Lettuce

Behaviour Driven Development

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Lettuce

- Python için bir Behaviour Driven Development aracıdır.

- Lettuce, Ruby camiasındaki Cucumber'dan esinlenmiştir.

- Senaryolar için Gherkin adında bir DSL kullanır.

Amacı

- Test logic'ini ve senaryoları birbirinden ayırır.
- Testlerin implementation'dan ziyade user story güdümlü olması.
- Kodlama bilgisi olmayanların testleri geliştirebilmesine olanak tanıması.

örnek

```
Feature: Commenting on documents

    In order to discussing with the other users,

    As an authenticated user,

    I want to comment on a pattern
```

```
Scenario: users can comment on documents

  Given I am logged in as user "tester"

  And I create a pattern that named "Comment Model"

  When go to the that pattern

  And I type the "body" as "Test Comment"

  When I submit the comment

  Then the comment count of that pattern should be 1
```

Konseptler

Feature

Uygulamanın test edilecek özellikleridir.

Örnek: Kullanıcının bir fotoğrafa yorum girebilmesi.

Scenario

Bir özelliği çeşitli senaryolar ile test edersiniz.

Örnek: Kullanıcı sisteme bağlı değilken yorum girip girememesi.

Step

Senaryoları oluşturan adımlardır.

Örnek: Kullanıcının fotoğraf sayfasına gelmesi.

Kurulum

pip install lettuce

/home/foo/projects/foobar-app

- app.py (flask, django, ya da başka bir şey)
+ tests
  + features
    - steps.py (adım tanımlamalarınız)
    - login.feature (senaryolar)
    - photos.feature (senaryolar)

senaryolarımızı oluşturalım

feature

Feature: Login mechanism

In order to see my dashboard

As an anonymous user,

I want to login

Scenario: Login from homepage

Given I am an anonymous user

And I go to homepage

When I type “fatih” as username

And I type “123” as password

When I submit the form

Should I see “My dashboard” text on homepage

steps.py

```
from lettuce import step, world

@step('When I "(.*)" as username')
def set_username(step, username):
    world.username = username

@step('When I "(.*)" as password')
def set_password(step, password):
    world.password = password

@step('I submit the form')
def submit(step):
    world.login_is_done = (
        world.username == "fatih" and
        world.password == "123"
    )

@step('I see "My dashboard" text on homepage')
def homepage(step):
    assert world.login_is_done
```

