

The Coldest Journey

or, adventures in Django



An expedition to make the first crossing of
Antarctica in winter, previously lead by Sir
Ranulph Fiennes

Django + mobile = my new (ad)venture

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<http://www.theappchaps.co.uk>

Why Django? Or, what is Django??

Django is a high-level Python Web framework that encourages rapid development and clean, pragmatic design.

(<http://www.djangoproject.com>)

What is Django?

- Django is a 'full-stack' web framework, e.g.
 - Database access / ORM
 - Templating language
 - URL routing
 - Caching
 - "Auto" admin system
 - A massive ecosystem of quality extensions

Django extensions

A few useful examples:

- **South** (database migrations)
- **Django-Compressor** (minifies and auto-compiles JS, CSS & also SCSS, LESS, Coffeescript and more)
- **Django celery** (message queue integration)
- **GeoDjango** – full GIS extensions

Plus, it's just Python anyway

So you get access to the Python's 'batteries included' standard library and huge ecosystem of high quality libraries.

So, why Django?

- Contains pretty much everything you need to get started
- Anything else probably exists already and can be added
- It's FAST to develop in
- The auto-generated admin system can be really useful

Also, Django has PONIES



Thanks to <http://synopsi.tv> for this one :)

This isn't a tutorial...

I'd recommend having a look at the tutorial at <http://www.djangoproject.com>. You'll need a little bit of familiarity with the command line but otherwise it's very easy to get started with.

A few things this Django install does

Periodically scrapes and stores 'unfriendly' data (using **BeautifulSoup**) including GPS readings, weather data, images from blog posts, caches Twitter feed. Local weather reports are sent in Excel format by email. The system extracts these attachments and parses the Excel data. Practical solutions to non-ideal data. My advice: just get on with it.

Converts geographic data (WSG84 latitude / longitude to Antarctic Polar Stereographic using **GeoDjango**)

A few things this Django install does

Allows user entry for 'points of interest' with image uploads and text entry

Provides apps on four platforms with JSON feeds

All data is editable, including the scraped data.

A web-app is bundled too, written in HTML 5 and Coffeescript. *Coffeescript > Javascript IMO.*

Set-up and Deployment

It's currently running on an **Amazon EC2 micro instance** (for free!) with static files available on Amazon's worldwide Content Delivery Network (**Cloudfront**)

Served by **Gunicorn + nginx** and uses a **Postgres** database, **caching** provided by **Memcached**. Performance is pretty decent.

Follow along...

iOS app: <http://bit.ly/Z596yj>

Windows phone app: <http://bit.ly/15Qikxo>

Android: *coming soon*

Experimental web / embed version: <http://tcj.theappchaps.co.uk>

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