

# Rapport

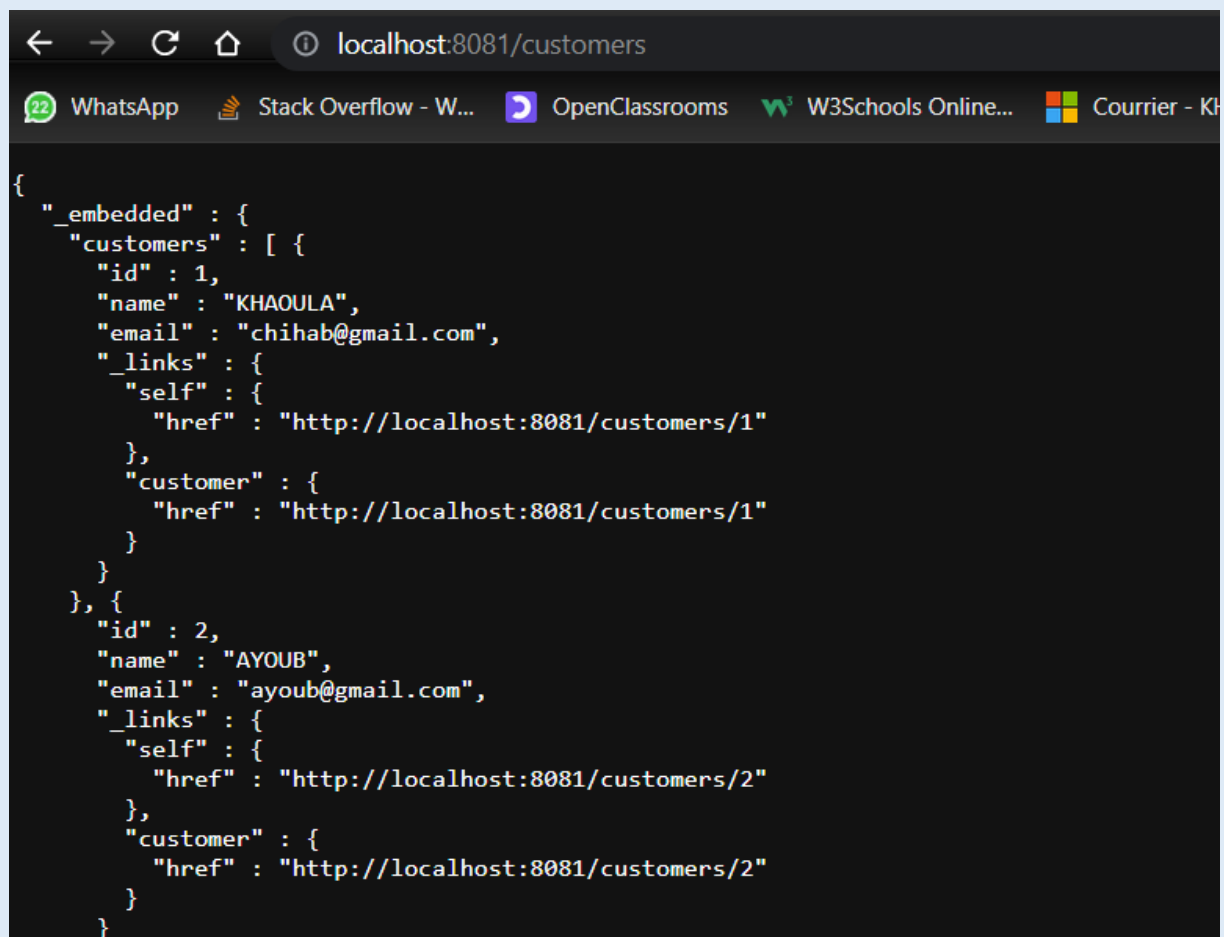
Application basée sur une architecture micro-service de gestion des factures .

## Ecom-App

### Travail a faire :

Un micro-service customer-service : gestion des clients

« GET »



```
{
  "_embedded" : {
    "customers" : [ {
      "id" : 1,
      "name" : "KHAOULA",
      "email" : "chihab@gmail.com",
      "_links" : {
        "self" : {
          "href" : "http://localhost:8081/customers/1"
        },
        "customer" : {
          "href" : "http://localhost:8081/customers/1"
        }
      }
    }, {
      "id" : 2,
      "name" : "AYOUB",
      "email" : "ayoub@gmail.com",
      "_links" : {
        "self" : {
          "href" : "http://localhost:8081/customers/2"
        },
        "customer" : {
          "href" : "http://localhost:8081/customers/2"
        }
      }
    }
  ]
}
```

