



BEHAVE

behavior-driven development, Python style

What is BDD

BDD uses human-readable descriptions of software user requirements as the basis for software tests.

Behave

**we should test how an application
behaves in certain situations**

Behavior

**operation with inputs, actions, and
expected outcomes**

Feature

**a desired product functionality often
involving multiple behaviors**

Scenario

**specification of a behavior using
formal steps and examples**

Gherkin

**a simple language used to explain
the expected behavior of a system**

Simple Gherkin Scenario

Feature: Google Searching

As a web surfer, I want to search using Google, so that I can learn new things.

Scenario: Simple Google search

Given a web browser is on the Google page

When the search phrase "panda" is entered

Then results for "panda" are shown

"Given" initializes a state

"When" describes an action

"Then" states the expected outcome

Other Keywords

Feature: Google Searching

As a web surfer, I want to search Google, so that I can learn new things.

Scenario: Simple Google search

Given a web browser is on the Google page

When the search phrase "panda" is entered

Then results for "panda" are shown

And the related results include "Panda Express"

But the related results do not include "pandemonium"

Using Background

Feature: Google Searching

As a web surfer, I want to search Google, so that I can learn new things.

Background:

Given a web browser is on the Google page

Scenario: Simple Google search for pandas

When the search phrase "panda" is entered

Then results for "panda" are shown

Scenario: Simple Google search for elephants

When the search phrase "elephant" is entered

Then results for "elephant" are shown

Scenario Outline

Feature: Google Searching

As a web surfer, I want to search Google, so that I can learn new things.

Scenario Outline: Simple Google searches

Given a web browser is on the Google page

When the search phrase "<phrase>" is entered

Then results for "<phrase>" are shown

And the related results include "<related>"

Examples: Animals

phrase	related	
panda	Panda Express	
elephant	Elephant Man	

Tags

Feature: Google Searching

As a web surfer, I want to search Google, so that I can learn new things.

@automated @google @panda

Scenario: Simple Google search

Given a web browser is on the Google page


When the search phrase "panda" is entered

Then results for "panda" are shown

> **behave --tag google**

Steps

Python codes that are link between the descriptive tests in `.feature` files and the actual application code.



```
[project root directory]
|-- [product code packages]
|-- features
|   |-- environment.py
|   |-- *.feature
|   `-- steps
|       `-- *_steps.py
`-- [behave.ini|.behave.rc|tox.ini|setup.cfg]
```

PROJECT STRUCTURE



QUIZ

WRITE ONE BDD FEATURE

With at least two scenario

LET'S CHECK OUT
A REAL-WORLD
EXAMPLE