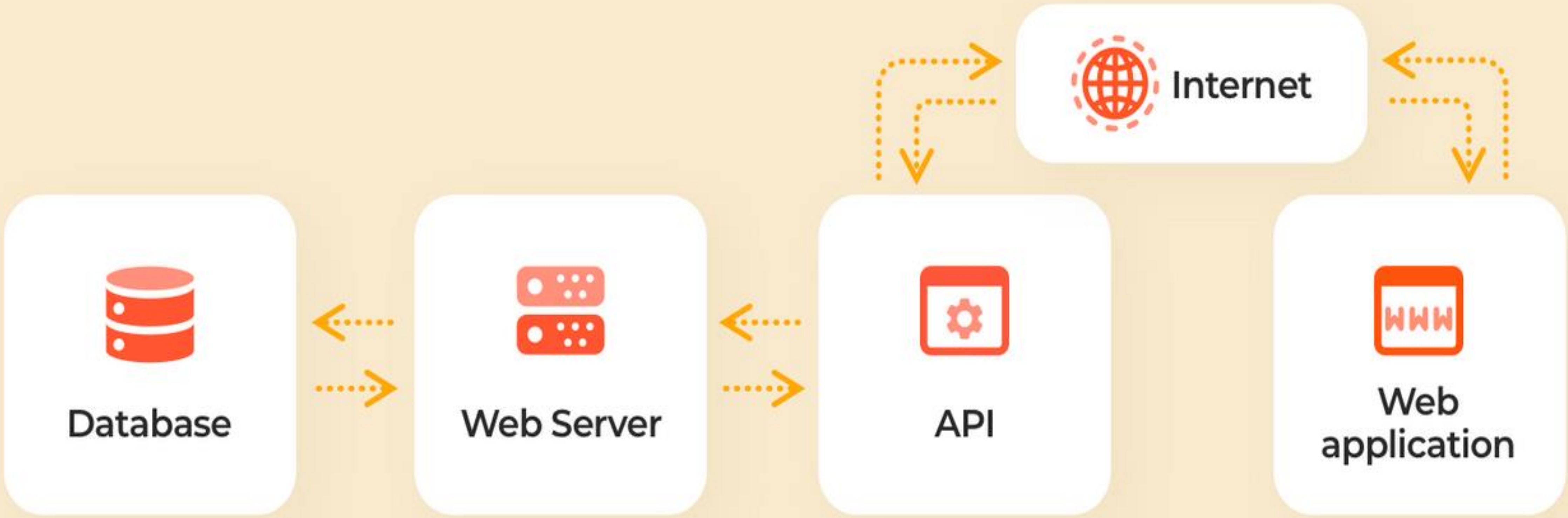
