

REST API fundamentals

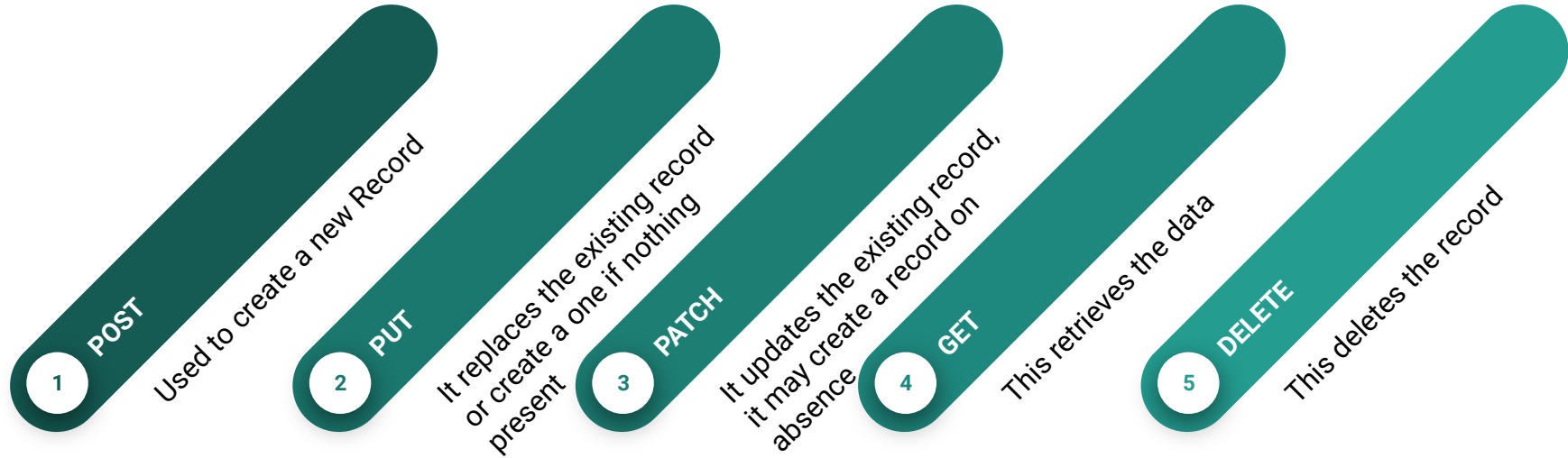
REST- Representational state transfer

- is an architectural style to create webservices, built over HTTP protocol
- It supports JSON, XML, HTML, Multipart
- It supports many HTTP methods - POST, PUT, PATCH, GET, DELETE
- It is stateless and can be cached
- Carries lesser payload

