

RAPP Platform Tests - Qr Detection

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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

functional_tests	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	11
TestCase	
functional_tests.QrDetFunc	12

Chapter 3

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	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/ functional_tests.py	15
/home/travis/rapp_temp/rapp-platform/rapp_qr_detection/tests/qr_detection/ unit_tests.cpp	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_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.

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](#)

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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