- QColor innerColor () const

  innerColor property getter.

- void setInnerColor (const QColor &innerColor)

  innerColor propery setter.

- QColor backgroundColor () const

  backgroundColor property getter.

- void setBackgroundColor (const QColor &backgroundColor)

  backgroundColor property setter.

- QColor borderColor () const

  borderColor property getter.

- void setBorderColor (const QColor &borderColor)

  borderColor property setter.

- QColor fillStartColor () const

  fillStartColor property getter.

- void setFillStartColor (const QColor &fillStartColor)

  fillStartColor property setter.

- QColor fillEndColor () const

  fillEndColor property getter.

- void setFillEndColor (const QColor &fillEndColor)

  fillEndColor property setter.

Static Public Member Functions

- static QString ModeToString (Mode mode)

  Convert argument into a readable string.

- static Mode StringToMode (QString mode)

  Convert argument string in a Mode value.

- static QString StatusToString (Status status)

  Convert argument into a readable string.

- static Status StringToStatus (QString status)

  Convert argument in a Status value.

Static Public Attributes

- constexpr static const float DEF_INNER_RATIO = 0.8f

  Size ratio of inner area (button actuator) against the full widget frame.
- constexpr static const float DEF_GLYPH_RATIO = 0.8f

  Size ratio of glyph/symbol ratio relative to inner area.
- constexpr static const int DEF_TIMEOUT = 3000

  Default timeout value for both locking and unlocking (ms).
- constexpr static const int MAX_TIMEOUT = 3000

  Maximum timeout value for locking and unlocking (ms).
- constexpr static const int MIN_TIMEOUT = 500

  Minimum timeout value for locking and unlocking (ms).
- constexpr static const int DEF_UPDATE_TIMEOUT = 50

  Timeout value for paint update (only used for fill effect).

Protected Member Functions

- void resizeEvent (QResizeEvent ∗event)

  override of base class resizeEvent.
- void paintEvent (QPaintEvent ∗event)

  override of base class paintEvent.
- void mousePressEvent (QMouseEvent ∗event)

  override of base class mousePressEvent
- void mouseReleaseEvent (QMouseEvent ∗event)

  override of base class mouseReleaseEvent
- void mouseMoveEvent (QMouseEvent ∗event)

  override of base class mouseMoveEvent

Properties

- int **lockTimeout**
- int **unlockTimeout**
- int **borderWidth**
- Status **status**
- Mode **mode**
- QColor **innerColor**
- QColor **backgroundColor**
- QColor **borderColor**
- QColor **fillStartColor**
- QColor **fillEndColor**

3.1.1 Detailed Description

QLockButton class.

QLockButton implements a two state, time based lock button.

3.1.2 Member Enumeration Documentation

3.1.2.1 Mode

```
enum QLockButton::Mode  [strong]
```

LockButton function Mode.

Enumerator

SingleShot	Only one successful status switch allowed
MultiShot	Unlimited number of status switch allowed

3.1.2.2 Status

```
enum QLockButton::Status  [strong]
```

LockButton status.

Enumerator

Unlocked	Unlocked
Locked	Locked

3.1.3 Constructor & Destructor Documentation

3.1.3.1 QLockButton()

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

Construct a new QLockButton object.

Parameters

parent	parent object

3.1.4 Member Function Documentation

3.1.4.1 backgroundColor()

```
QColor QLockButton::backgroundColor ( ) const
```

backgroundColor property getter.

Returns

QColor backgroundColor value

See also

mBackgroundColor

3.1.4.2 backgroundColorChanged

```
void QLockButton::backgroundColorChanged ( )  [signal]
```

signal backgroundColor in mode property value.

See also

mBackgroundColor

3.1.4.3 borderColor()

```
QColor QLockButton::borderColor ( ) const
```

borderColor property getter.

