

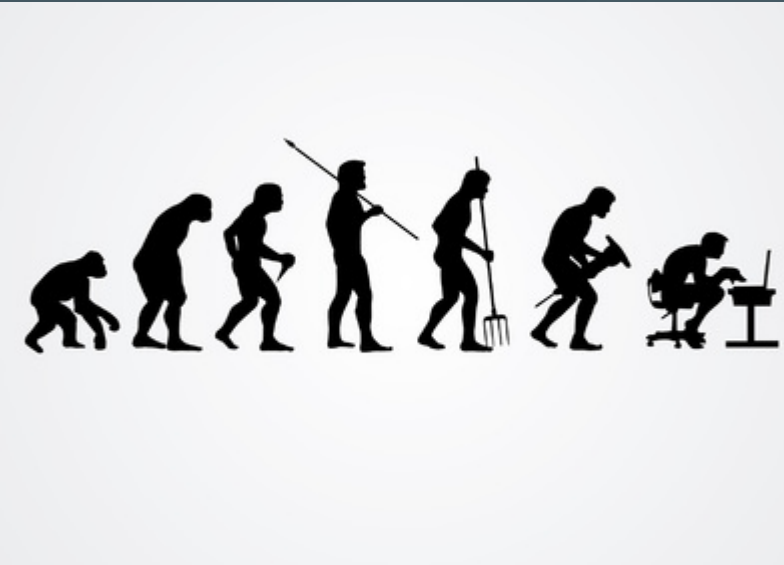
Why

django

Jorge Barata

Origins

Origins



Origins

PHP



Origins

2003

- Web department of the Lawrence Journal-World met Python
- Multiple web apps
- “The CMS”

Origins

2005

- Public release
- 0.9.1
- BSD license
- “Django Reinhardt”

Origins

2008

- Django Software Foundation
- 1.0

Origins

Key Matters

1. Django's "sweet spot":
 - Django was born in a news environment
 - features that are particularly well suited for "content" sites
2. Its origins have shaped the culture of its community
 - real-world code

“ Django was invented to meet fast-moving newsroom deadlines, while satisfying the tough requirements of experienced Web developers ”