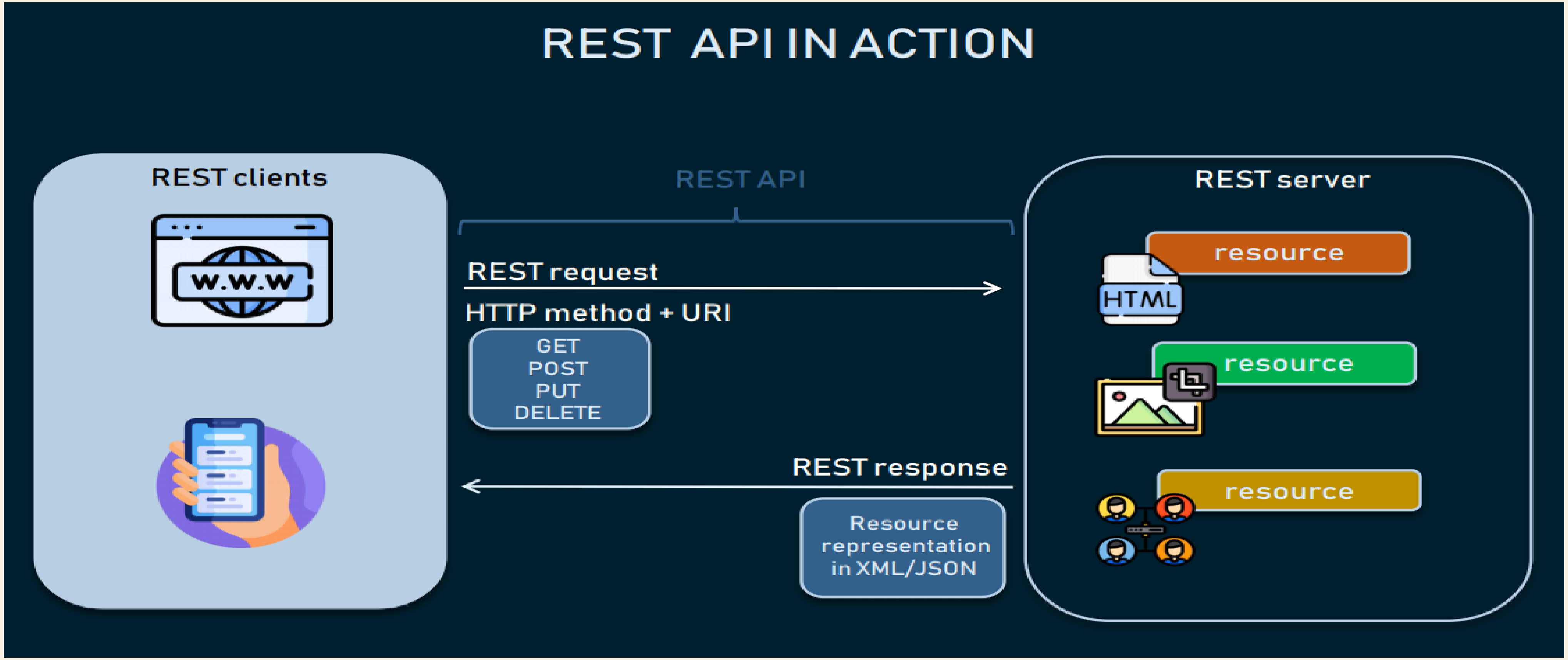
REST API