çalıştıralım

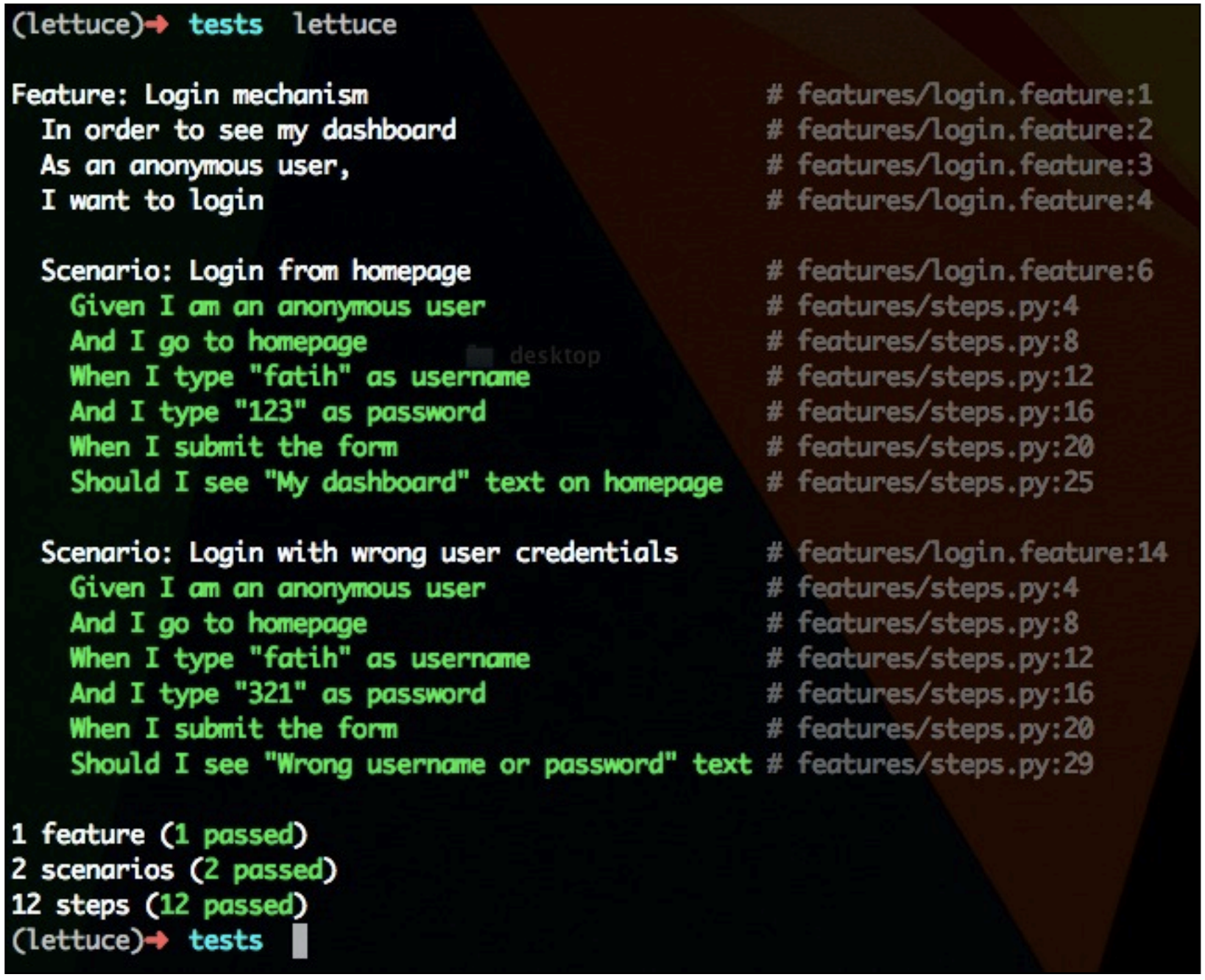
```
(lettuce)➜ tests  lettuce

Feature: Login mechanism                                    # features/login.feature:1
  In order to see my dashboard                              # features/login.feature:2
  As an anonymous user,                                     # features/login.feature:3
  I want to login                                           # features/login.feature:4

  Scenario: Login from homepage                             # features/login.feature:6
    Given I am an anonymous user                            # features/steps.py:4
    And I go to homepage                                    # features/steps.py:8
    When I type "fatih" as username                         # features/steps.py:12
    And I type "123" as password                            # features/steps.py:16
    When I submit the form                                  # features/steps.py:20
    Should I see "My dashboard" text on homepage            # features/steps.py:25

1 feature (1 passed)
1 scenario (1 passed)
6 steps (6 passed)
(lettuce)➜ tests
```

bir senaryo daha ekleyelim

feature

```
Feature: Login mechanism

    In order to see my dashboard

    As an anonymous user,

    I want to login

...

Scenario: Login with wrong user credentials

  Given I am an anonymous user

  And I go to homepage

  When I type the “fatih” as username

  And I type the “321” as password

  When I submit the form

  Should I see “Wrong username or password” message
```

```
from lettuce import step, world

# ...

@step(‘I see “Wrong username or password” message’)
def homepage(step):
    assert not world.login_is_done
```



```
(lettuce)➜ tests  lettuce

Feature: Login mechanism                                  # features/login.feature:1
  In order to see my dashboard                            # features/login.feature:2
  As an anonymous user,                                   # features/login.feature:3
  I want to login                                         # features/login.feature:4

  Scenario: Login from homepage                           # features/login.feature:6
    Given I am an anonymous user                          # features/steps.py:4
    And I go to homepage                                  # features/steps.py:8
    When I type "fatih" as username                       # features/steps.py:12
    And I type "123" as password                          # features/steps.py:16
    When I submit the form                                # features/steps.py:20
    Should I see "My dashboard" text on homepage          # features/steps.py:25

  Scenario: Login with wrong user credentials             # features/login.feature:14
    Given I am an anonymous user                          # features/steps.py:4
    And I go to homepage                                  # features/steps.py:8
    When I type "fatih" as username                       # features/steps.py:12
    And I type "321" as password                          # features/steps.py:16
    When I submit the form                                # features/steps.py:20
    Should I see "Wrong username or password" text        # features/steps.py:29

1 feature (1 passed)
2 scenarios (2 passed)
12 steps (12 passed)
(lettuce)➜ tests
```

Scenario outlines

Adımları belirlediğiniz tabular şeklindeki verilerle yeniden kullanmanızı sağlar.