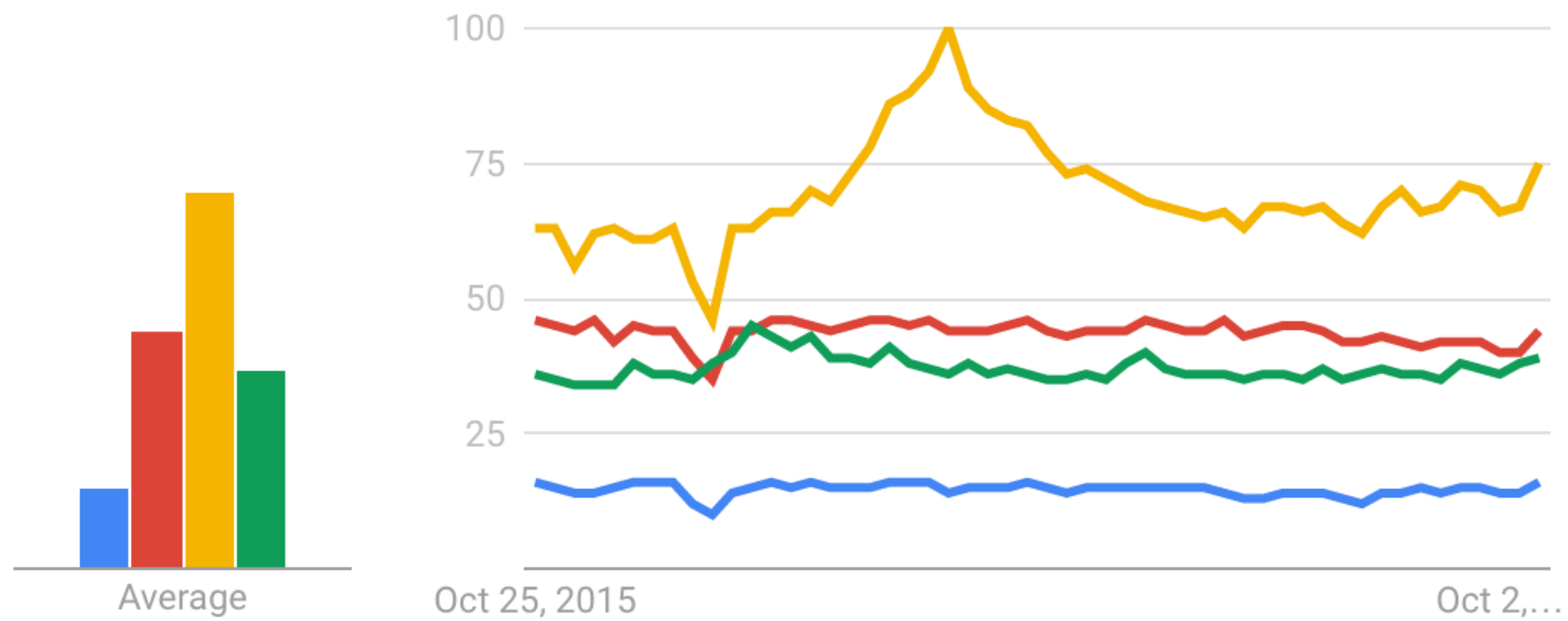
Today

**Django is the most popular Python web
framework**