What is an API?

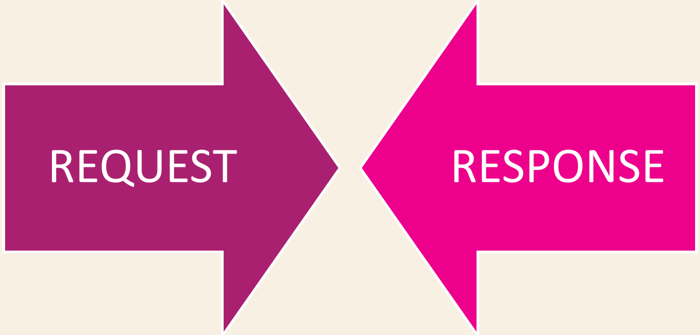


WHAT IS REST API?

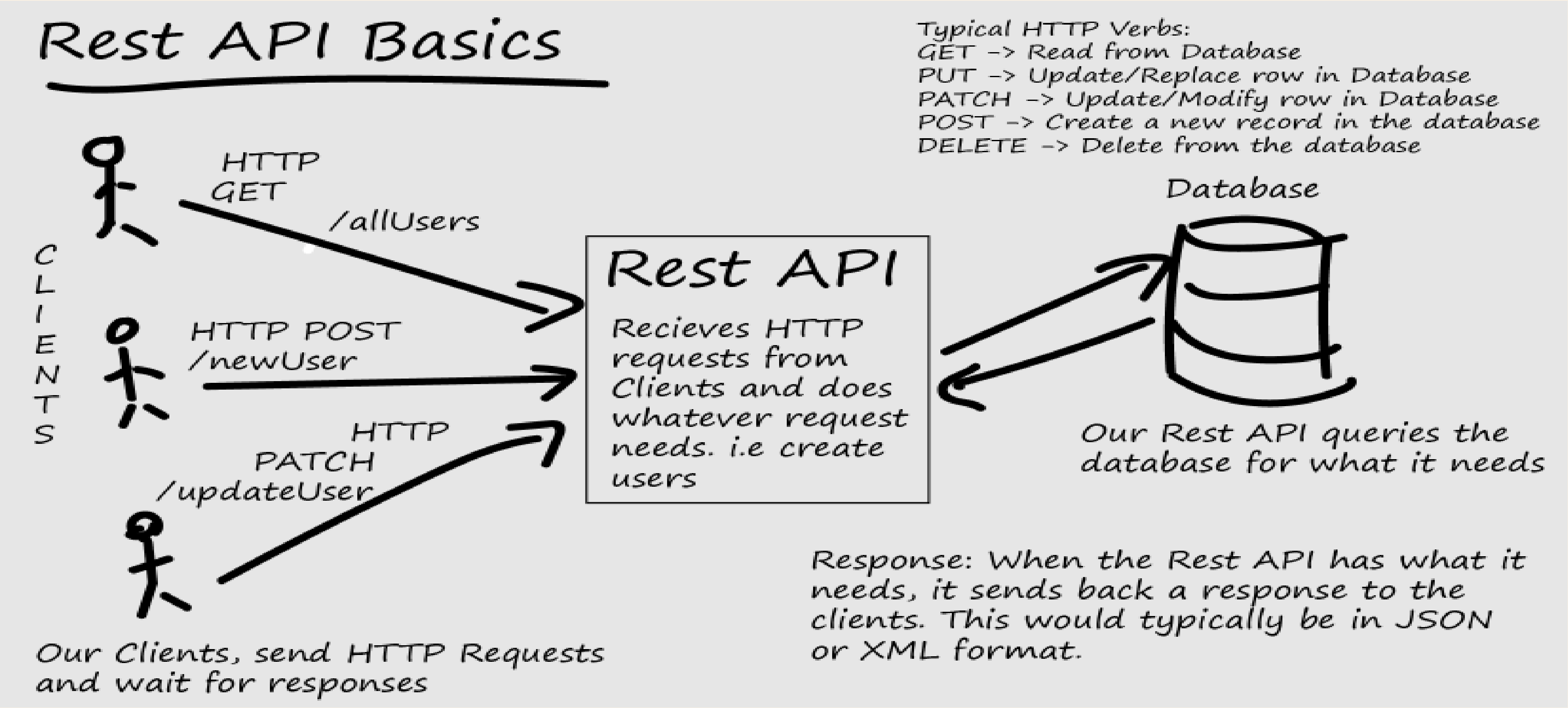
A REST API is an API that conforms to the design principles of the REST, or *representational state transfer* architectural style. For this reason, REST APIs are sometimes referred to RESTful APIs.



BUILDING BLOCKS OF REST API


REQUEST

RESPONSE


Rest API Basics

Typical HTTP Verbs:
GET -> Read from Database
PUT -> Update/Replace row in Database
PATCH -> Update/Modify row in Database
POST -> Create a new record in the database
DELETE -> Delete from the database

