CALS SIM

Unit Testing

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# Introduction

The purpose of this document is to present how Unit Testing was conducted. The testing frameworks which we will use for creating unit test would be PyUnit in combination with PyQt QtTest module. PyQt QtTest contains only QTest class.

To see how you can do write unit tests follow the example presented here: [http://johnnado.com/pyqt-qtest-example/](http://johnnado.com/pyqt-qtest-example/%20)

The repository where all the code for the above example can be found is here: <https://bitbucket.org/jmcgeheeiv/pyqttestexample>

# Unit tests

Put the files with unit tests for an interface screen inside **Code/tests**. A test file is a Python script. Such a file needs to contain a test class that inherits **unittest.TestCase**. Import the Python script into **Code/RunTestSuite.py.** To run the tests use the following command ‘**python RunTestSuite.py**’. Creating the tests is easy. Look into the **Code/tests/SimulationWidgetTest.py** and you will see an example.

## Unit tests for the Workstation UI

* Default value for controller id
* Default value for facility id
* Default value for workstation id
* Login with default values in the UI
* Login normal
* Login when already logged in
* Login button press
* Logout with default values in the UI
* Logout normal
* Logout when not logged in
* Role change normal

All these tests will be contained in SimulationWidgetTest.py