

### Pytest and coverage Tool

|  |   |
|--|---|
| <code>py.test &lt;files&gt;</code>     | Run py.test tool                              |
| <code>--maxfail=X</code>               | Exit after failing X tests                    |
| <code>--durations=10</code>            | Use this to Profile your tests (time taken)   |
| <code>--cov=path</code>                | Run coverage within the project path          |
| <code>--cov-report term-missing</code> | Add this to show which lines were not covered |

#### Packages to install:

```
pip install pytest
pip install pytest-sugar
pip install pytest-cov
```

### Coverage Configuration File

|                              |                             |
|------------------------------|-----------------------------|
| <code>.coveragerc</code>     | Default filename looked for |
| <code>[report]</code>        | Section defining the report |
| <code>exclude_lines =</code> | Exclude lines defined after |

<http://coverage.readthedocs.io/en/latest/config.html>

Write after `exclude_lines =` the lines as they are in Python code

### Pytest with Flask

|   |  |
|---|--|
| <code>client = app.test_client()</code> | Gives you an <code>Test Client</code> object |
| <code>client.get(url)</code>            | Makes a GET request                          |
| <code>client.post(url, data=[])</code>  | Makes a POST request                         |
| <code>client.put(url, data=[])</code>   | Makes a PUT request                          |

You can create a test client to test your Flask app

### Fixture

|                                      |   |
|--------------------------------------|---|
| <code>@pytest.fixture()</code>       | Fixture decorator   |
| <code>scope="session"</code>         | Scope for the fixture: Can be <code>session</code> , <code>module</code> , <code>class</code> or <code>function</code>                  |
| <code>params=[]</code>               | For each value, the fixture will be called with that value (this makes multiple calls)  |
| <code>autouse=False</code>           | All tests in the session use the fixture automatically  |
| <code>def my_fixture(request)</code> | Putting <code>request</code> object in fixture gives you access to the <code>pytest request</code> (e.g. put a <code>finalizer</code> ) |
| <code>pytest --fixtures</code>       | See all available fixtures  |

The purpose of test fixtures is to provide a fixed baseline upon which tests can reliably and repeatedly execute.

### pytest-mock

In short, mocking is creating objects that simulate the behaviour of real objects.

