

Consuming a REST API with Guzzle and PHP

GETTING STARTED



Annapurna Agrawal

AUTHOR

@annapurna_23 [linkedin.com/in/annapurna-agrawal](https://www.linkedin.com/in/annapurna-agrawal)



Getting Started



Annapurna Agrawal

AUTHOR

@annapurna_23 [linkedin.com/in/annapurna-agrawal](https://www.linkedin.com/in/annapurna-agrawal)



REST and HTTP



HTTP

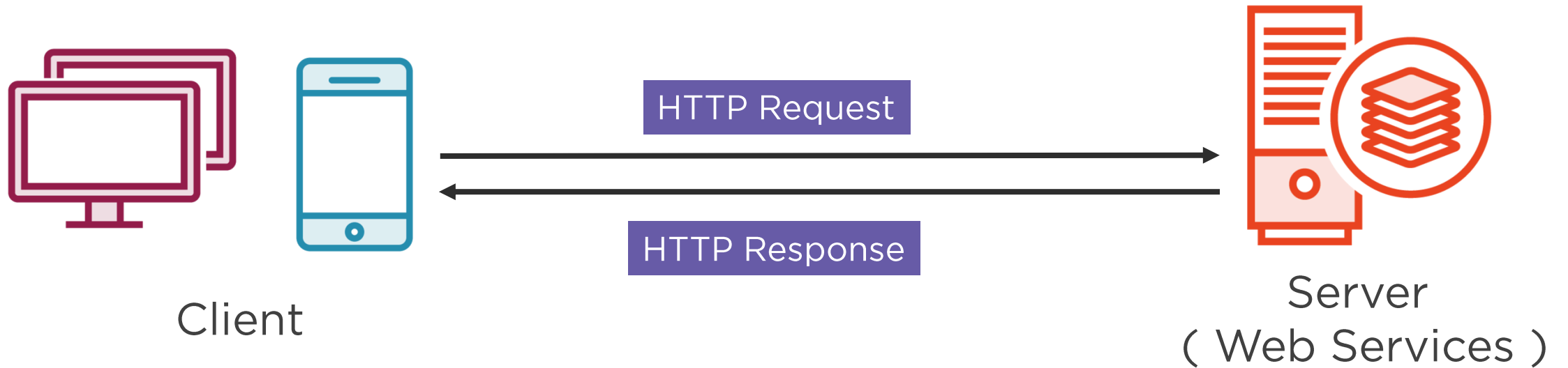
- Hyper Text Transfer Protocol



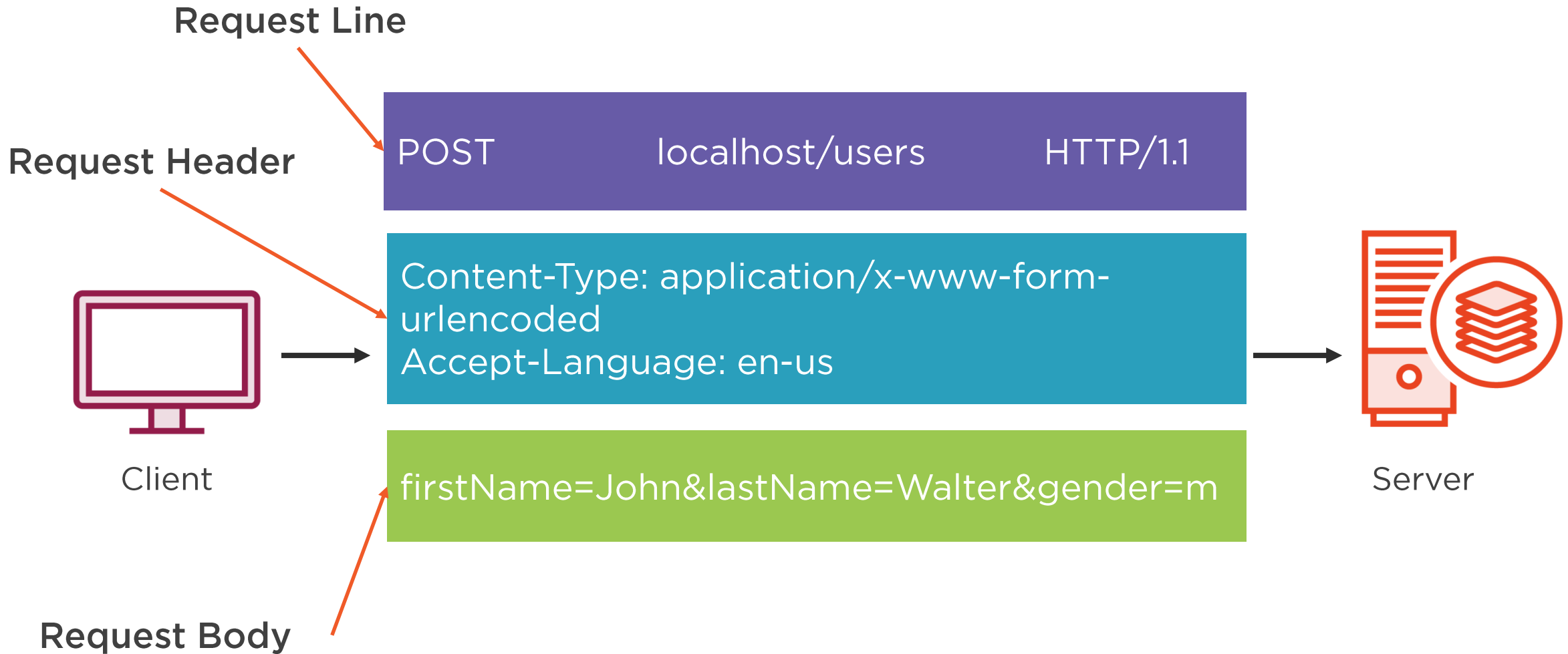
HTTP is an application
protocol for distributed,
collaborative, hypermedia
information systems