### Fonction Ajouter customer(frontend)

```
saveCustomer(){
  this.customer=new Customer();
  this.customer.name=this.customerFormGroup.value.name;
  this.customer.email=this.customerFormGroup.value.email;
  this.save();
}

save() (property) CustomersComponent.customerService: CustomerService
  this.customerService.createCustomer(this.customer)
    .subscribe({
      next: (data)=>{
        Swal.fire(
          'Customer Added Successfully!',
          'You clicked the button!',
          'success'
        )
        this.ngOnInit();
      },
      error: (err)=>{
        console.log(err)
      }
    });
  this.customer = new Customer();
}
```

### Supprimer customer

```
deleteCustomer(id: number) {
  this.customerService.deleteCustomer(id)
    .subscribe({
      next: (data)=>{
        Swal.fire(
          'Customer Removed !',
          'You clicked the button!',
          'success'
        )
        this.ngOnInit();
      },
      error: (err)=>{
        console.log(err)
      }
    });
}
```

## Backend (ajouter customer , supprimer customer)

```
public class CustomerController {  
  
    2 usages  
    @Autowired  
    private CustomerService service;  
  
    khaoulachihab  
    @PostMapping("/addcustomer")  
    public void add(@RequestBody Customer p) { service.addCustomer(p); }  
  
    khaoulachihab  
    @DeleteMapping("/deletecustomer/{id}")  
    public String deletecustomer(@PathVariable int id) { return service.deleteCustomer(id); }  
}
```

## micro-service inventory-service : gestion des produits

```
localhost:8082/products  
WhatsApp Stack Overflow - W... OpenClassrooms W3Schools Online... Courier - KH  
{  
  "_embedded" : {  
    "products" : [ {  
      "id" : 1,  
      "name" : "Iphone 12 Pro",  
      "price" : 788.0,  
      "quantity" : 12.0,  
      "_links" : {  
        "self" : {  
          "href" : "http://localhost:8082/products/1"  
        },  
        "product" : {  
          "href" : "http://localhost:8082/products/1"  
        }  
      }  
    }, {  
      "id" : 2,  
      "name" : "Lenovo Yoga",  
      "price" : 88.0,  
      "quantity" : 129.0,  
      "_links" : {  
        "self" : {  
          "href" : "http://localhost:8082/products/2"  
        },  
        "product" : {  
          "href" : "http://localhost:8082/products/2"  
        }  
      }  
    }, {  
      "id" : 3,  
      "name" : "Samsung Galaxy S21",  
      "price" : 1288.0,  
      "quantity" : 112.0,  
      "_links" : {  
        "self" : {  
          "href" : "http://localhost:8082/products/3"  
        },  
        "product" : {  
          "href" : "http://localhost:8082/products/3"  
        }  
      }  
    }  
  ]  
}
```

### ajouter Produit (frontend)

```
saveProduct(){
  this.product=new Product();
  this.product.name    =this.productFormGroup.value.name    ;
  this.product.price   =this.productFormGroup.value.price   ;
  this.product.quantity=this.productFormGroup.value.quantity;
  this.save();
}

save() {
  this.productService.createProduct(this.product)
    .subscribe({
      next: (data)=>{
        Swal.fire(
          'Product Added Successfully!',
          'You clicked the button!',
          'success'
        )
        this.ngOnInit();
      },
      error: (err)=>{
        console.log(err)
      }
    });
  this.product = new Product();
}
```

### Supprimer produit

```
deleteProduct(id: number) {
  this.productService.deleteProduct(id)
    .subscribe({
      next: (data)=>{
        Swal.fire(
          'Product Removed !',
          'You clicked the button!',
          'success'
        )
        this.ngOnInit();
      },
      error: (err)=>{
        console.log(err)
      }
    });
}
```

## Backend (ajouter supprimer produit)

```

khaoulachihab
@RestController
public class ProductController {
    2 usages
    @Autowired
    private ProductService service;

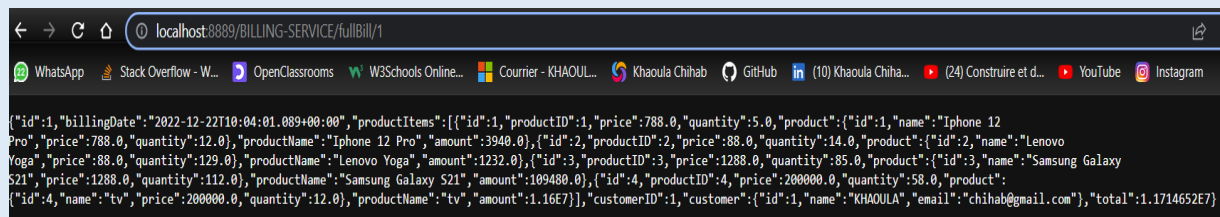
    khaoulachihab
    @PostMapping("/addproduct")
    public void add(@RequestBody Product p) { service.addProduct(p); }

    khaoulachihab
    @DeleteMapping("/deleteproduct/{id}")
    public String deleteLivres(@PathVariable int id) { return service.deleteProduct(id); }
}

