

The Django Web Framework

Your First Website, or Starting from Scratch

- Design database tables
- Separate Header, Footer, Content sections
- Present content in coherent manner
- Refactor...

Web Frameworks

- Provide a Model View Controller architecture
- Designing your URLs
- Template system

Django

- Written in Python
- Stable
- Scalable
- Active community and development
 - 1.0 release in September 2008

Django Principals

- Loose coupling
- Less code
- Quick development
- Don't Repeat Yourself
- Explicit is better than implicit
- Consistency

The Origin of Django

- 2003: World Online web developers
 - Adrian Holovaty
 - Simon Willison
- 2005: Released as open source
- Django Reinhardt

Sites Using Django

- Washington Post
 - projects.washingtonpost.com/congress/
 - projects.washingtonpost.com/fallen/
- World Online
- Pownce
- EveryBlock
- djangosites.org

Django Components: Scripts

- `django-admin.py`
 - Functions specific to Django
- `manage.py`
 - Functions specific to a Django project

Django Components: Models

- Predefined field types
 - Database column
 - HTML widget
 - Validation
- Database API
 - Programmatic access to database
 - Lazy querysets

Django Components: URLs

- Regular expressions define the URL layout and send information to the View
 - Virtually any URL scheme can be defined
- Specific to App or Project

Django Components: Views

- Business logic
- Gather and prepare data, render template, and send view
- Generic views
 - List and detail
 - Date based
 - CRUD

Django Components: Templates

- Control the presentation of content
- Variables
- Filters
- Tags

Django Components: Forms

- Newforms vs. Oldforms
- Provides a model for HTML forms
 - Validation
 - Saving
- ModelForm

Django Components: Administration

- Out of the box CRUD
- Newforms Admin makes extending more powerful
- Not suitable for every occasion

Serving Django with Apache

- Install Apache 2 and mod_python
- Add entry to httpd.conf
 - Include project settings into Python path

Django Resources

- djangoproject.com
- djangobook.com
- IRC: [#django](https://irc.freenode.net)
- This Week in Django podcast
 - blog.michaeltrier.com/netcasts
- djangosnippets.org
- pinax.hotcluboffrance.com