

## RAPP Platform Tests - Qr Detection

Generated by Doxygen 1.8.6

Fri Dec 4 2015 16:20:31



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# Chapter 1

## Namespace Index

### 1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

<a href="#">functional_tests</a> . . . . .	9
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## Chapter 2

# Hierarchical Index

### 2.1 Class Hierarchy

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

Test	
QrDetectionTest . . . . .	<a href="#">11</a>
TestCase	
functional_tests.QrDetFunc . . . . .	<a href="#">12</a>





## Chapter 3

# Class Index

### 3.1 Class List

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

<a href="#">QrDetectionTest</a>	Utilizes gtest in order to provide unit tests for qr detection . . . . .	11
<a href="#">functional_tests.QrDetFunc</a>	Supports the deployment of QR detection functional tests . . . . .	12



## Chapter 4

# File Index

### 4.1 File List

Here is a list of all files with brief descriptions:

/home/travis/rapp_temp/rapp-platform/rapp_qr_detection/tests/qr_detection/ <a href="#">functional_tests.py</a> . . . . .	15
/home/travis/rapp_temp/rapp-platform/rapp_qr_detection/tests/qr_detection/ <a href="#">unit_tests.cpp</a> . . . . .	15



## Chapter 5

# Namespace Documentation

### 5.1 functional\_tests Namespace Reference

#### Classes

- class [QrDetFunc](#)  
*Supports the deployment of QR detection functional tests.*

#### Variables

- string [PKG](#) = 'ros\_nodes'

#### 5.1.1 Variable Documentation

##### 5.1.1.1 string functional\_tests.PKG = 'ros\_nodes'

Definition at line 17 of file functional\_tests.py.



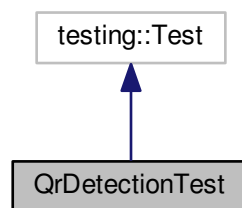
## Chapter 6

# Class Documentation

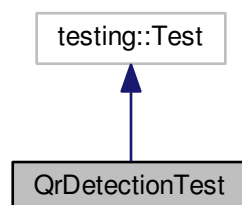
### 6.1 QrDetectionTest Class Reference

Utilizes gtest in order to provide unit tests for qr detection.

Inheritance diagram for QrDetectionTest:



Collaboration diagram for QrDetectionTest:



#### Protected Member Functions

- [QrDetectionTest\(\)](#)

*Default constructor.*

- virtual void [SetUp](#) ()

*Sets up stuff before each unit test call.*

- virtual void [TearDown](#) ()

*Clears up stuff after each unit test call.*

## Protected Attributes

- QrDetector \* [qr\\_detector\\_](#)

### 6.1.1 Detailed Description

Utilizes gtest in order to provide unit tests for qr detection.

Definition at line 27 of file unit\_tests.cpp.

### 6.1.2 Constructor & Destructor Documentation

#### 6.1.2.1 QrDetectionTest::QrDetectionTest ( ) [inline], [protected]

Default constructor.

Definition at line 33 of file unit\_tests.cpp.

### 6.1.3 Member Function Documentation

#### 6.1.3.1 virtual void QrDetectionTest::SetUp ( ) [inline], [protected], [virtual]

Sets up stuff before each unit test call.

Definition at line 40 of file unit\_tests.cpp.

#### 6.1.3.2 virtual void QrDetectionTest::TearDown ( ) [inline], [protected], [virtual]

Clears up stuff after each unit test call.

The QrDetector object, used to test its functions

Definition at line 48 of file unit\_tests.cpp.

### 6.1.4 Member Data Documentation

#### 6.1.4.1 QrDetector\* QrDetectionTest::qr\_detector\_ [protected]

Definition at line 54 of file unit\_tests.cpp.

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

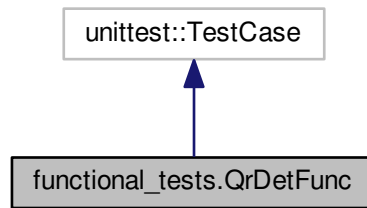
- /home/travis/rapp\_temp/rapp-platform/rapp\_qr\_detection/tests/qr\_detection/[unit\\_tests.cpp](#)

## 6.2 functional\_tests.QrDetFunc Class Reference

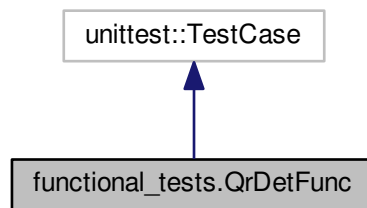
Supports the deployment of QR detection functional tests.



Inheritance diagram for functional\_tests.QrDetFunc:



Collaboration diagram for functional\_tests.QrDetFunc:



## Public Member Functions

- def [test\\_filesAudio](#)  
*Tests qr detection with an audio file.*
- def [test\\_fileNotExists](#)  
*Tests qr detection with a non-existent image.*
- def [test\\_qrExists](#)  
*Tests QR detection with an image containing a QR.*
- def [test\\_qrExists\\_stress](#)  
*Stress test for the QR detection.*
- def [test\\_qrNotExists](#)  
*Tests qr detection with an image containing a face.*

### 6.2.1 Detailed Description

Supports the deployment of QR detection functional tests.

