

# The Slacker's Guide to REST API

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# Overview

- Making your ORM accessible with REST
  - Tastypie and Restless
- Using the API by hand
  - Postman
- Documentation
  - apidocjs

# Reeder Demo

- Originally a Django app to “replace” Google Reader, and demonstrate Juju cloud deployment
- Now, a Demo of adding easy RESTish API to a Django app
- `Git clone`  
`https://github.com/jtmitchell/reeder-demo.git`
- `Git checkout talk/001-start`
- Original hand-crafted JSON responses in `rssfeeds/views.py`

# REST-full ORMs

- Adding Restless to the app
  - Tastypie is very full featured with automatic pagination, validation through Django Forms, etc... But is Django only
  - Restless just handles the JSON serialization and HTTP verbs (GET/POST/PUT/...) and leaves the rest to you, BUT it is available fro Django and Flask
  - This demo adds Restless to a Django app
- `Git co talk/002-first_rest_api_calls`
- Looking at
  - `Rssfeeds/view.py`
  - `Rssfeeds/api.py`
  - `Reeder/urls.py`
- Live API call `http://localhost:5000/api/feeds/`
  - Argh! The JSON response is all on one line, and has no colour! HELP!

# Using the API by hand

- Postman
  - Chrome(ium) only extension
  - Prettify the JSON output with colour and multiple lines
  - Save all the API endpoints and their parameters
- Share the API library with developers and testers
  - Mention the environments feature!
- Git checkout `talk/003-CRUD`
- Fully CRUD
- Try calling
  - `http://localhost:5000/api/feeds/`
  - `http://localhost:5000/api/articles/`

# DEMO FAIL!

- Restless requires “authentication” for the update and delete endpoints
- Too clever by half
  - Using an HTTP Authorization Header
- Adding Headers and Parameters to Postman
  - Add Header of type “Authorization” with value “1234”
- Fingers crossed as we try again...

# The Devil's in the Documentation

- The ultimate documentation is the source code
  - “*Just look at reeder.rssfeeds.api*”
- Unless you are an external vendor...
- Apidocjs
  - Node.js tool to scan your code, find tags in multiline comments, and generate a static website for the API
- `Git checkout talk/004-apidocs`

# Let me Google that for you...

- TastyPie
  - <http://tastypieapi.org/>
  - <http://django-tastypie.readthedocs.org/en/latest/toc.html>
- Restless
  - <https://github.com/toastdriven/restless/>
  - <http://restless.readthedocs.org/en/latest/>
- Postman
  - <http://www.getpostman.com/>
- APIdocjs
  - <http://apidocjs.com/>
- Reeder
  - <https://github.com/jtmitchell/reeder-demo>
- Presentation files
  - <http://www.maungawhau.net.nz/presentations/slacker-rest/Slackers-Guide-REST.pdf>
  - [http://www.maungawhau.net.nz/presentations/slacker-rest/Reeder-Demo.json.postman\\_collection](http://www.maungawhau.net.nz/presentations/slacker-rest/Reeder-Demo.json.postman_collection)
  - [http://www.maungawhau.net.nz/presentations/slacker-rest/Reeder-Local.postman\\_environment](http://www.maungawhau.net.nz/presentations/slacker-rest/Reeder-Local.postman_environment)