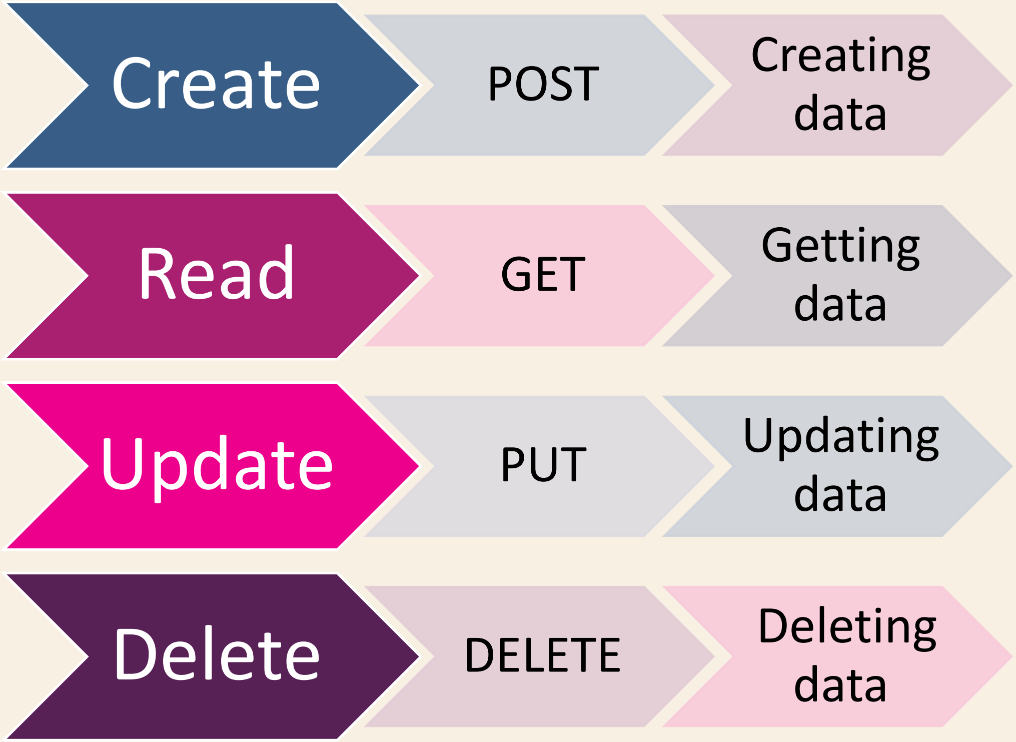
Recieves HTTP requests from Clients and does whatever request needs. i.e create users

Our Rest API queries the database for what it needs

Response: When the Rest API has what it needs, it sends back a response to the clients. This would typically be in JSON or XML format.

Our Clients, send HTTP Requests and wait for responses

CRUD OPERATIONS AND IT’S HTTP METHODS



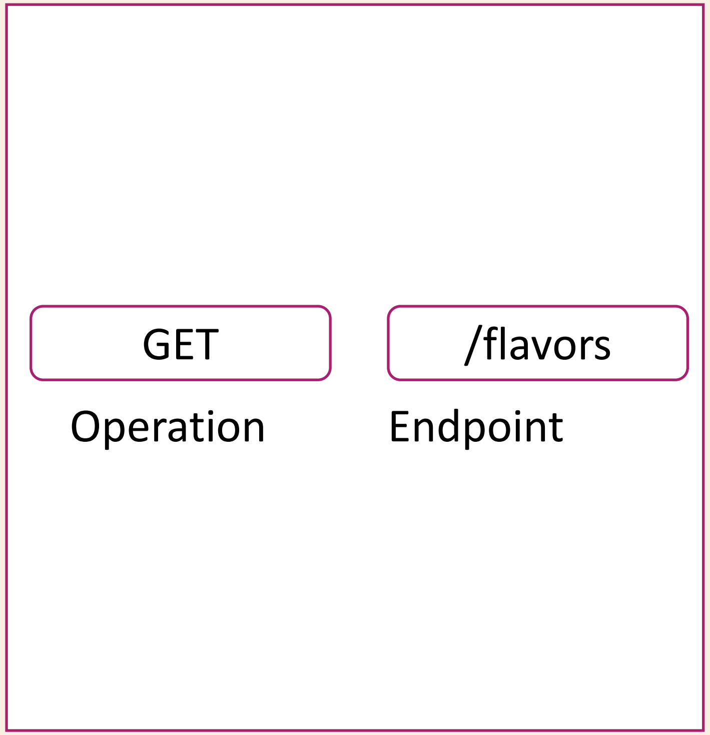
Create	POST	Creating data
Read	GET	Getting data
Update	PUT	Updating data
Delete	DELETE	Deleting data

EXAMPLES

”HTTP://ICECREAM.COM/API/FLAVORS”

