



APIs from the ground up

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- Payload over HTTP
- SOAP
- REST

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- **REST**

- REST dictates that the HTTP actions be the verbs
 - GET
 - POST
 - PUT
 - DELETE
- In REST you would never use:
 - `GET /profile/get/userid/42`

- XML
- JSON
- HTML
- Other

- GET

- Exactly what you think. It asks for a resource.
- Should error if the resource does not exist.
- GET /profile/1

- POST

- Submits a new resource for storage. Akin to SQL's INSERT.
- Should error if the resource already exists.
- POST /profile/1

- PUT

- Submits a resource for update. Akin to SQL's UPDATE
- Should error if the resource does not exist.
- PUT /profile/1

- DELETE

- Just what you think, it deletes a resource.
- Should error if the resource does not exist.
- DELETE /profile/1

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- **200 OK**
Whatever you asked was returned. Usually used for GET
- **201 Created**
Good for a successful POST
- **202 Accepted**
A successful PUT would return a 202

- **400 Bad Request.**
Literally, the request cannot be fulfilled due to bad syntax.
- **401 Unauthorized**
Not a 403. This one indicates that authorization is possible but failed or has not been provided.
- **403 Forbidden**
We know who you are and you still can't get here. Or we don't know who you are but we don't care because you aren't allowed here.
- **404 Not Found**
The resource you are looking for is not here but could be here in the future.
- **409 Conflict**
For some reason, the server cannot return a valid response. In our sample code a POST to a resource that already exists returns a 409 or when multiple people are editing the same resource.

- Hand Code
- Frapi (<http://getfrapi.com>)
- Zend Framework

- Build an API for your profile
/profile
 - GET /profile/:userid
 - PUT /profile/:userid
 - POST /profile/:userid
 - DELETE /profile/:userid

Show stunning example
of hand-crafted code here

Show shining example
of frapi's ease of use
here

Show the power and
might of Zend
Framework in a code
example here.

- Nonce
(Stolen from Forms, not API specific)
- Track IP addresses invalidate session if it changes
- If API is closed, require API Key to be registered and still do the two above.

- APIs are not difficult
- APIs are the magic sauce of the coming web

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