

REST APIs in Python

an Introduction



Github Link

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REST

- Client - Server
- Stateless (REpresentational State Transfer)
- Uniform Interface
 - Resource Based
 - Representations
 - Self Descriptive
- Cacheable
- Layered System
 - Load Balancing and Security
- Code on Demand (Optional)

REST

- Usually HTTP(S), but not required
- HTTP Verbs
 - POST CREATE
 - GET READ
 - PUT UPDATE
 - DELETE DELETE
- BODY
- URI for Resource
 - `https:// server / api / v1 / meetings`
- Security
 - Not included in demo

Our Resource

- IndyPy Meeting
 - meeting_date: str YYYY-MM-DD (PK)
 - theme: str
 - pbj_topic: str
 - right_brain_topic: str
 - pro_talk_topic: str
- URI /meetings
- SQLAlchemy with in memory SQLite
- Flask and flask-restful

GET

- /meetings
 - List of meeting dicts
 - No pagination
- /meetings/2019-02-12
 - Individual meeting dict

POST

- /meetings/2019-02-12 gives Error
- /meetings correct URI
- BODY JSON with Data

```
{  
  "meeting_date": "2019-02-12",  
  "theme": "Share the (Python) Love",  
  "pbj_topic": "REST APIs in Python",  
  "right_brain_topic": "Understand Before You Judge",  
  "pro_topic": "Integrating Python with AWS",  
}
```

PUT

- /meetings gives Error (No Resource)
- /meetings/2019-02-12
- BODY JSON with Updates

```
{  
    "meeting_date": "2019-02-12",  
    "theme": "Share the (Python) Love",  
    "pbj_topic": "REST APIs in Python",  
    "right_brain_topic": "Understand Before You Judge",  
    "pro_topic": "Integrating Python with AWS",  
}
```

DELETE

- /meetings
 - Delete all meetings?!?
 - Probably not a good idea to support
- /meetings/2019-02-12
 - Delete meeting if found

Python Code

[https:// github.com / sacherjj / rest_intro_presentation](https://github.com/sacherjj/rest_intro_presentation)