1) GET FLAVORS

REQUEST



GET

Operation

/flavors

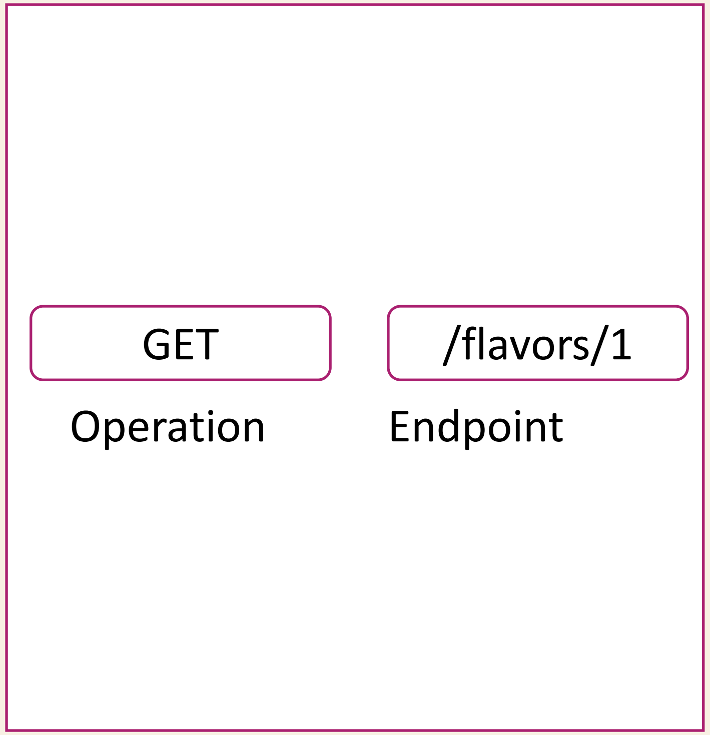
Endpoint

RESPONSE

```
[ {
    “id” : 0,
    “flavor” : “strawberry”},
  {
     “id” : 1,
     “flavor” : “vanilla”}
…..
]
```