Interest over time

Google Trends

● Symfony ● Ruby on Rails ● Spring Framework ● Django

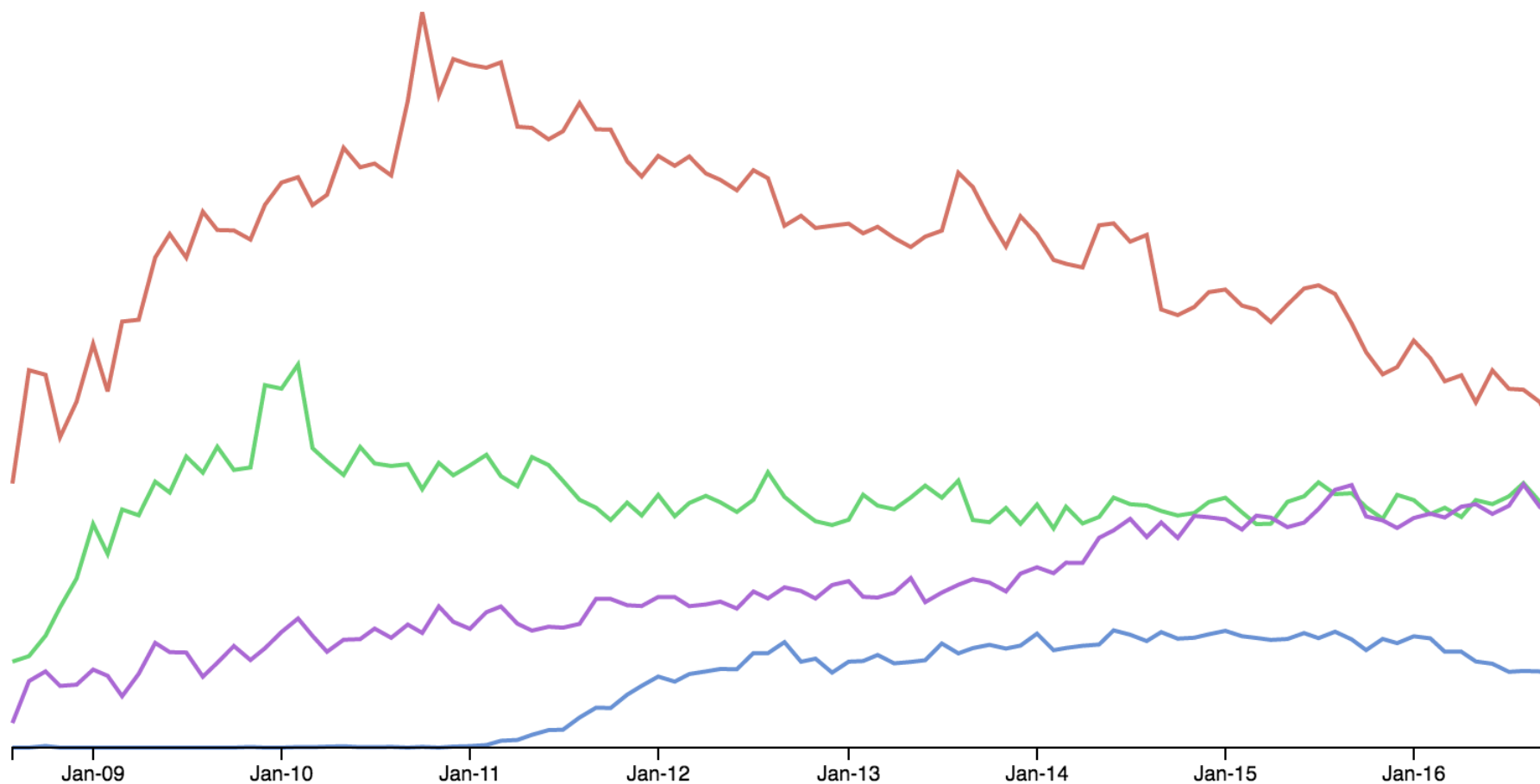


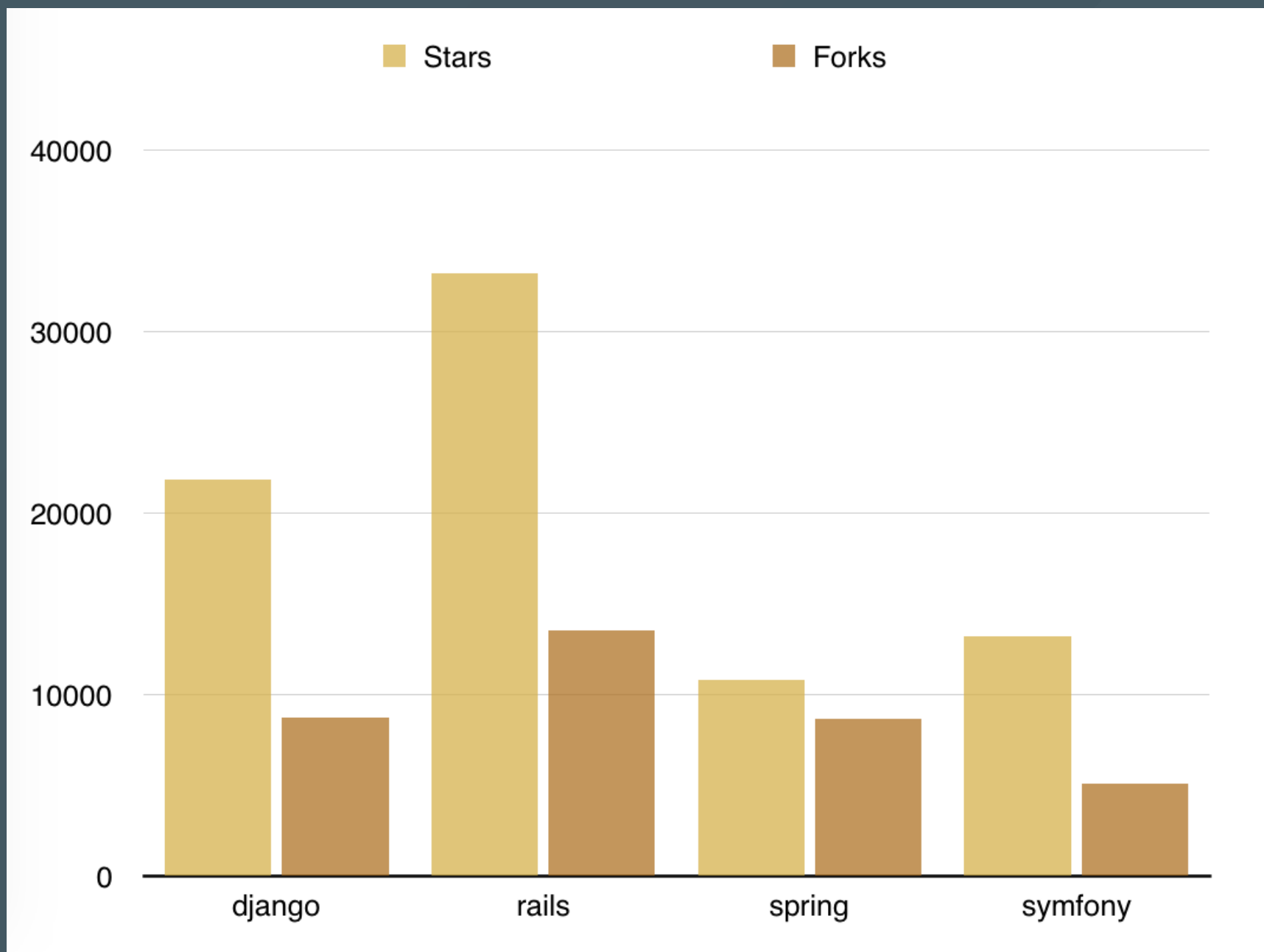
Worldwide. Past 12 months.

