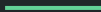LAYER ZERO

UNLV CYBER SECURITY CLUB

curl & HTTP Headers

curl

(Client URL)

- used to transfer data
- supports HTTP methods, FTP, LDAP, SCP, etc.

HTTP

(HyperText Transfer Protocol)

- layer 7 protocol
- client / server architecture
- HTTP methods / verbs
- status codes
  - standard response code given by servers

HTTP Headers

- allow client/server to pass additional info with a request or response
- header fields

https://en.wikipedia.org/wiki/List_of_HTTP_header_fields

HTTP Verb	CRUD	Entire Collection (e.g. /customers)	Specific Item (e.g. /customers/{id})
POST	Create	201 (Created), 'Location' header with link to /customers/{id} containing new ID.	404 (Not Found), 409 (Conflict) if resource already exists..
GET	Read	200 (OK), list of customers. Use pagination, sorting and filtering to navigate big lists.	200 (OK), single customer. 404 (Not Found), if ID not found or invalid.
PUT	Update/Replace	405 (Method Not Allowed), unless you want to update/replace every resource in the entire collection.	200 (OK) or 204 (No Content). 404 (Not Found), if ID not found or invalid.
PATCH	Update/Modify	405 (Method Not Allowed), unless you want to modify the collection itself.	200 (OK) or 204 (No Content). 404 (Not Found), if ID not found or invalid.
DELETE	Delete	405 (Method Not Allowed), unless you want to delete the whole collection—not often desirable.	200 (OK). 404 (Not Found), if ID not found or invalid.

HTTP Verbs Overview

- **POST / PUT**
    - create new resources
    - successful creation ⇒ code 201 (location header)
    - PUT typically for updating
- **GET**
    - read or retrieve a resource
    - returns a resource representation in XML, JSON, etc.
    - successful resource retrieval ⇒ code 200 (OK)
    - unsuccessful retrieval ⇒ code 404 (not found) / code 400 (bad request)
- **DELETE**
    - successful deletion ⇒ code 200 (OK)
    - unsuccessful deletion ⇒ code 204 (no content)