2) GET A PARTICULAR FLAVOR

REQUEST



GET

Operation

/flavors/1

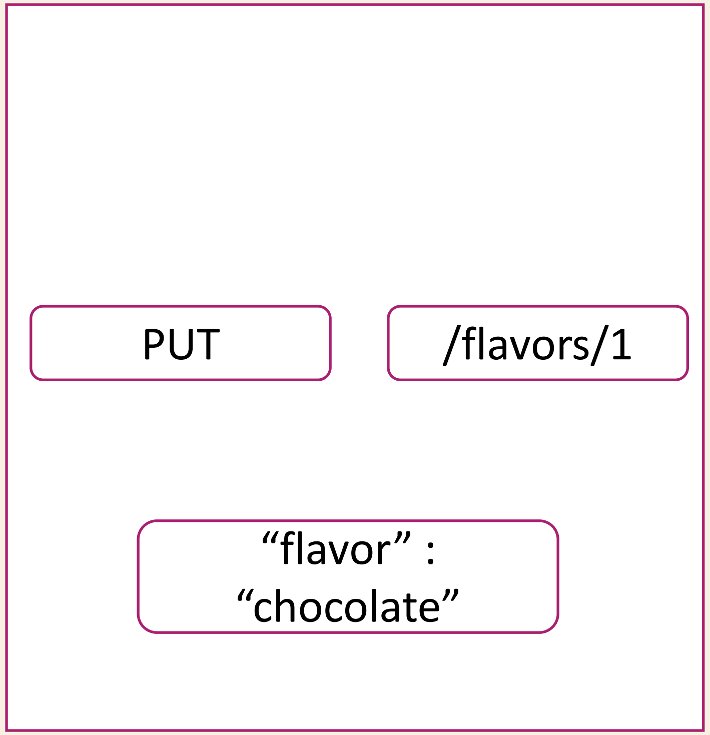
Endpoint

RESPONSE

```
[
  {
    “id” : 1,
    “flavor” : “vanilla”}
]
```

3) UPDATE FLAVORS

REQUEST



PUT

/flavors/1

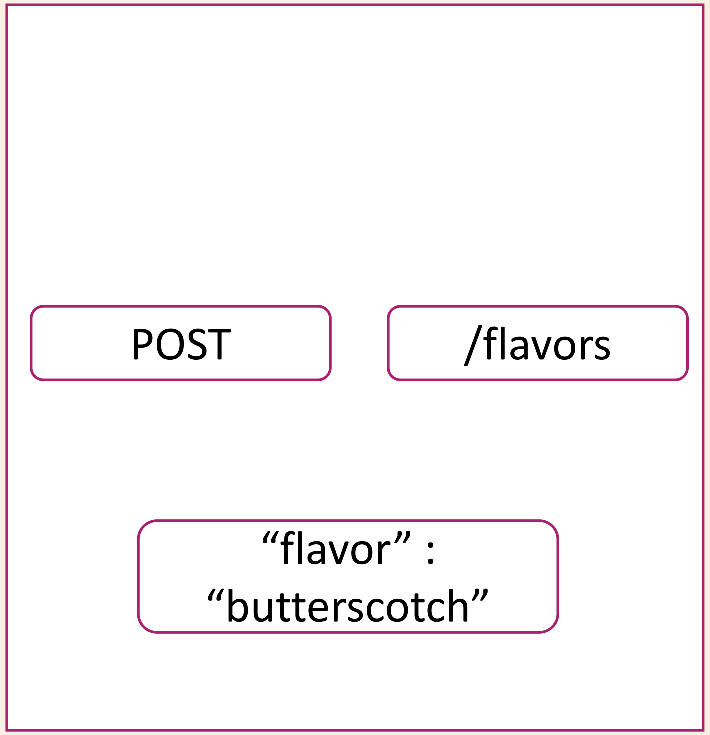
“flavor” : “chocolate”

RESPONSE

```
[
{
    “id” : 1,
    “flavor” : “chocolate”}
]
```

4) CREATE A NEW FLAVOR

REQUEST



POST

/flavors

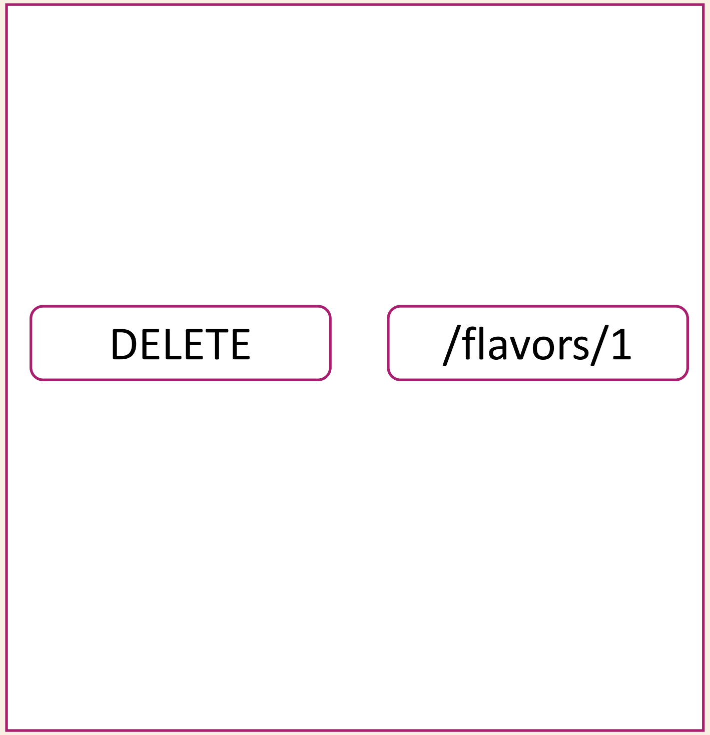
“flavor” : “butterscotch”