```

## Gateway Spring cloud Gateway : système de routage

Cet url nous redirige vers le micro service [BILLING-SERVICE](#)

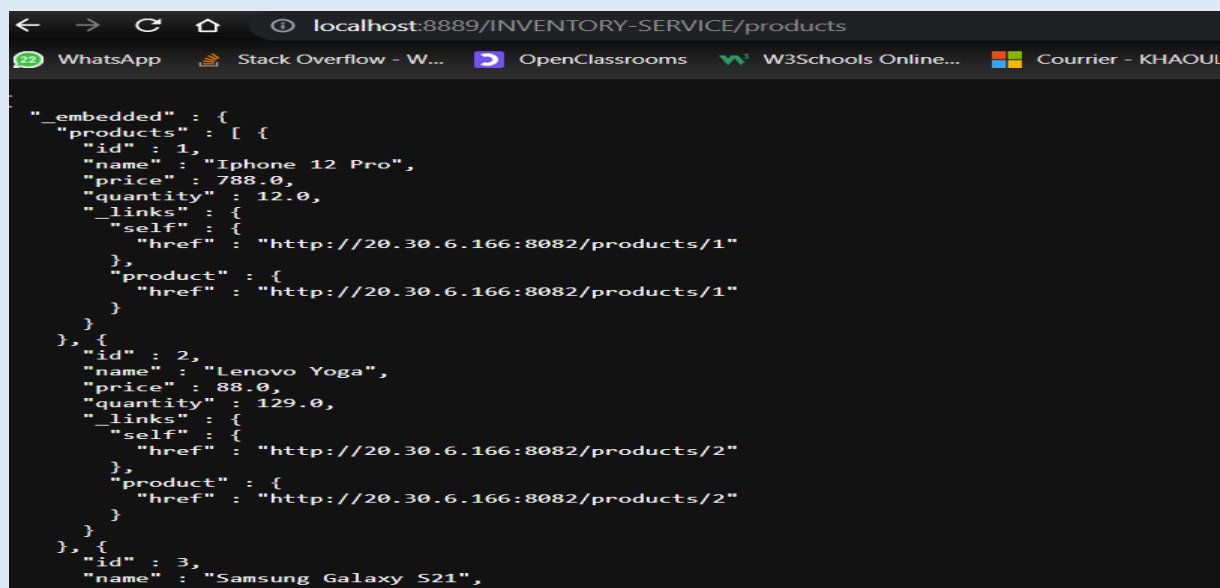


```

{"id":1,"billingDate":"2022-12-22T10:04:01.089+00:00","productItems":[{"id":1,"productID":1,"price":788.0,"quantity":5.0,"product":{"id":1,"name":"Iphone 12 Pro","price":788.0,"quantity":12.0},"productName":"Iphone 12 Pro","amount":3940.0},{"id":2,"productID":2,"price":88.0,"quantity":14.0,"product":{"id":2,"name":"Lenovo Yoga","price":88.0,"quantity":129.0},"productName":"Lenovo Yoga","amount":1232.0},{"id":3,"productID":3,"price":1288.0,"quantity":85.0,"product":{"id":3,"name":"Samsung Galaxy S21","price":1288.0,"quantity":112.0},"productName":"Samsung Galaxy S21","amount":109480.0},{"id":4,"productID":4,"price":200000.0,"quantity":58.0,"product":{"id":4,"name":"tv","price":200000.0,"quantity":12.0},"productName":"tv","amount":1.16E7}],"customerID":1,"customer":{"id":1,"name":"KHAOULA","email":"chihab@gmail.com"},"total":1.1714652E7}

```

URL qui mene vers [INVENTORY-SERVICE](#) :



```

{"_embedded": {"products": [{"id": 1, "name": "Iphone 12 Pro", "price": 788.0, "quantity": 12.0, "_links": {"self": {"href": "http://20.30.6.166:8082/products/1"}}, "product": {"href": "http://20.30.6.166:8082/products/1"}}, {"id": 2, "name": "Lenovo Yoga", "price": 88.0, "quantity": 129.0, "_links": {"self": {"href": "http://20.30.6.166:8082/products/2"}}, "product": {"href": "http://20.30.6.166:8082/products/2"}}, {"id": 3, "name": "Samsung Galaxy S21", "price": 1288.0, "quantity": 85.0, "_links": {"self": {"href": "http://20.30.6.166:8082/products/3"}}, "product": {"href": "http://20.30.6.166:8082/products/3"}}, {"id": 4, "name": "tv", "price": 200000.0, "quantity": 58.0, "_links": {"self": {"href": "http://20.30.6.166:8082/products/4"}}, "product": {"href": "http://20.30.6.166:8082/products/4"}}]}