HTTP Request and Response



HTTP Request Example



HTTP Methods

GET

Retrieve a resource

POST

Add a resource

PUT

Replace a resource

PATCH

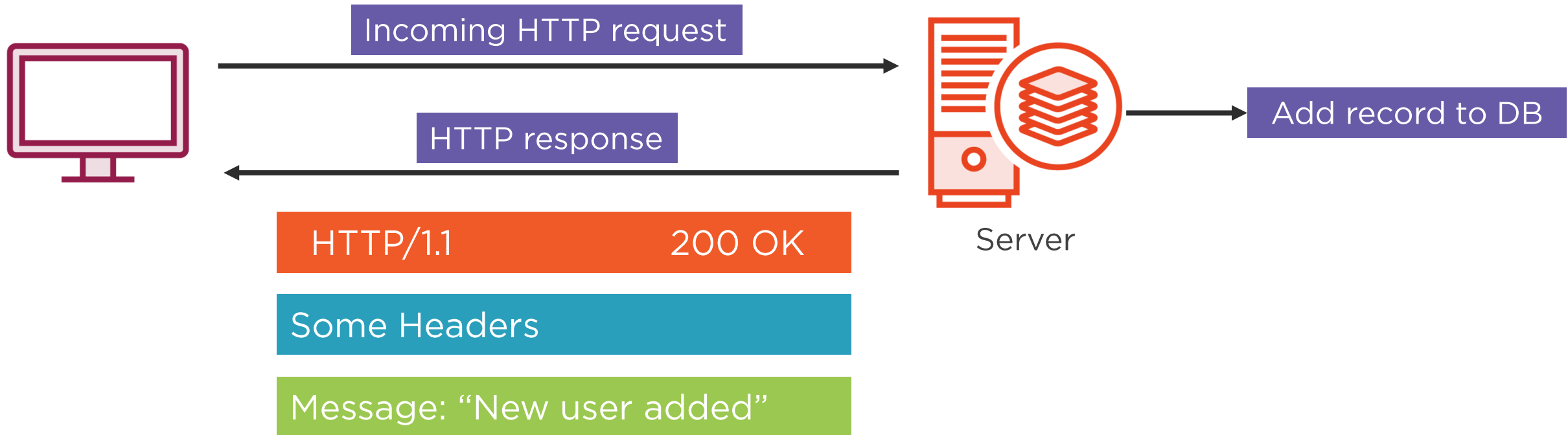
Update parts of
resource

DELETE

Remove a resource



HTTP Response



Status Code

Status Code Range	Meaning
100s	Informational
200s	Success
300s	Redirects
400s	Client Error
500s	Server Error



