

Django Fundamentals

INTRODUCTION



Reindert-Jan Ekker

@rjekker <http://nl.linkedin.com/in/rjekker>



Overview



About Django

- What is Django?
- Why choose Django?
- Design principles

Prerequisites

- What should I already know?
- What should I install?
- Versions

Project demo

Course overview

Django architecture



Build web apps quickly

With less code

Named after Django Reinhardt

django



Django is written in Python

Powerful, fast and fun

Batteries included

<http://awesome-django.com/>



Batteries Included

ORM

URL Mapping

Templates

Forms

Admin

Packages



Django Principles

Productivity

With less code

Good, clean code

See

<http://goo.gl/PRrEMe>

Fun



Great documentation

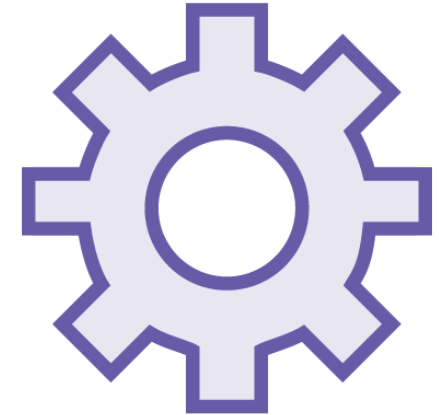
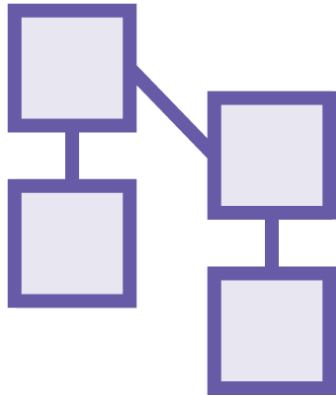
<http://www.djangoproject.com>



Model Template View

In MVC: “View”

In MVC: “Controller”



Model

Represents your data;
Maps model classes to
database tables

Template

Generates HTML;
Presentation logic only

View

Takes HTTP request
and returns response;
May call Template
and/or Model



What You Should Know Already



Python
Basics



Web development
Basic HTML
Basic CSS



Databases
Basic Concepts
Tables, Rows
INSERT/UPDATE



Versions

Django 1.11

Used for this course

Current LTS version

Supports Python 2.7+ and 3.6+

Python 3 is preferred

Django 2.0

Currently in alpha

All demo code should work

Supports **only Python 3**

See also: <http://goo.gl/UK4ctr>



Prerequisites

Python and Django are cross-platform

- Windows, Mac OS, Linux and others

Python installation (3.6+ preferred)

Optional: an editor with Python support

- I will use Pycharm
- See Python wiki: <http://goo.gl/rNj8so>

Django installation

- In the next module



Demo



Project: Tic Tac Toe

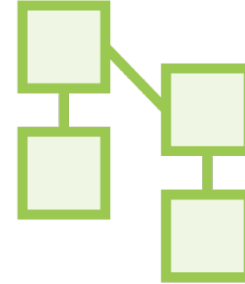
- All demo code can be downloaded



What to Expect



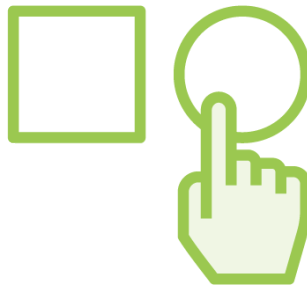
Install, Project Setup



Data: Model and Model API



**Frontend: Views and
Templates**



User Input: Forms



Final Steps

