

HTTP Verbs

Memi Lavi
www.memilavi.com



HTTP Verbs

- Set the action to be performed
 - Retrieve a resource
 - Add a resource
 - Update a resource
 - Delete a resource

CRUD

Create

Read

Update

Delete

HTTP Verbs

- Part of the HTTP standard

9.3 GET

The GET method means retrieve whatever information (in the form of an entity) is identified by the Request-URI. If the Request-URI refers to a data-producing process, it is the produced data which shall be returned as the entity in the response and not the source text of the process, unless that text happens to be the output of the process.

The semantics of the GET method change to a "conditional GET" if the request message includes an If-Modified-Since, If-Unmodified-Since, If-Match, If-None-Match, or If-Range header field. A conditional GET method requests that the entity be transferred only under the circumstances described by the conditional header field(s). The conditional GET method is intended to reduce unnecessary network usage by allowing cached entities to be refreshed without requiring multiple requests or transferring data already held by the client.

The semantics of the GET method change to a "partial GET" if the request message includes a Range header field. A partial GET requests that only part of the entity be transferred, as described in section [14.35](#). The partial GET method is intended to reduce unnecessary network usage by allowing partially-retrieved entities to be completed without transferring data already held by the client.

The response to a GET request is cacheable if and only if it meets the requirements for HTTP caching described in section 13.

See section [15.1.3](#) for security considerations when used for forms.

<https://www.w3.org/Protocols/rfc2616/rfc2616-sec9.html>

HTTP Verbs

- Extremely important:



Always Use The Correct Verb!

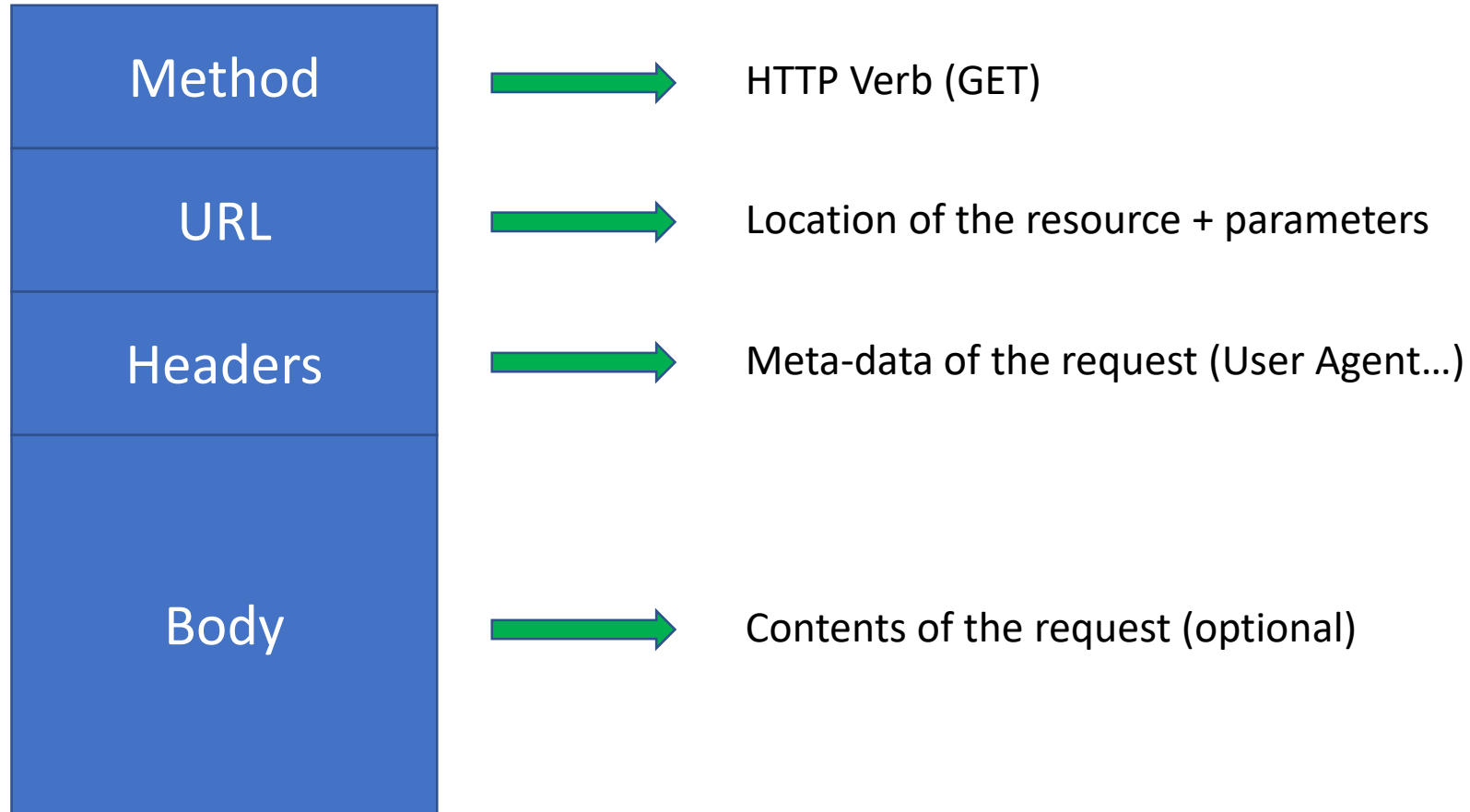
- Improves readability
- Should be treated as part of the URL

