

```
{  
  "id": "d9b43773-c41c-4854-8e84-d0cd09365022",  
  "name": "Jonatas Baldin",  
  "twitter": "@jonatasbaldin",  
  "job": "Software Developer & Promoter",  
  "company": "Cheesecake Labs",  
  "talk_title": "API Design: Think First, Code Later",  
  "talk_description": "please do this"  
}
```



API Design: Think First, Code Later

ckl.io

submitted 11 days ago by [mafontes14](#)

[26 comments](#) [share](#) [pocket](#)

[/r/python/](#)



API Design: Think First, Code Later

ckl.io

submitted 11 days ago by [mafontes14](#)

[26 comments](#) [share](#) [pocket](#)

[/r/python/](#)


TOP

What is an API?

- Application Program Interface
- Routines, tools and and protocols
- Interaction between users and programs
- Or programs and programs
- Independent of underlying technology

And a REST API?

- Representational State Transfer
- Roy Fielding
- Resources and Representations
- URIs (Uniform Resource Identifier)
- Hypermedia As The Engine Of Application State
- Has six constraints

REST: The Constraints

- Uniform interface
- Layered system
- Client-Server
- Stateless
- Cacheable
- Code on demand (optional)

RE

SUA API NÃO É RESTFUL

nts

- Uniform
- Layered
- Client-Server
- Stateless
- Caching
- Code on the server



HTTP and JSON

just a little bit


```
{  
  "id": "d9b43773-c41c-4854-8e84-d0cd09365022",  
  "name": "Jonatas Baldin",  
  "twitter": "@jonatasbaldin",  
  "job": "Software Developer & Promoter",  
  "company": "Cheesecake Labs",  
  "talk_title": "API Design: Think First, Code Later",  
  "talk_description": "please do this"  
}
```

```
{  
  "id": "d9b43773-c41c-4854-8e84-d0cd09365022",  
  "name": "Jonatas Baldin",  
  "twitter": "@jonatasbaldin",  
  "job": "Software Developer & Promoter",  
  "company": "Cheesecake Labs",  
  "talk_title": "API Design: Think First, Code Later",  
  "talk_description": "please do this"  
}
```

RIP XML

Bad, bad design

- Absence of consistency
- Difficulty to scale
- Hard to learn
- Performance issues
- APIs tend to be forever

Blueprint API <3

- A powerful high-level API description language for web APIs
- API Design and Documentation
- [Markdown]()
- Tools
- Resources, actions and URIs
- MSON





aglio

api blueprint renderer



drakov



DREDD

No more outdated API Documentation

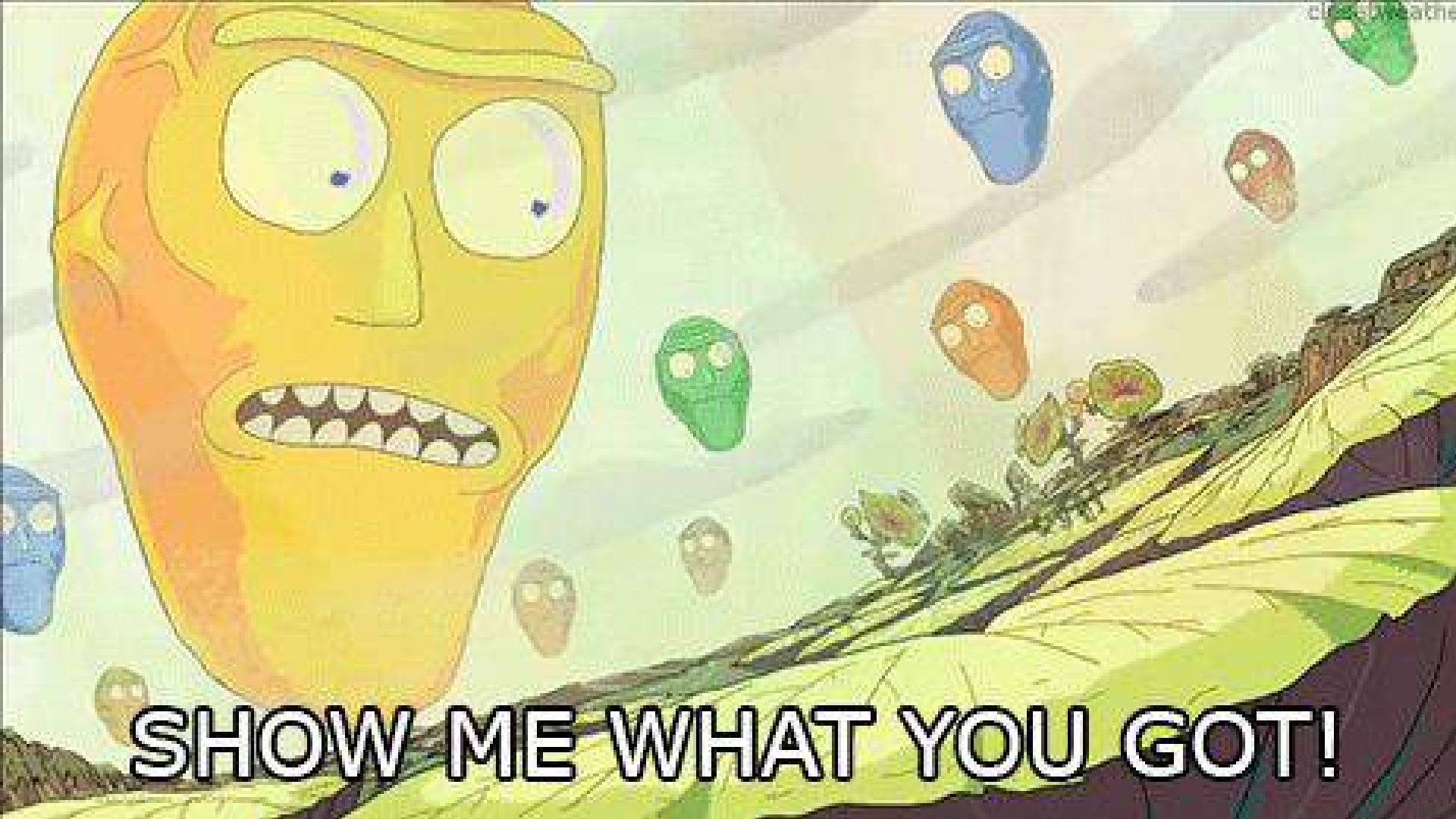


node



php





SHOW ME WHAT YOU GOT!

Other tips

- Nouns: YES / Verbs: NO
- Use plural on your URI resources
- Filter with query parameters
- Return errors with 4xx (and use codes correctly)
- Don't reimplement authentication
- Take a moment to think about versioning
- If you API is public, throttle it

~~Good~~ Awesome design

- Talk to your customers
- Easy to use
- Hard to misuse
- Simple is better than complex
- Use your API before implementing it
- Be resilient
- Test everything

vlw flw

questions?