# **Restful APIs**

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### What Are APIs?

- Known as Application Programming Interfaces
- Used to get one software to interact with another
- Different Types of APIs
  - **REST**
  - SOAP
  - $\circ$  XML-RPC
  - JSON-RPC

#### **REST APIs**

• Stands for **RE**presentational **S**tate **T**ransfer



#### **JSON Objects**

#### • Most APIs return JSON objects

example = {"person": [

}

{"name": "Peter", "age": 28, "nationality": "Irish"},

{"name": "Paul",
 "age": 44,
 "nationality": "German"},

{"name": "Stephen",
 "age": 22,
 "nationality": "English"},

{"name": "Paul",
 "age": 26,
 "nationality": "Scottish"}
]

### **Common HTTP methods**

- **GET-** retrieves resource
- **POST** modify resource
- **PUT** replace resource
- **DELETE -** remove resource



## Challenge

- Open Google Colaboratory or whatever text editor you feel most comfortable with Python installed. Don't forget to import requests!
- 2. Use the public API shibe.online to GET a URL of an image of a shibe
- 3. POST the URL to CleanURI API to obtain a shortened url
- 4. Click the shortened URL and enjoy the picture of a cute shibe



https://colab.research.google.com/drive/19SInaKdSkWc1J07RofZr9aHmb0INyCA1