# Behat and Drupal for Absolute Beginners

Drupal GovCon 2016



#### **Alison Jo McCauley**

Drupal Developer, Cornell University alisonjo2786 on Drupal.org, Twitter, GitHub, Google alison@cornell.edu

#### **Nneka Hector**

Senior Web Developer, DSFederal Nneka on Drupal.org, Twitter, GitHub nneka.hector@dsfederal.com

## Agenda

- What's Goin' On: Welcome! And, what is Behat...?
- Let's Get it Started: Setting up Behat for your project
- **That Thing You Do:** Features (tests) demo!
- **Keep on Dancin:** Get yourself moving with Behat



# First thing's first

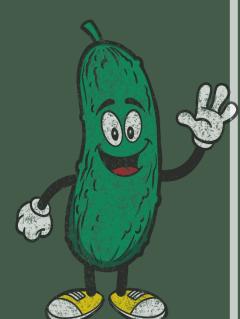
Use Behat for... \*Behavior Driven Development (BDD)\* testing!

>> Programmatically test behaviors within specific scenarios on your application.

Given I am (context)

When I do (action)

Then I should (outcome)



# First thing's second

Words to know

**Gherkin** - language in which you write Features.

**Browser emulators** - allow you to test in-browser behavior/actions - Mink is a browser emulator that comes with Behat.

**DrupalExtension** - an optional add-on tool that provides a variety of drivers and

FeatureContext class extensions that \*can\* make using Behat for Drupal sites simpler.

**Features** - contain **scenarios** that are all related to a desired functionality.

**Scenarios** - contain **steps** for how the feature should act under different conditions.

FeatureContext class - your tests run based on the functions that extend this class.



### Setup: Step 1

Create a file called **composer.json** in your project root, and enter in your Behat configuration requirements.

```
{
    "require": {
        "drupal/drupal-extension": "~3.0"
    },
    "config": {
        "bin-dir": "bin/"
    }
}
```

**By the way,** Behat requires >= PHP 5.3.1! (We're using PHP 5.5 and Behat 3.0.)

#### Setup: Step 2

Download composer.phar and run install.

```
$ curl -sS https://getcomposer.org/installer | php
$ php composer.phar install
```

This step downloads, unpacks, and installs what you need to run Behat in your project.

```
bin/
composer.lock
vendor/
```

#### Setup: Step 3

Initialize Behat!

```
$ behat --init
```

**Note:** If simply running behat --init doesn't work for you, try using the full path, i.e. bin/behat --init

You should get a response like...

```
+d features - place your *.feature files here
+d features/bootstrap - place your context classes here
+f features/bootstrap/FeatureContext.php - place your
definitions, transformations and hooks here
```

#### Where in the world is...

**Directory structure** - from Behat project root:

- composer.json
- behat.yml <del><</del>

# behat.yml

- Automatically created when you install via composer.
- Handles the Behat configuration:
  - Environment variables
  - Global filters/Tags
  - Extensions

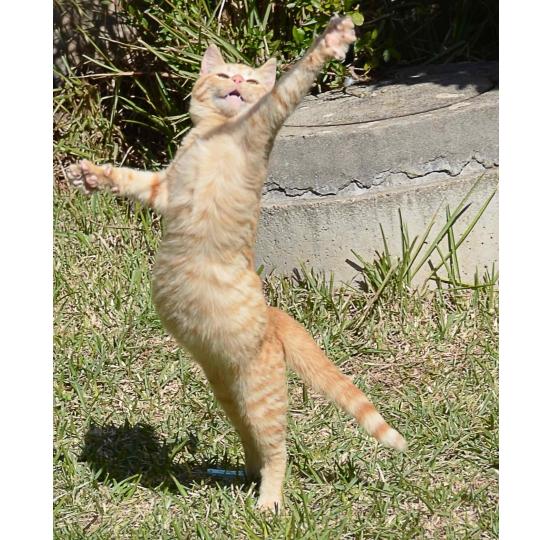
```
default:
   extensions:
        Behat\MinkExtension:
            [...truncated...]
            base_url: http://localhost
        Drupal\DrupalExtension:
        selectors:
            [...truncated...]
        drush:
            root: '/vagrant/docroot'
        drupal:
            drupal_root: '/vagrant/docroot'
```

#### Where in the world is...

**Directory structure** - from Behat project root:

- composer.json
- behat.yml
- bin/
- vendor/
- features/
  - This is where your features go! (your .feature files)
- features/bootstrap/FeatureContext.php
  - This is where you write functions to extend the FeatureContext class.





#### Epilogue

- The VM we used for this session: <a href="https://github.com/DSFederalInc/drupal7-behat-vagrant-setup">https://github.com/DSFederalInc/drupal7-behat-vagrant-setup</a>
- Fantastic quick-start guide from Behat.org documentation: <a href="http://docs.">http://docs.</a>
   behat.org/en/v2.5/quick intro.html
- Behat 3.0 docs: <a href="http://docs.behat.org/en/v3.0/">http://docs.behat.org/en/v3.0/</a>
- Behat + Mink: <a href="http://mink.behat.org/en/latest/at-a-glance.html">http://mink.behat.org/en/latest/at-a-glance.html</a>
- Drupal: <a href="https://www.drupal.org/project/drupalextension">https://www.drupal.org/project/drupalextension</a>
  - And: <a href="http://behat-drupal-extension.readthedocs.io/en/3.1/drivers.html">http://behat-drupal-extension.readthedocs.io/en/3.1/drivers.html</a>
- DGC Mentoring!