Definition at line 32 of file functional\_tests.py.

## 6.2.2 Member Function Documentation

### 6.2.2.1 `def functional_tests.QrDetFunc.test_fileIsAudio ( self )`

Tests qr detection with an audio file.

Should return 0 qrs

Definition at line 88 of file functional\_tests.py.

### 6.2.2.2 `def functional_tests.QrDetFunc.test_fileNotExists ( self )`

Tests qr detection with a non-existent image.

Should return 0 qrs

Definition at line 75 of file functional\_tests.py.

### 6.2.2.3 `def functional_tests.QrDetFunc.test_qrExists ( self )`

Tests QR detection with an image containing a QR.

Should return 1 qr

Definition at line 35 of file functional\_tests.py.

### 6.2.2.4 `def functional_tests.QrDetFunc.test_qrExists_stress ( self )`

Stress test for the QR detection.

Performs 100 consecutive calls

Definition at line 48 of file functional\_tests.py.

### 6.2.2.5 `def functional_tests.QrDetFunc.test_qrNotExists ( self )`

Tests qr detection with an image containing a face.

Should return 0 qrs

Definition at line 62 of file functional\_tests.py.

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

- [/home/travis/rapp\\_temp/rapp-platform/rapp\\_qr\\_detection/tests/qr\\_detection/functional\\_tests.py](/home/travis/rapp_temp/rapp-platform/rapp_qr_detection/tests/qr_detection/functional_tests.py)

## Chapter 7

# File Documentation

### 7.1 /home/travis/rapp\_temp/rapp-platform/rapp\_qr\_detection/tests/qr\_detection/functional\_tests.py File Reference

#### Classes

- class [functional\\_tests.QrDetFunc](#)

*Supports the deployment of QR detection functional tests.*

#### Namespaces

- [functional\\_tests](#)

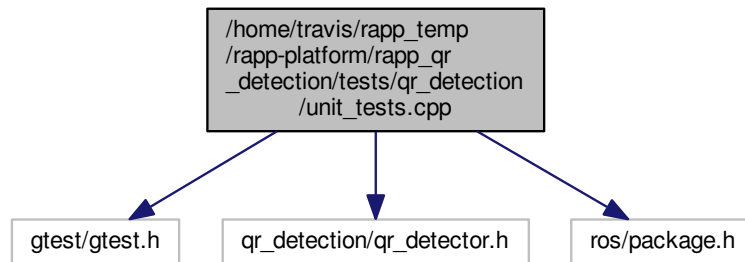
#### Variables

- string [functional\\_tests.PKG](#) = 'ros\_nodes'

### 7.2 /home/travis/rapp\_temp/rapp-platform/rapp\_qr\_detection/tests/qr\_detection/unit\_tests.cpp File Reference

```
#include <gtest/gtest.h>
#include <qr_detection/qr_detector.h>
#include <ros/package.h>
```

Include dependency graph for unit\_tests.cpp:



## Classes

- class [QrDetectionTest](#)  
*Utilizes gtest in order to provide unit tests for qr detection.*

## Functions

- int [main](#) (int argc, char \*\*argv)  
*The main function. Initializes the unit tests.*
- [TEST\\_F](#) ([QrDetectionTest](#), lenna\_test)  
*Tests QR detection with an image containing face. Should return 0 qrs.*
- [TEST\\_F](#) ([QrDetectionTest](#), qr\_test)  
*Tests QR detection with an image containing a qr. Should return 1 qr.*
- [TEST\\_F](#) ([QrDetectionTest](#), file\_not\_exists\_test)  
*Tests QR detection with a non-existent image. Should return 0 qrs.*
- [TEST\\_F](#) ([QrDetectionTest](#), zero\_sized\_image\_test)  
*Tests QR detection with a zero-sized image. Should return 0 qrs.*

### 7.2.1 Function Documentation

#### 7.2.1.1 int main ( int argc, char \*\* argv )

The main function. Initializes the unit tests.

Definition at line 108 of file `unit_tests.cpp`.

#### 7.2.1.2 TEST\_F ( QrDetectionTest , lenna\_test )

Tests QR detection with an image containing face. Should return 0 qrs.

Definition at line 61 of file `unit_tests.cpp`.

#### 7.2.1.3 TEST\_F ( QrDetectionTest , qr\_test )

Tests QR detection with an image containing a qr. Should return 1 qr.

Definition at line 73 of file `unit_tests.cpp`.

#### 7.2.1.4 TEST\_F ( QrDetectionTest , file\_not\_exists\_test )

Tests QR detection with a non-existent image. Should return 0 qrs.

Definition at line 85 of file unit\_tests.cpp.

#### 7.2.1.5 TEST\_F ( QrDetectionTest , zero\_sized\_image\_test )

Tests QR detection with a zero-sized image. Should return 0 qrs.

Definition at line 97 of file unit\_tests.cpp.

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