The GET Verb

- Used to retrieve resource(s)
- NEVER use it to add / update / delete resources
- The default verb of the browser's address bar
- Usually combined with parameters

The GET Verb

- Should not include body



The GET Verb - Exception

- Sometimes GET cannot be used for retrieval
 - For example: Too many parameters
- In this case – use POST

The POST Verb

- Used to add resource
- Should contain a message body that specifies the resource to be added
- Should not contain query string parameters
 - ie *POST /api/entity?company=15*

The PUT Verb

- Used to modify resource(s)
- Should contain a message body that specifies the resource to be modified
- Should not contain query string parameters
 - ie *PUT /api/entity?company=15*

The PUT Verb

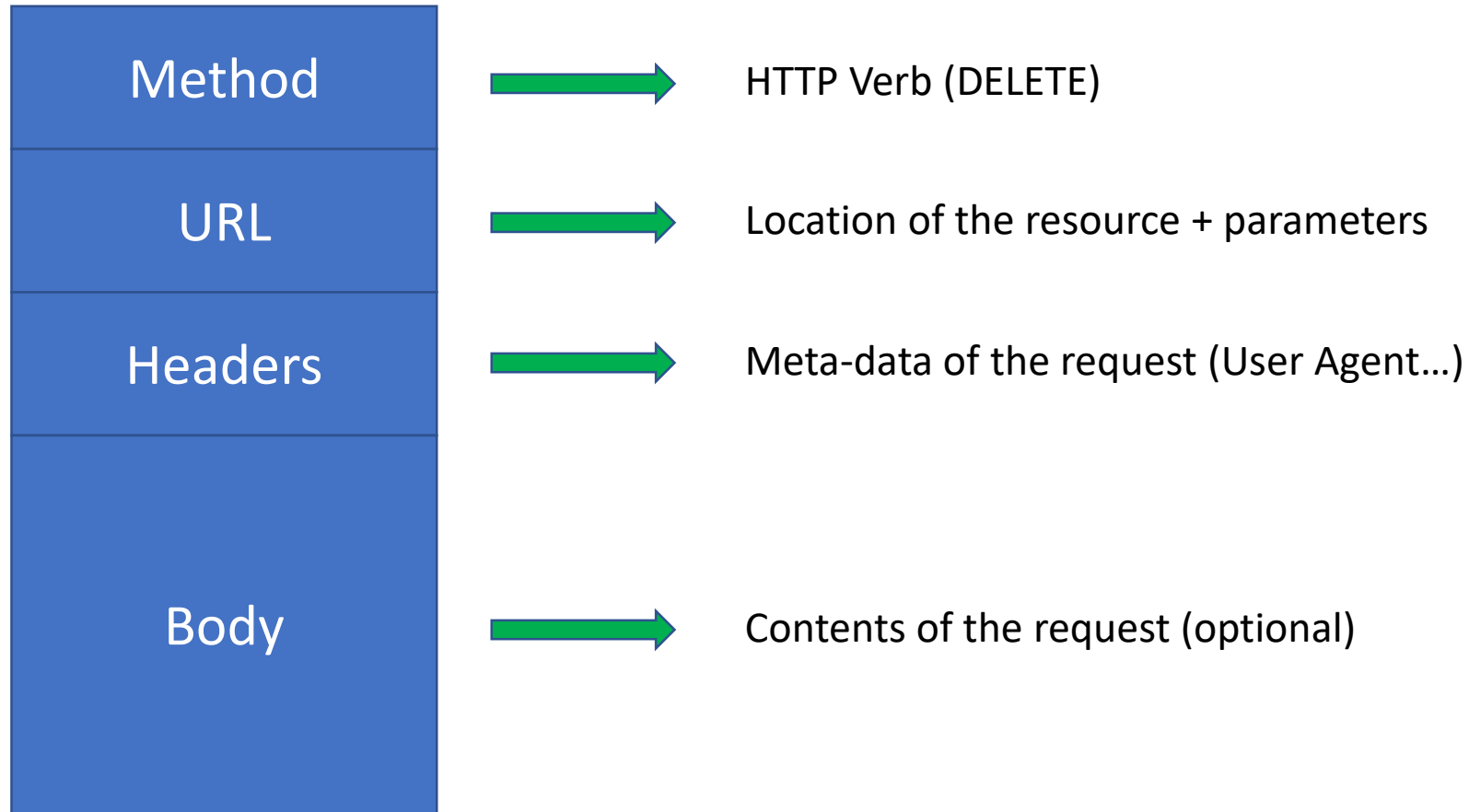
- What happens if the resource to modify does not exist?
- The spec states a new resource should be created
- Use your own discretion
- PUT is Idempotent

The DELETE Verb

- Used to delete resource(s)
- NEVER use it to add / update / retrieve resources
- Almost always combined with parameters

The DELETE Verb

- Should not include body



Rarely Used Verbs

- PATCH – Similar to Put, but with partial updates
- HEAD – Same as GET, but without the body in the response
- OPTIONS – Describes the available verbs for the URL

```
1 | curl -X OPTIONS http://example.org -i
```

```
1 | HTTP/1.1 204 No Content  
2 | Allow: OPTIONS, GET, HEAD, POST
```

Summary of Verbs

Verb	Role	Body?	Params In...
GET	Retrieve resource(s)	No	URL
POST	Add resource(s)	Yes	Body
PUT	Modify resource(s)	Yes	Body
DELETE	Delete resource(s)	No	URL