```

## CUSTOMER-SERVICE

```
localhost:8889/CUSTOMER-SERVICE/customers

{
  "_embedded" : {
    "customers" : [ {
      "id" : 1,
      "name" : "KHAOULA",
      "email" : "chihab@gmail.com",
      "_links" : {
        "self" : {
          "href" : "http://20.30.6.166:8081/customers/1"
        },
        "customer" : {
          "href" : "http://20.30.6.166:8081/customers/1"
        }
      }
    }
  ]
}
```

Ce Bean permet de dynamiser le routage avec le discover client

```
@Bean
DiscoveryClientRouteDefinitionLocator definitionLocator(
    ReactiveDiscoveryClient rdc,
    DiscoveryLocatorProperties properties
){
    return new DiscoveryClientRouteDefinitionLocator(rdc,properties);
}
```

## l'annuaire Eureka Discovery Service :

```
server.port=8761
eureka.client.fetch-registry=false
eureka.client.registry-with-eureka=false
eureka.instance.preferIpAddress=true
```

### Instances currently registered with Eureka


Application	AMIs	Availability Zones	Status
BILLING-SERVICE	n/a (1)	(1)	UP (1) - <a href="#">LAPTOP-2MSVJFSK:billing-service:8083</a>
CUSTOMER-SERVICE	n/a (1)	(1)	UP (1) - <a href="#">LAPTOP-2MSVJFSK:customer-service:8081</a>
GATEWAY-SERVICE	n/a (1)	(1)	UP (1) - <a href="#">LAPTOP-2MSVJFSK:gateway-service:8889</a>
INVENTORY-SERVICE	n/a (1)	(1)	UP (1) - <a href="#">LAPTOP-2MSVJFSK:inventory-service:8082</a>
UNKNOWN	n/a (1)	(1)	UP (1) - <a href="#">LAPTOP-2MSVJFSK:8761</a>

## le service de facturation Billing-Service (Open Feign)

### un client Web Angular

#### Clients


ECOMWEBAPP Products Customers

**Add new customer** 

Add Customer


ID	Name	Email	Delete	Bill
1	KHAOULA	chihab@gmail.com	<button>Delete</button>	<button>Bills</button>
2	AYOUB	ayoub@gmail.com	<button>Delete</button>	<button>Bills</button>
3	KHCHIHAB	khaoula@gmail.com	<button>Delete</button>	<button>Bills</button>

ECOMWEBAPP Products Customers

**Add new customer** 

Add Customer

ID	Name	Email	Delete	Bill
1	KHAOULA			<button>Bills</button>
2	AYOUB			<button>Bills</button>
3	KHCHIHAB			<button>Bills</button>
7	chihab khaoula			<button>Bills</button>



**Customer Added Successfully!**

You clicked the button!

OK

#### Produits

##### Add products

**Add new product**

Add Product

ID	Name	Price	quantity
1	Iphone 12 Pro	788	12
2	Lenovo Yoga	88	129

Un message d'alerte :le produit est ajouté avec succes

### Add new product

Add Product

ID	Name	Action
1	Iphone 12 Pro	Delete
2	Lenovo Yoga	Delete
3	Samsung Galaxy S21	Delete
4	tv	Delete
5	smart watch	Delete

### Product Added Successfully!

You clicked the button!

OK

## Factures

ID	Date	CustomerID	Action
1	22/12/2022	1	Bill Details

## Bill details

ECOMWEBAPP

ProductsCustomers

### Bill Details

Bill ID: 1

Date Bill: 2022-12-22T10:04:01.089+00:00

Customer ID: 1

Customer Name: KHAOULA

Customer Email: chihab@gmail.com

### Product Items

Show Products Items

Total:11714652 MAD



Show products items

## Product Items

Show Products Items

Product ID	Name	Quantity	Price	Amount
PROD-1	Iphone 12 Pro	5	788	3940 MAD
PROD-2	Lenovo Yoga	14	88	1232 MAD
PROD-3	Samsung Galaxy S21	85	1288	109480 MAD
PROD-4	tv	58	200000	11600000 MAD

Total:11714652 MAD