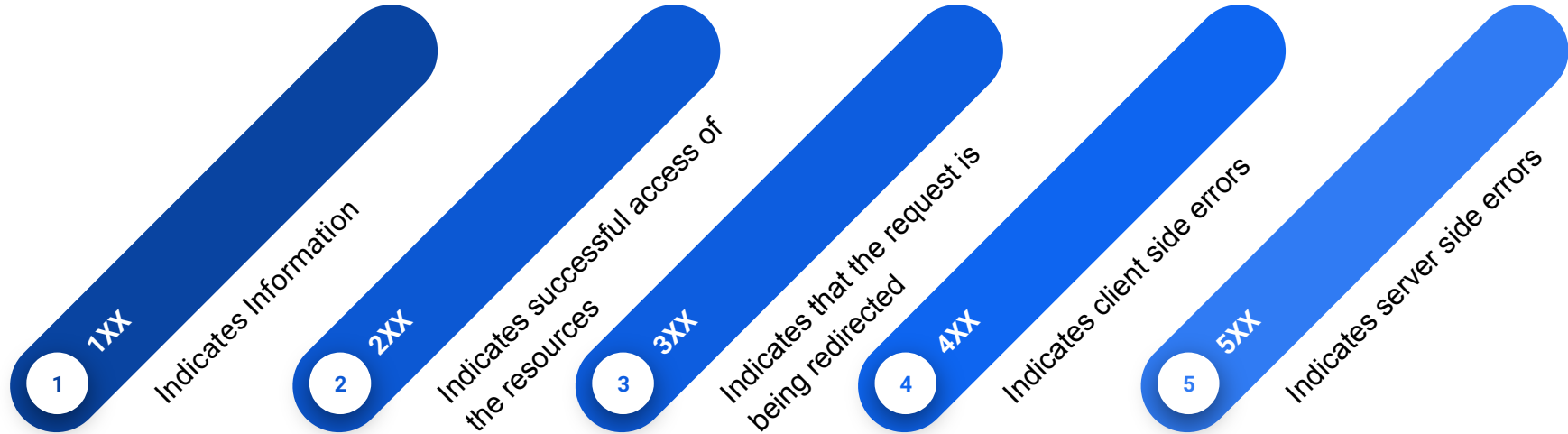
Limitations of RESTFUL services

- Multiple endpoints
- Under / over fetching the data

HTTP Methods



Status codes



Payload

- Payload is the request / response body of an api
- Types
 - XML
 - JSON
 - Query
 - Multipart
 - HTML

Request URL

- It's a combination of hostname and the context path

Eg:- <https://gorest.co.in/public/v2/users>

Host: <https://gorest.co.in>

base path: /public/v2

Resource: /users

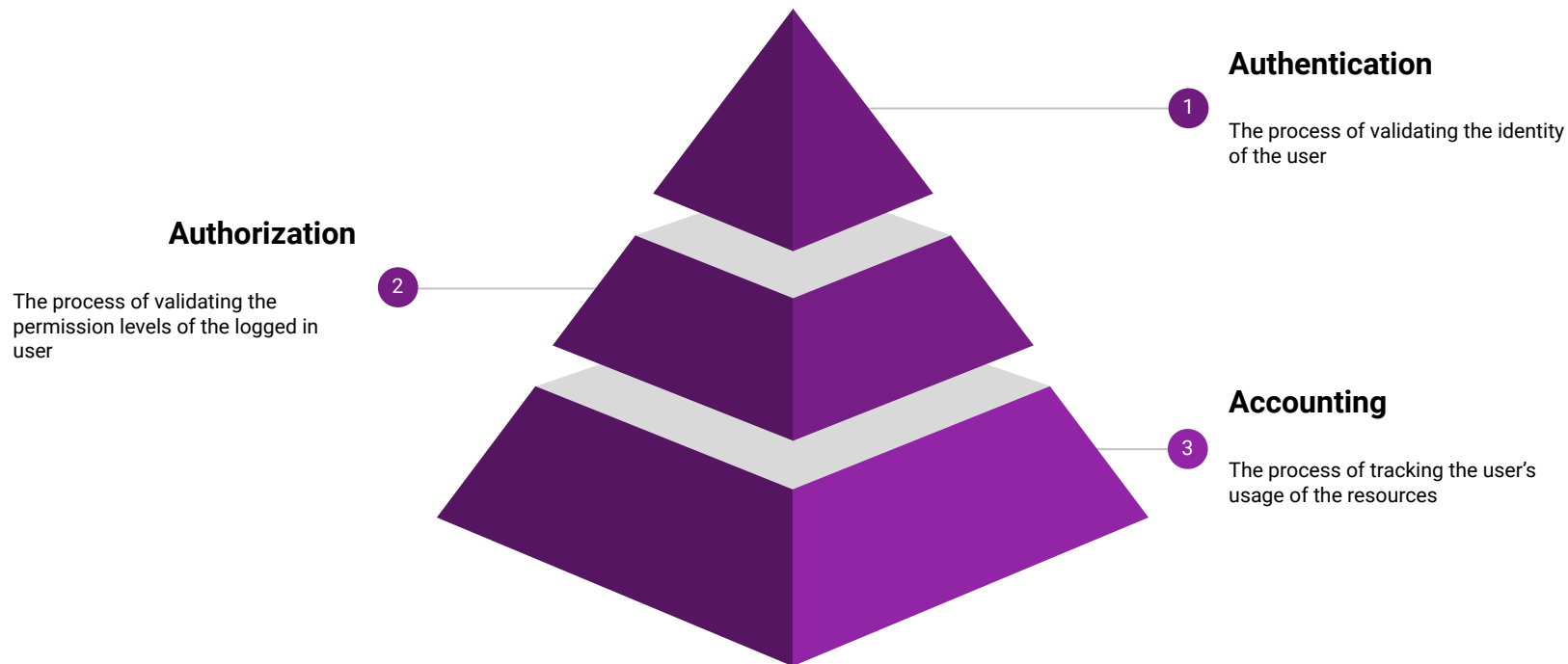
Headers

- Content-Type - type of request body
- Accept - content type of the response body
- Authorization - header that helps gaining access of the resources