Returns

QColor borderColor value

See also

mBorderColor

3.1.4.4 borderColorChanged

```
void QLockButton::borderColorChanged ( )  [signal]
```

signal borderColor in mode property value.

See also

mBorderColor

3.1.4.5 borderWidth()

```
int QLockButton::borderWidth ( ) const
```

borderWidth property getter.

Returns

int borderWidth value

See also

mBorderWidth

3.1.4.6 borderWidthChanged

```
void QLockButton::borderWidthChanged ( )  [signal]
```

signal change in borderWidth property value.

See also

mBorderWidth

3.1.4.7 fail

```
void QLockButton::fail (
            int remainingTime )  [signal]
```

signal unsuccessful attempt.

Parameters

remainingTime	time missing to a successfull status change (ms)

3.1.4.8 fillEndColor()

```
QColor QLockButton::fillEndColor ( ) const
```

fillEndColor property getter.

Returns

QColor fillEndColor value

See also

mFillEndColor

3.1.4.9 fillEndColorChanged

```
void QLockButton::fillEndColorChanged ( )  [signal]
```

signal fillEndColor in mode property value.

See also

mFillEndColor

3.1.4.10 fillStartColor()

```
QColor QLockButton::fillStartColor ( ) const
```

fillStartColor property getter.

Returns

QColor

See also

mFillStartColor

3.1.4.11 fillStartColorChanged

```
void QLockButton::fillStartColorChanged ( )  [signal]
```

signal fillStartColor in mode property value.

See also

mFillStartColor

3.1.4.12 innerColor()

```
QColor QLockButton::innerColor ( ) const
```

innerColor property getter.

Returns

QColor innerColor value.

See also

mInnerColor

3.1.4.13 innerColorChanged

```
void QLockButton::innerColorChanged ( )  [signal]
```

signal innerColor in mode property value.

See also

mInnerColor

3.1.4.14 lockTimeout()

```
int QLockButton::lockTimeout ( ) const
```

lockTimeout property getter.

Returns

int lockTimeout value.

See also

mLockTimeout

3.1.4.15 lockTimeoutChanged

```
void QLockButton::lockTimeoutChanged ( )  [signal]
```

signal change in lockTimeout property value.

See also

mLockTimeout

3.1.4.16 mode()

```
Mode QLockButton::mode ( ) const
```

mode property getter.

Returns

Mode mode value

See also

Mode, mMode

3.1.4.17 modeChanged

```
void QLockButton::modeChanged ( )  [signal]
```

signal change in mode property value.

See also

mMode

3.1.4.18 ModeToString()

```
QString QLockButton::ModeToString (
            Mode mode )  [static]
```

Convert argument into a readable string.

Parameters

mode	

Returns

QString

3.1.4.19 mouseMoveEvent()

```
void QLockButton::mouseMoveEvent (
            QMouseEvent * event )  [protected]
```

override of base class mouseMoveEvent

N/A

Parameters

event	event descriptor

3.1.4.20 mousePressEvent()

```
void QLockButton::mousePressEvent (
            QMouseEvent * event )  [protected]
```

override of base class mousePressEvent

Invoked when user press mouse button/touch inside widget area. This action start the status change evaluation process/timeout.

Parameters

event	Event descriptor

3.1.4.21 mouseReleaseEvent()

```
void QLockButton::mouseReleaseEvent (
            QMouseEvent * event )  [protected]
```

override of base class mouseReleaseEvent

Invoked when the user release mouse button/touch inside widget area. This action usually reports an unsuccessfull status change.

Parameters

event	event descriptor

3.1.4.22 paintEvent()

```
void QLockButton::paintEvent (
            QPaintEvent * event )  [protected]
```

override of base class paintEvent.

Invoked when widget area need to be repainted. Forced by repaint() method calls. Will depict widget current status.

Parameters

event	Event descriptor

3.1.4.23 reset()

```
void QLockButton::reset ( )
```

reset internal status.

