



Pytest Quick Start



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Introduction to Pytest



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Pytest Basics



- Testing Framework for Python
- API Testing
- Frontend (UI) Testing
- Unit Testing
- Simple or Complex
- Learn more: <https://docs.pytest.org/en/latest/contents.html#toc>

Pytest Basics

- Finds tests automatically
- Test file names
 - ✓ must start with **'test_*.py'** (_ required)
 - or
 - ✓ must end with **'*_test.py'**
- Finds files in current directory and subdirectories

Pytest Basics

- Test files can have just function for classes
- If class, then `'__init__()'` should not exist
- Functions must start with `'test*'` (`_` not required)

```
def test_foo_bar(arg1, arg2, ..):
```

- Class names must start with `'Test'` and methods with `'test'`

```
Class TestFooBar(object):
```

```
def test_verify_something():
```

PyTest Basics



```
# smoke_test.py
```

```
def test_user_login():  
    print("log in")
```

```
def test_user_register():  
    print("log in")
```

```
def test_user_logout():  
    print("log in")
```

```
# smoke_test.py
```

```
Class TestUserSmoke(object):
```

```
    def test_user_login():  
        print("log in")
```

```
    def test_user_register():  
        print("log in")
```

```
    def test_user_logout():  
        print("log in")
```

PyTest Basics

To run the test

```
$ pytest <options>
```

or

```
$ pytest <options> /path/to/test/files
```

or

```
$ py.test <options> /path/to/test/files
```

or

```
$ python -m pytest <options> /path/to/test/files
```



Selecting Specific Tests (Markers)



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Selecting Tests by Markers



```
# smoke_test.py
```

```
import pytest
```

```
@pytest.mark.smoke  
def test_user_login():  
    print("log in")
```

```
@pytest.mark.regression  
def test_user_register():  
    print("register")
```

```
# smoke_test.py
```

```
import pytest
```

```
@pytest.mark.smoke  
Class TestUserSmoke(object):
```

```
    def test_user_login():  
        print("log in")
```

```
    def test_user_register():  
        print("register")
```

Selecting Tests by Markers

```
# smoke_test.py

import pytest

pytestmark = pytest.mark.smoke

def test_user_login():
    print("log in")

def test_user_register():
    print("register")
```

```
# smoke_test.py

import pytest

pytestmark = [pytest.mark.smoke,
               pytest.mark.fe]

Class TestUserSmoke(object):

    def test_user_login():
        print("log in")

    def test_user_register():
        print("register")
```

Selecting Tests by Markers



```
# smoke_test.py

import pytest

@pytest.mark.smoke
@pytest.mark.fe
def test_user_login():
    print("log in")

def test_user_register():
    print("register")
```

PyTest Basics



To run the test

```
$ pytest -m smoke
```

```
$ pytest -m "smoke or regression" ./tests
```

```
$ pytest -m "smoke and regression" ./tests
```

```
$ pytest -m "not prod" ./tests
```