REST

- Representational State Transfer (REST) is a software architectural style that defines a set of constraints to be used for creating Web services. https://en.wikipedia.org/wiki/Representational_state_transfer

- A RESTful API is an application program interface (API) that uses HTTP requests to GET, PUT, POST and DELETE data. https://searchmicroservices.techtarget.com/definition/RESTful-API

- Generally speaking, when people use the term REST API, they are referring to an API that is accessed via the HTTP protocol at a predefined set of URLs (uniform resource locators) representing the various **resources** with which interactions can occur. https://www.twilio.com/docs/glossary/what-is-a-rest-api

HTTP Methods (Verbs)

Method	Definition
GET	Read and return the specified resource. Requests using GET should only retrieve data, never change server data.
POST	Create a new resource, often causing a change in state on the server. Not idempotent (duplicate calls might cause two new resources).
PUT	Update the specified resource with the request payload. Idempotent (duplicate calls may be made without side effects).
DELETE	Remove the specified resource from the server.
PATCH	Update a portion of the specified resource (seldom used).

Let's Code

HTTP Headers

Header	What it does	Example
Accept	Request: tells server what type of content is acceptable	Accept: text/plain,application/json
Authorization	Request: Specifies the type of authorization to be sent	Authorization: Bearer
Content-type	Response: Tells what type of content has been sent	Content-type: application/json
Content-length	The length of the body of the request	Content-length: 255
PATCH	Update a portion of the specified resource (seldom used).	

Let's Code

HTTP Methods (Verbs)

Method	URL	Req Body	Resp Body	Example
GET	None http://api.com/todos	None	JSON array of objects	fetch(this.apiURL)
GET	:id http://api.com/todos/101	None	JSON object	fetch(`${this.apiURL}/${id}`)

POST	None
	http://api.com/todos
		JSON object	None (or id)	fetch(this.apiURL,
				{
				method: 'POST',
				headers: {
				'content-type': 'application/json'
				},
				body: JSON.stringify(this.theTodo)
				})

PUT	:id
	http://api.com/todos/101
		JSON object	None	fetch(url,
				{
				method: 'PUT',
				headers: {

Tools

- JSON Viewer (Chrome extension)
- Postman
- REST Client (VS Code extension)