



3PILLAR

GLOBAL

Python in Web Development

Recap

- Exception Handling
- Iterators
- Generators
- Debugging

LAB 5

Beginning Django

AGENDA

- Virtual envs
- Python packaging
- Beginning Django

Virtual envs

- Creates an isolated environment
- Allows for different versions of libraries to co-exist on the same system
- You can choose the interpreter version (2, 3)

Virtual env example

```
$ python3 -m venv example
```

- Two ways to activate the environment:

- a.

```
$ source example/bin/activate
```

- b.

```
$ . example/bin/activate
```

- To install:

```
$ pip install pylint
```

```
$ pip list
```

- To use:

```
$ pylint
```

Python Packaging

- **History**
 - **easy_install**
 - **no dependency resolution**
 - **setuptools**
 - **first attempt at a better package manager**
 - **distutils**
 - **builds upon setuptools**
 - **distutils merged in setuptools which is installed by default with Python**

PIP (Pip Installs Packages)

Installs from PyPI(Python Package Index)

```
$ pip install package_name[>, <, ==  
<version>]
```

```
$ pip uninstall package_name
```

```
$ pip list # lists installed packages
```

```
$ pip freeze # lists packages formatted  
for requirements file
```


Exercise 1: Upgrading to IPDB

In Vagrant, activate the installed virtual env and install the *ipdb* package, latest version.

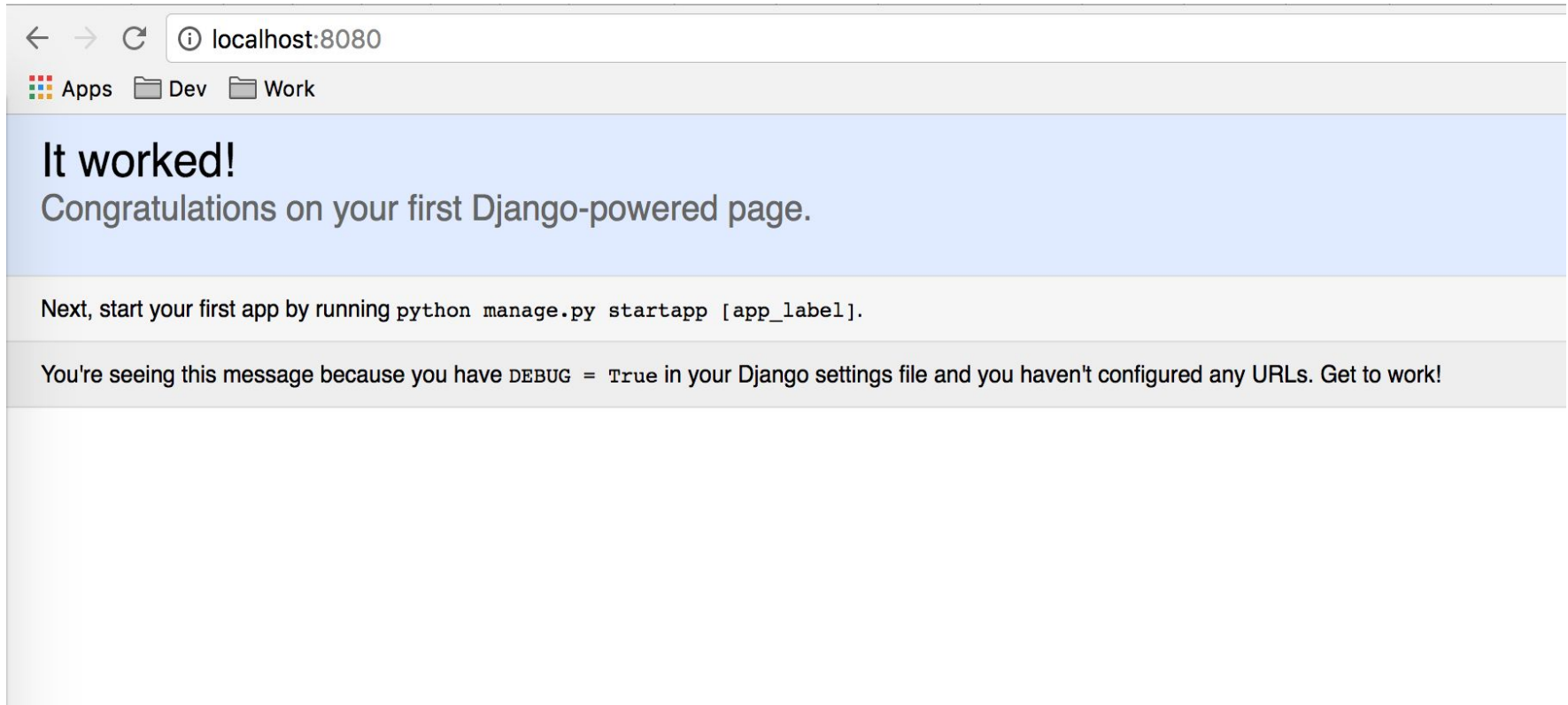
Start the Django project

Poll app tutorial

\$ django-admin startproject polls

```
(venv) ubuntu@ubuntu-xenial:/tmp/foo$ django-admin.py startproject polls
(venv) ubuntu@ubuntu-xenial:/tmp/foo$ find polls/
polls/
polls/manage.py
polls/polls
polls/polls/settings.py
polls/polls/wsgi.py
polls/polls/urls.py
polls/polls/__init__.py
```

Start the Django project



Exercise 2: Install Django Debug Toolbar

In Vagrant, activate the installed virtual env and install [Django debug toolbar](#).

Debug mode

- Used during development
- Should be disabled in production

Resources

- [Python Packaging](#)
- [Packaging and distributing Python projects](#)
- [Django Book](#)
- [Django debug toolbar](#)

Quiz time :)

<https://goo.gl/forms/Mrg6MXf4j2kPBKnr1>

Homework

- [Learn Python the Hard Way](#), ex. 49 - 52

Thank you!