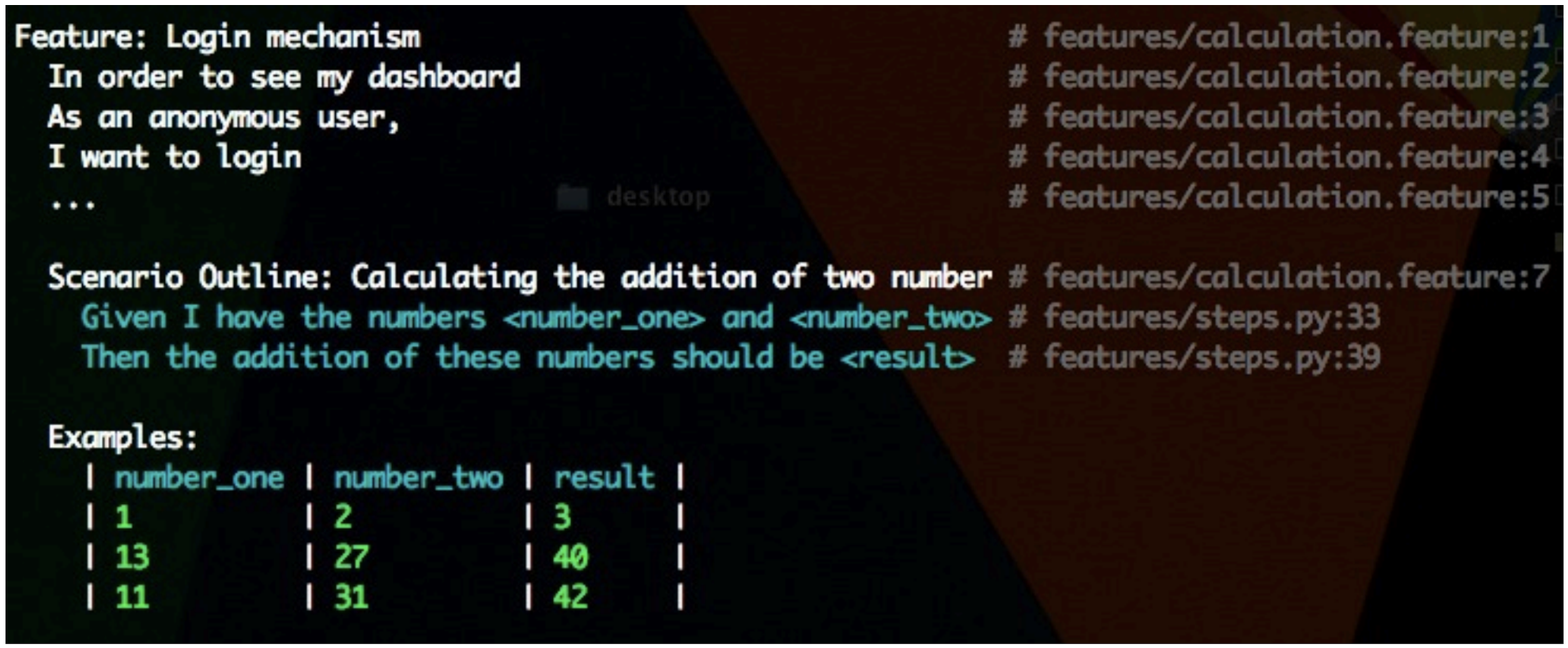
feature

```
Feature: Login mechanism

    In order to see my dashboard

    As an anonymous user,

    I want to login
  ...

Scenario: Login with wrong user credentials

  Given an user with <username> and <password>

  When the user is loggin

  Should see “Welcome” message

Examples:

  | username | password |

  | fatih    | 123      |
  | admin    | 321      |
  | foooo    | 123      |
```

başka bir örnek

```
Feature: Login mechanism

    In order to see my dashboard

    As an anonymous user,

    I want to login


Background:

   Given I am an anonymous user

   And I go to homepage


Scenario: Login with wrong user credentials

  When I type the “fatih” as username

  And I type the “321” as password

  When I submit the form

...
```

çalıştıralım



Background scenarios

Birbirine benzeyen senaryolar için taslak senaryolar hazırlayabilirsiniz.

```
Feature: Login mechanism
    In order to see my dashboard
    As an anonymous user,
    I want to login
...
Background:
   Given I have the numbers <number_one> and <number_two>
   Then the result should be <result>

Examples:
  | number_one | number_two | result  |
  | 1          | 2          | 3       |
  | 13         | 27         | 40      |
  | 11         | 31         | 42      |
```

Senaryo örnekleri

- https://github.com/fatiherikli/dbpatterns/tree/master/tests
- https://github.com/diaspora/diaspora/tree/master/features
- https://github.com/teambox/teambox/tree/dev/features

teşekkürler