ruby-on-rails × symfony2 × django × spring ×

Questions over time ?

Relative: ☒





Team



Team

- Core team
 - Group of trusted volunteers who manage the project
- Technical board
 - 5 comitters, elected after each feature release
 - Experienced and active committers who steer technical choices
 - Their main concern is to maintain the quality and stability

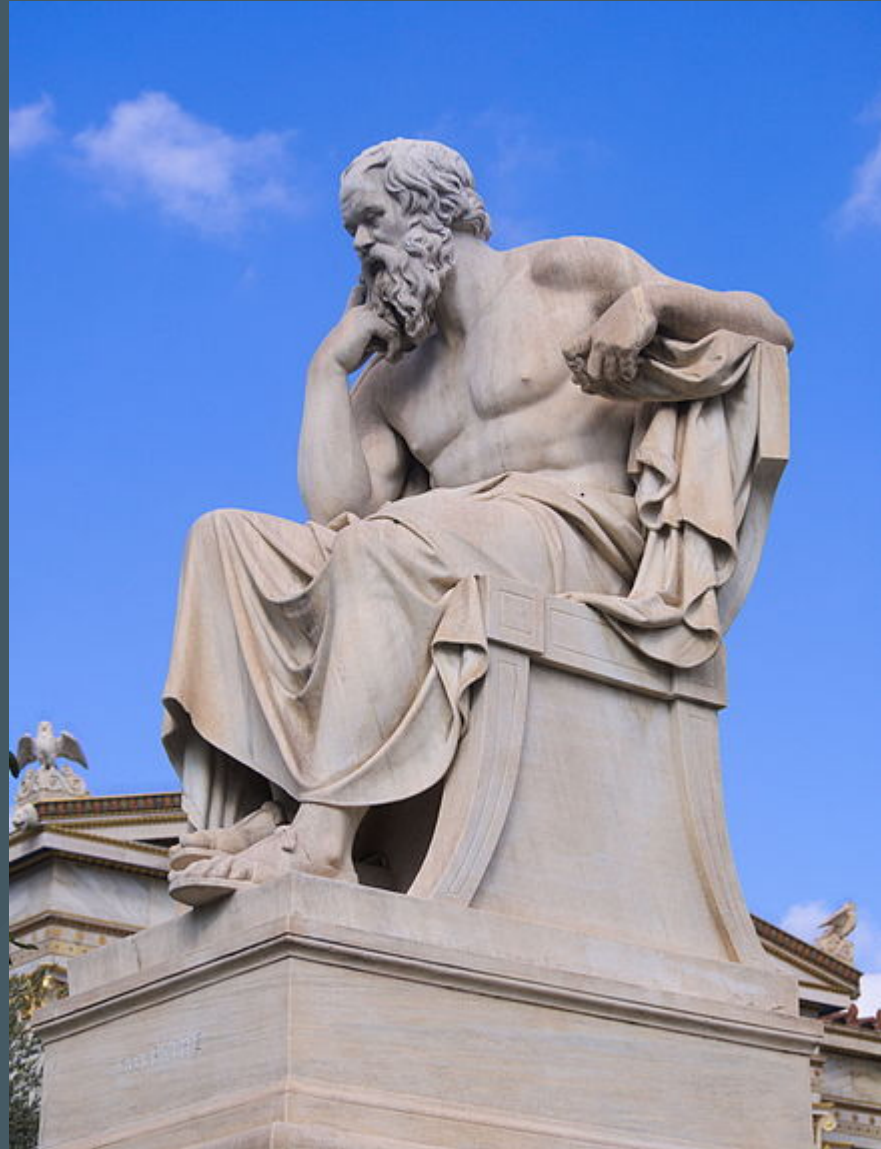
Release process



Release process

- Feature release: **A.B alpha/beta/rc N**
 - **Nth** alpha/beta/release candidate of version **A.B**
 - Some of them LTS (3 years)
- Patch release: A.B.C
 - bugfix and security releases
 - backwards-compatible with the previous release
 - security > compatibility

Design philosophies



Loose coupling

- Full stack but the pieces are independent of another wherever possible

Less code

- No boilerplate

Quick development

Don't Repeat Yourself

- Redundancy is bad. Normalization is good.

Explicit is better than implicit

- No “magic” unless there’s a really good reason for it

Consistency

- Low-level (coding style)
- High-level (the “experience” of using Django)

Why Web Framework?

“ The point of a Web framework in the 21st century is to make the tedious aspects of Web development fast ”

1. Write a Web app from scratch.
2. Write another Web app from scratch.
3. Realize the app from step 1 shares much in common with the app from step 2
4. Refactor the code so that app 1 shares code with app 2
5. Repeat steps 2-4 several times
6. Realize you've invented a framework.

«Don't Repeat Yourself»

Community

Free software

MVC

Model

View

Controller

MVC

Model

~~*View*~~ *Template*

~~*Controller*~~ *View*

Model

Active Record

“ An object that wraps a row in a database table or view, encapsulates the database access, and adds domain logic on that data. ”

- Model instances
- Querysets
- Managers

Model

- Backend Support
 - PostgreSQL
 - MySQL
 - SQLite
- Migrations
 - Can automatically create migrations comparing model versions

~~View~~ Template

- Django Template Language (DTL)
- It is not a programming language
 - Designed for... designers. No Python knowledge required.
- Inheritance
- Variables, tags and filters.

Controller Views

- Function based views
- Class based views
 - CRUD

Contrib

Contrib

- The Django admin site
- `django.contrib.auth`
- The contenttypes framework
- The flatpages app
- GeoDjango
- `django.contrib.humanize`
- The messages framework

Contrib

- `django.contrib.postgres`
- The redirects app
- The sitemap framework
- The “sites” framework
- The staticfiles app
- The syndication feed framework

Modern web ecosystem



Modern web ecosystem



Modern web ecosystem

- Asynchronous tasks
 - Celery
- APIs
 - Django Rest Framework
 - *Viewsets*
 - *Serializers*
- Web sockets
 - Django Channels

Python

Python

- General-purpose language
- Scientific
- Numeric
- IT Automation

Thank you!

Bibliography

- The Definitive Guide to Django (Adrian Holovaty & Jacob Kaplan-Moss, Apress)
- Two Scoops of Django (Greenfelds, Two Scoops Press)
- www.python.org
- docs.djangoproject.com
- www.martinfowler.com
- Google Trends, Stack Overflow Trends, GitHub, LinkedIn

Django Girls Workshop

@ PyCon Ireland

Mon November 7th 2016

- Free programming workshop for women
- Deadline is Sunday October 30, 23:00 (Dublin Time)
- Place are limited to 30 people