### RAPP Platform Tests - Qr Detection

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# Namespace Index

1.1	Namespace List	
Here	s a list of all namespaces with brief descriptions:	
fu	actional tosts	(

2 Namespace Index

# **Hierarchical Index**

### 2.1 Class Hierarchy

rnis inneritance list is sorted roughly, but not completely, alphabetically:	
Test	

QrDetectionTest	 												 			11
TestCase																
functional_tests.QrDetFunc	 												 			12

**Hierarchical Index** 

## **Class Index**

### 3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:	
QrDetectionTest	
Utilizes gtest in order to provide unit tests for qr detection	11
functional tests.QrDetFunc	

6 Class Index

# File Index

### 4.1 File List

Here is a list of all files	with brief	descriptions
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/home/travis/rapp_temp/rapp-platform/rapp_qr_detection/tests/qr_detection/functional_tests.py	15
/home/travis/rapp temp/rapp-platform/rapp qr detection/tests/qr detection/unit tests.cpp	15

8 File Index

# **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'

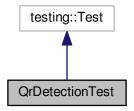
Definition at line 17 of file functional\_tests.py.

Names	pace	Docur	nentation

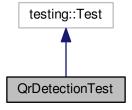
## **Class Documentation**

### 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 ()

12 Class Documentation

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.

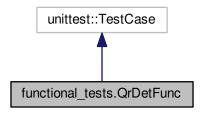
The documentation for this class was generated from the following file:

• /home/travis/rapp\_temp/rapp-platform/rapp\_qr\_detection/tests/qr\_detection/unit\_tests.cpp

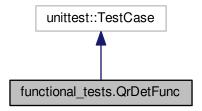
#### 6.2 functional\_tests.QrDetFunc Class Reference

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\_fileIsAudio

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.

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#### 6.2.2 Member Function Documentation

6.2.2.1 def functional\_tests.QrDetFunc.test\_fileIsAudio ( self )

Tests or 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 or 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

### **File Documentation**



#### Classes

• class functional\_tests.QrDetFunc

Supports the deployment of QR detection functional tests.

#### **Namespaces**

· functional tests

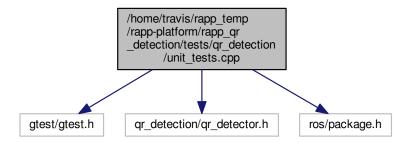
#### **Variables**

- 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>
```

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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 grs.

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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