REST and HTTP



HTTP

- Hyper Text Transfer Protocol

REST

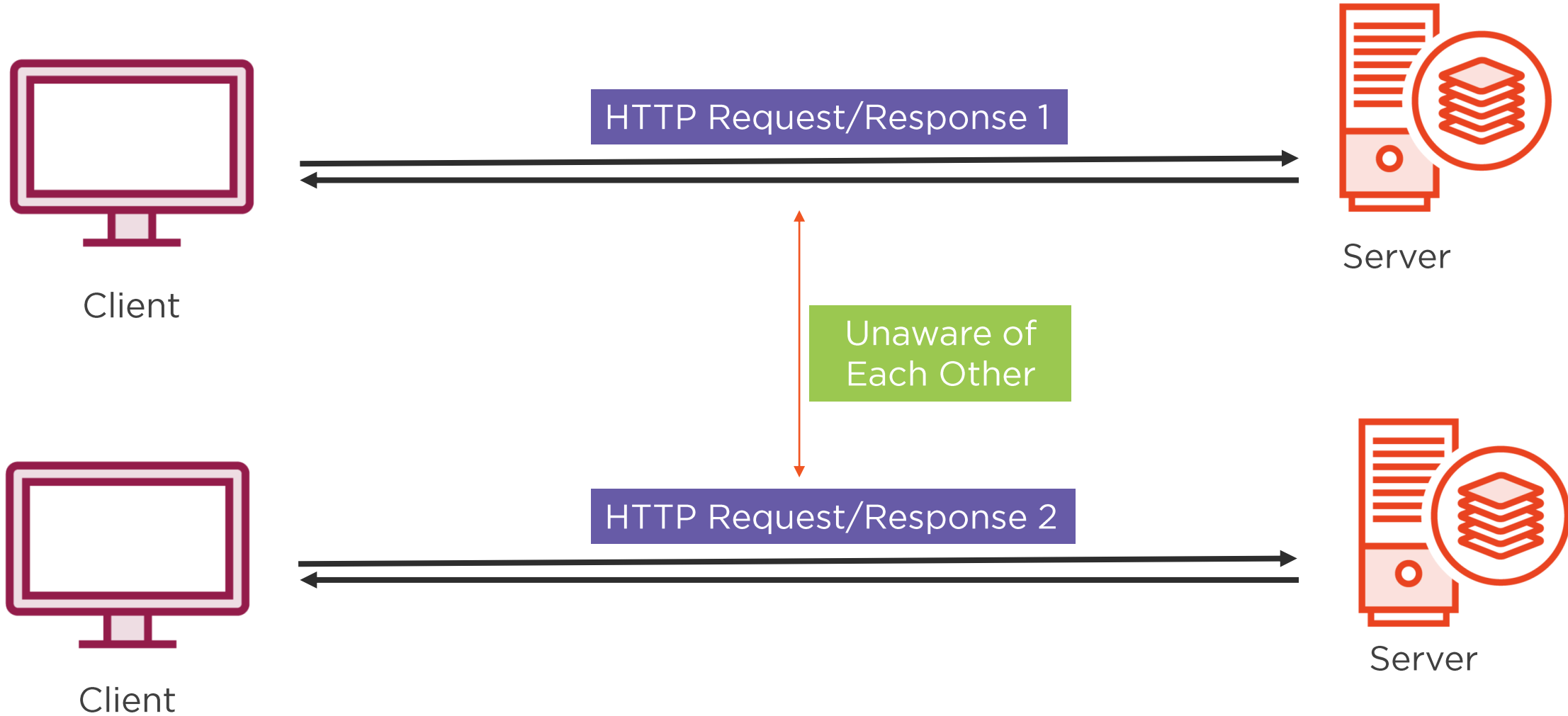
- Representational State Transfer
- RESTful APIs

RESTful APIs

**Stateless Client-Server
Relationship**



Stateless



RESTful APIs

**Stateless Client-Server
Relationship**

**Utilize HTTP Methods
(GET, PUT, POST, PATCH,
DELETE)**

**Structured and Consistent
URLs**



HTTP Methods and Structured URLs

HTTP Method	Consistent URL	Web Service Operation
GET	localhost/user	Fetch User
POST	localhost/user	Add User
DELETE	localhost/user	Delete User

GET localhost/user/3 fetch user whose id is 3



RESTful APIs

**Stateless Client-Server
Relationship**

**Utilize HTTP Methods
(GET, PUT, POST, PATCH,
DELETE)**

**Structured and Consistent
URLs**

Consistent Data Type Transfer



Consistent Data Type

JSON

XML



REST is the way **HTTP**
should be used.



cURL and Guzzle



cURL

- client URL
- Command line tool exchanging data using URL syntax

Guzzle

- HTTP client built with and for PHP
- Easy exchange of data and integration with web services

cURL GET Request in CLI

```
curl -H 'Accept: application/json' -H 'Content-Type:  
application/json' -X GET http://hostname/resource
```



cURL GET Request in PHP

```
$curl = curl_init();  
$headers = array(  
    'Accept: application/json',  
    'Content-Type: application/json');  
curl_setopt($curl, CURLOPT_HTTPHEADER, $headers);  
curl_setopt($curl, CURLOPT_URL, 'http://hostname/resource');  
curl_setopt($ch, CURLOPT_CUSTOMREQUEST, 'GET');  
$resp = curl_exec($curl);
```



GUZZLE request

```
$client = new GuzzleHttp\Client();  
$response = $client->request('GET',  
    'http://hostname/resource', [  
    'headers' => [  
        'Accept' => 'application/json',  
        'Content-Type' => 'application/json'  
    ]]);
```



Guzzle



Initially Guzzle was a wrapper library around cURL

Now, it has adopted PSR-7 standards

Provides class implementations



Why Guzzle?

Abstraction layer for HTTP requests

Uses PSR-7 as the HTTP interface

Clean API and detailed documentation

Built-in unit testing support



Demo



Installing Guzzle

- Install guzzle using composer



Demo



Creating First Guzzle request



Demo App: Globomantics Media