RESPONSE

```
[
{
      “id” : 2,
      “flavor” : “butterscotch”}
]
```

5) DELETE A FLAVOR

REQUEST



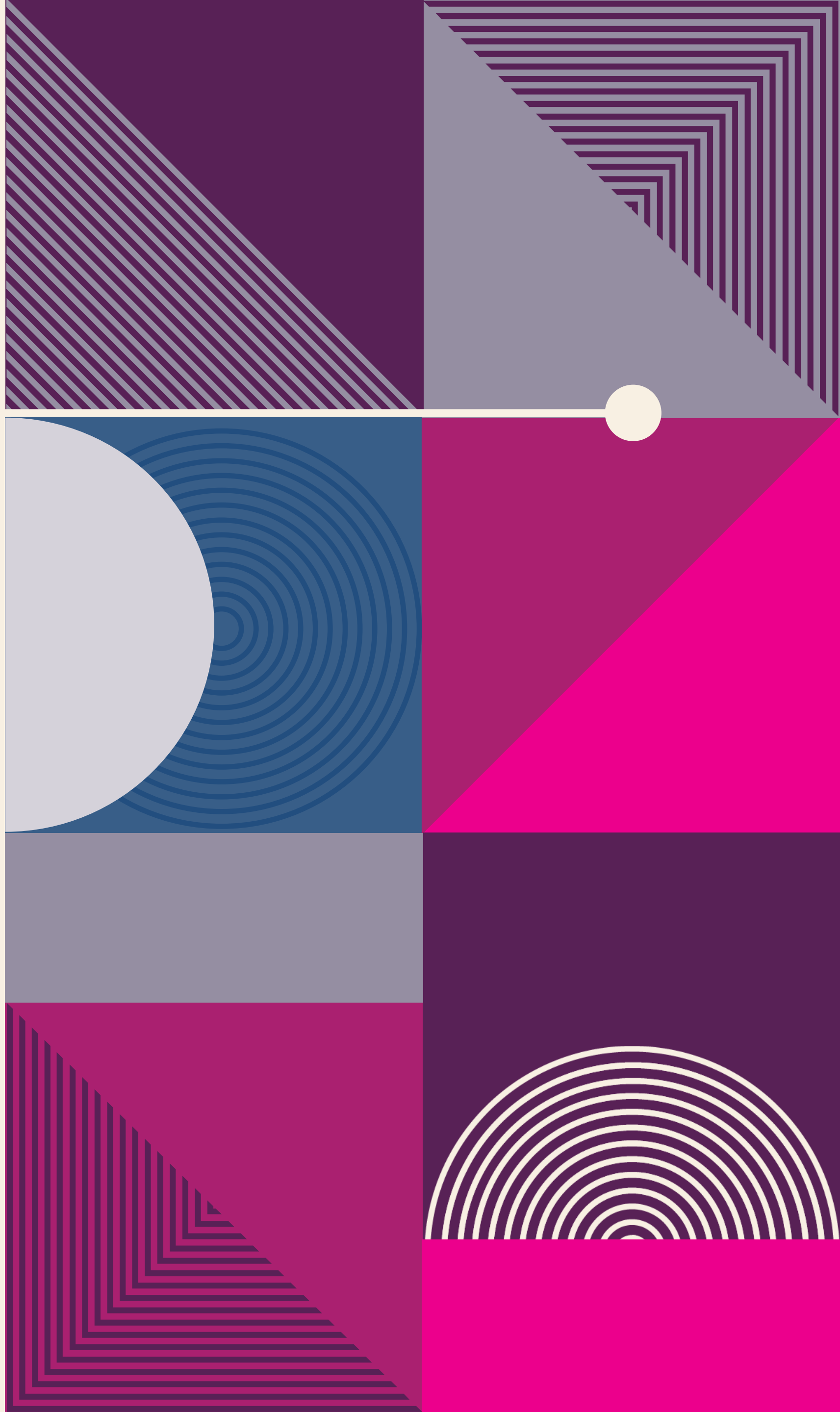
DELETE

/flavors/1

RESPONSE

BENEFITS OF USING REST API

- Simple and standardized approach
- Scalable
- Stateless
- High performance
- Support caching
- Efficient and fast



THANK YOU