Reset interal object status to allow further re-triggers (only when used in SingleShot mode)

See also

mTriggered

3.1.4.24 resizeEvent()

```
void QLockButton::resizeEvent (
            QResizeEvent * event )  [protected]
```

override of base class resizeEvent.

Invoked when widget area is resized. Will update internal sub-areas size accordingly with defined ratios.

Parameters

event	Event descriptor

See also

resize()

3.1.4.25 setBackgroundColor()

```
void QLockButton::setBackgroundColor (
            const QColor & backgroundColor )
```

backgroundColor property setter.

Parameters

backgroundColor	new value

See also

mBackgroundColor

3.1.4.26 setBorderColor()

```
void QLockButton::setBorderColor (
            const QColor & borderColor )
```

borderColor property setter.

Parameters

borderColor	new value

See also

mBorderColor

3.1.4.27 setBorderWidth()

```
void QLockButton::setBorderWidth (
            int borderWidth )
```

borderWidth property setter.

Parameters

borderWidth	new value

See also

mBorderWidth

3.1.4.28 setFillEndColor()

```
void QLockButton::setFillEndColor (
            const QColor & fillEndColor )
```

fillEndColor property setter.

Parameters

fillEndColor	new value

See also

mFillEndColor

3.1.4.29 setFillStartColor()

```
void QLockButton::setFillStartColor (
            const QColor & fillStartColor )
```

fillStartColor property setter.

Parameters

fillStartColor	new value

See also

mFillStartColor

3.1.4.30 setInnerColor()

```
void QLockButton::setInnerColor (
            const QColor & innerColor )
```

innerColor propery setter.

Parameters

innerColor	new value

See also

mInnerColor

3.1.4.31 setLockTimeout()

```
void QLockButton::setLockTimeout (
            int lockTimeout )
```

lockTimeout property setter.

Parameters

lockTimeout	new value

See also

mLockTimeout

3.1.4.32 setMode()

```
void QLockButton::setMode (
            Mode mode )
```

mode property setter.

Parameters

mode	new value

See also

Mode, mMode

3.1.4.33 setStatus()

```
void QLockButton::setStatus (
            Status status )
```

status property setter.

Parameters

status	new value

See also

mStatus

3.1.4.34 setUnlockTimeout()

```
void QLockButton::setUnlockTimeout (
            int unlockTimeout )
```

unlockTimeout property setter.

Parameters

unlockTimeout	new value

See also

mUnlockTimeout

3.1.4.35 status()

```
Status QLockButton::status ( ) const
```

status property getter.

Returns

Status status value

See also

mStatus

3.1.4.36 statusChanged

```
void QLockButton::statusChanged ( )  [signal]
```

signal change in status property value.

See also

mStatus, Status

3.1.4.37 StatusToString()

```
QString QLockButton::StatusToString (
            Status status )  [static]
```

Convert argument into a readable string.

Parameters

status	

Returns

QString

3.1.4.38 StringToMode()

```
QLockButton::Mode QLockButton::StringToMode (
            QString mode )  [static]
```

Convert argument string in a Mode value.

Parameters

mode	

Returns

Mode

3.1.4.39 StringToStatus()

```
QLockButton::Status QLockButton::StringToStatus (
            QString status )  [static]
```

Convert argument in a Status value.

Parameters

status	

Returns

Status

3.1.4.40 success

```
void QLockButton::success (
            QLockButton::Status status )  [signal]
```

signal successful change in status.

Parameters

status	reached status

See also

Status, mStatus

3.1.4.41 unlockTimeout()

```
int QLockButton::unlockTimeout ( ) const
```

unlockTimeout property getter.

Returns

int unlockTimeout value

See also

mUnlockTimeout

3.1.4.42 unlockTimeoutChanged

```
void QLockButton::unlockTimeoutChanged ( )  [signal]
```

signal change in unlockTimeout property value.

See also

mUnlockTimeout

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

- qlockbutton.h
- qlockbutton.cpp

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