params

- Path params - path params are used with the endpoint to precisely reach the resource
- Query params - query params acts like a filters to manipulate the response
- Form params - Request params while inserting the media content type

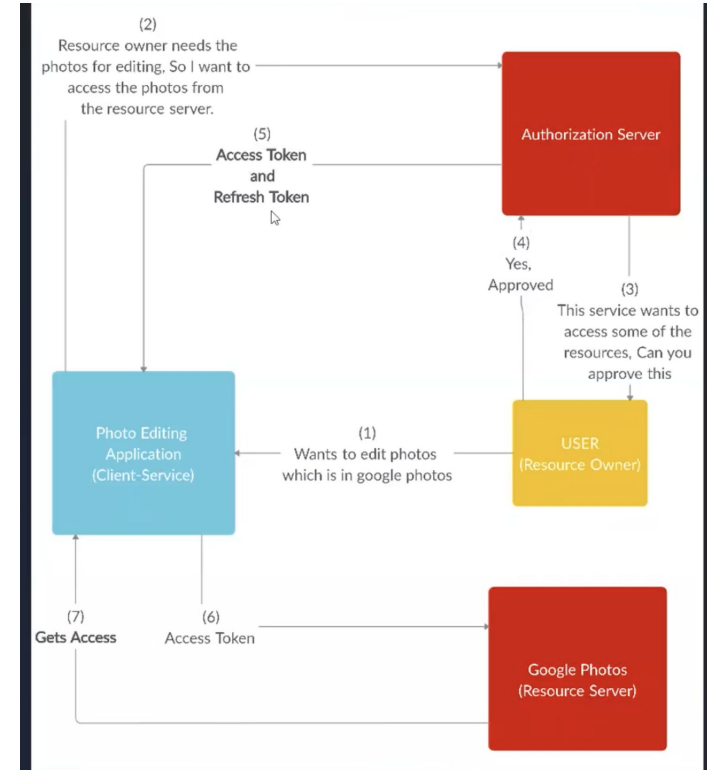
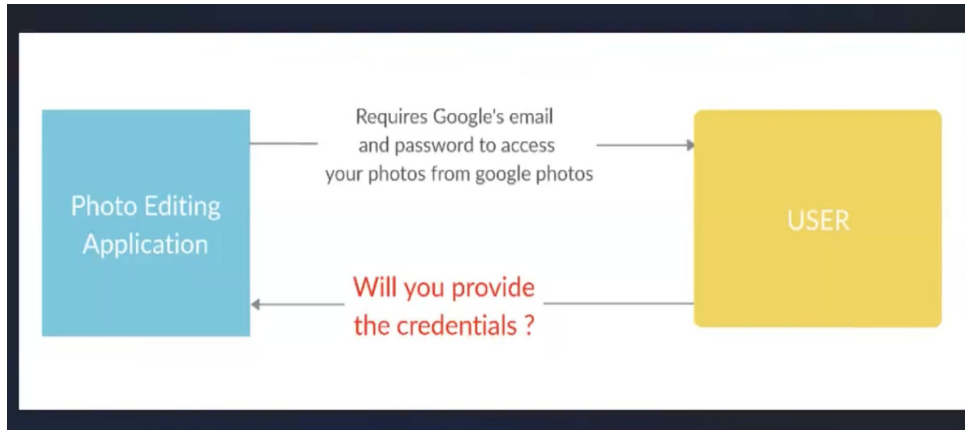
AAA



Types of Authentication

- Basic auth
- OAuth
- Tokens
- API key

Oauth flow



Difference between API key and token?

- Token
 - tokens are used for user authentication purpose
 - Tokens add security
- API keys
 - these are used between the service calls as an identification
 - This is not as secure as the token