**REST API - RESTful API**

* A REST API also known as RESTful API is an **application programming interface** (API or web API) that conforms to the constraints of REST architectural style and allows for interaction with RESTful web services. REST stands for **representational state transfer** and was created by computer scientist Roy Fielding.

**Roy Fielding - the founder**

Roy Thomas Fielding is an American computer scientist, one of the principal authors of the HTTP specification and the originator of the Representational State Transfer architectural style. He is an authority on computer network architecture and co-founded the Apache HTTP Server project.



**Why API**

* Multi Platform apps development
* Data sharing system from one server to another server
* Implement microservices based system



**REST API Methods**

* GET : for data get
* POST : for create a post
* PUT : update all data
* PATCH : update single data
* DELETE : delete a data

#### **Create a Shop API**

* **Customers**  
  name, email, cell, location, zip code, shipping address, billing address, status
* **Product**name, slug, regular price, sale price, stock, short desc, long desc, category, tag, brand, photo, gallery, rating, status
* **Category**   
  name, slug, photo, status
* **Tag**  
  name, slug, status
* **Brand**   
  name, slug, photo, status

**Postman for api access**

* Create a postman account
* Install postman and setup
* Create a complete REST API and save collection in postman
* Published a REST API with postman

**FormData object**

* To send form data FormData object is too useful
* We have to use it in any api for send form data
* We can also manage any file uploading system by this OBJ
* First init form data obj   
  const data = new FormData();
* Then append form data fields value   
  data.append(‘key’, ‘value’);  
  data.append(‘key’, ‘value’);

data.append(‘key’, ‘value’);

* Then Send Data to req   
  axios.post(‘api\_url’, data );

**Fetch API**

* To access API we can use fetch API
* Its also known as Web API
* We can send complete CRUDS Request
* Send **GET** Req   
  fetch(‘api.url’)  
  .then( **data** => **data**.json() )  
  .then(**data** => {  
   // Data manage   
  });
* Send a **POST / DELETE / PUT / PATCH**  Req   
  fetch(‘api.url’, {  
   method : ‘POST’,  
   headers : {  
   ‘Content-Type’ : ‘application/json’  
   },  
   body : JSON.stringify(data)  
  })  
  .then( **data** => **data**.json() )  
  .then(**data** => {  
   // Data manage   
  });

**Data fetch by axios**

* To access api axios is awesome
* To use axios install axios or use cdn link
* Then send any req into server by axios
* install axios by npm/yarn  
   $ npm install axios  
   $ yarn add axios
* get data get by axios  
  **axios**.get(‘api.url’).then(data=> {  
   // data.data  
  });
* Insert data by axios with POST request   
  **axios**.post(‘api.url’, {  
   name : data,  
   email : data,  
   . . . . . .   
  }).then(data=> {  
   // data.data  
  });
* Delete data by axios with delete request   
  **axios**.delete( ‘api.url/’ + id ).then(data=> {  
   // data.data  
  });
* Edit data by axios with PUT/PATCH request   
  **axios**.put(‘api.url’, {  
   name : data,  
   email : data,  
   . . . . . .   
  }).then(data=> {  
   // data.data  
  });