

API REST Request Quick Reference Guide

The Request URL

<https://www.happypath.com/contact/2?phone>

<https://> = protocol

www.happypath.com/ = domain

[contact/](https://www.happypath.com/contact/) = path

[2](https://www.happypath.com/contact/2) = path parameter

[?phone](https://www.happypath.com/contact/2?phone) = query parameter

HTTP Verbs

GET- retrieves a record from the database

POST- adds a record to the database

PUT- replaces a record in the database with a new record

PATCH- modifies an existing record in the database

DELETE- removes a record from the database

Parameters

Path Parameter: Included as part of the path

Examples:

- **contacts/2** will return the contact with the id of 2
- **company/3/contacts/4** will return the contact with the id of 4 in the company with the id of 3

Query Parameter: Appended to the path

Preceded by a question mark

Can be chained together with an ampersand

Can ask for a specific resource with an equals sign

Examples:

- **contacts/2?phone** will return the phone number for the contact
- **contacts/2?phone&email** will return the phone number and the email for the contact
- **contacts?lastname=Smith** will return the contacts that have a last name of Smith

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Headers

Request Headers:

- Accept-** Media types that are acceptable in the response
- Accept-Charset-** Character sets that are acceptable in the response
- Accept-Encoding-** Encoding that is acceptable in the response
- Accept-Language-** Language that is acceptable in the response
- Authorization-** Credentials for the request
- Cache-Control-** Indicates whether caching is allowed
- Content-Length-** The length of the request body
- Content-Type-** The media type of the request body
- Cookie-** Cookie returned previously by the server to save a response
- User-Agent-** The software making the request, such as a web browser

Response Headers:

- Cache-Control-** Indicates whether the response can be cached and for how long
- Content-Encoding-** The type of encoding used on the data
- Content-Language-** The language of the response
- Content-Length-** The length of the response
- Content-Type-** The format of the response
- Date-** The date and time of the response
- Location-** Indicates where the request was redirected, or where a resource has been created
- Set-Cookie-** A cookie that can be used to store data

Response Codes

100 Level: Informational

- 100 Continue-** The server has received the request headers and the client should now send the request body

200 Level: Successful

- 200 OK-** The request was successful
- 201 Created-** The request has created a new resource
- 202 Accepted-** The request has been accepted, but the processing has not yet been completed
- 204 No Content-** The request has been processed and returned no content

300 Level: Redirection

- 301 Moved Permanently-** The resource has been moved to the location indicated in the response header

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400 Level: Client Error

400 Bad Request- The request is malformed or invalid

401 Unauthorized- The client does not have the correct authentication

403 Forbidden- The client does not have permission to access the resource

404 Not Found- The requested resource was not found

405 Method Not Allowed- The HTTP verb is not correct

409 Conflict- The request puts data resources in conflict with each other

500 Level: Server Error

500 Internal Server Error- An unexpected condition was encountered

502 Bad Gateway- The server received a bad response from an upstream server

503 Service Unavailable- The server is currently down or overloaded

504 Gateway Timeout- The server did not receive a timely response from an upstream server

JSON Format

name-value pair-

```
"name": "Spot"
```

object- a group of name-value pairs

```
{  
  "name": "Spot",  
  "type": "dog",  
  "age": "5"  
}
```

array- a group of objects

```
"pets": [  
  {  
    "name": "Spot",  
    "type": "dog",  
    "age": "5"  
  },  
  {  
    "name": "Fluffy",  
    "type": "cat",  
    "age": "3"  
  }  
]
```