

Online Pharmacy App

Josue Auguste

March 27, 2022

SERVICE LAYERS

Overview

After a little bit of research on the most popular backend framework used in the last couple of years, we came to the conclusion that we should go for the Node.js Express to design the backend of our application. This web development framework will enable us to add specific handling for different HTTP verbs like GET, POST, DELETE, and so on... It will also separately handle requests at different URL paths and serve static files. Besides all the flexibility provided by the Express Node framework, Express will save us some time since we had some basic knowledge on how it works.

The first important layer that our backend service will provide is the ROUTE. A route within an API is a specific path to take to get specific information or data out of a website database in other words this is a way for the user to request information through the API. The second layer that we will rely on is the controller service. Controllers are the gateways into the web API for client applications via HTTP requests. They represent request and response models for controller methods, request models define the parameters for incoming requests, and response models define the data that is returned. Technically, this is how our backend service will be operating. Heroku is the tool that will be used to deploy the app since we used it in our “advanced topics” programming class.

LAYER SPECIFICATION

It is very important to mention that users will not be able to add or delete any product listed on our product webpage. They can only get access to those products' information and purchase them through our API. Therefore, the GET method will come to the rescue when users are looking up specific products. There will be a page where the users may ask to post reviews or feedback on the service provided. This is where the POST and DELETE methods come in. The PUT method should help also when the customer needs to update some information relative to him/herself and his/her billing information. Let's demonstrate a few examples of how this is going to work.

Products Route

Method used is GET because the users can only get access to the products, place them in a shopping cart, and purchase them.

1_ Get all the available products

Method: GET

URL: <https://online.pharmacy.capstone.herokuapp.com/api/products>

Upon logging on to the app, the users will be able to access all the products listed in the database associated with our app. How to do that? There will be a "all products" button from our PRODUCTS webpage. Once the user clicks on it from the front end the service endpoint mentioned above will be called and returned all the available products.

The request is made the following way:

curl – request GET --url <https://online.pharmacy.capstone.herokuapp.com/api/products>

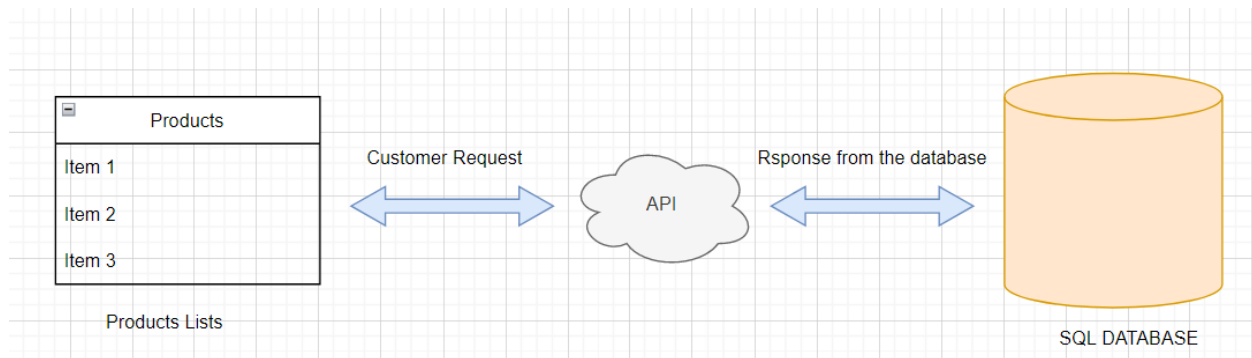
Successful response

```
[
  {
    "id": 1,
    "Product_name": "Acetaminophen",
    "Product_Category": "PRN",
    "Product_Info": "Good for headache"
  },
  {
    "id": 3,
    "Product_name": "Ibuprofen",
    "Product_Category": "Doctor's prescription required",
    "Product_Info": "Good for bellyache"
  }
],
```

Error response

```
[
  {
    "code": 404,
    "message": "Product not available"
  }
]
```

Diagram



2_ Get a product by ID

Method: GET

URL: <https://online.pharmacy.capstone.herokuapp.com/api/products:name>

Upon logging on to the app, the users will be able to access a specific product by knowing its ID. Once the user clicks on the product search box from the front end the service endpoint mentioned above will be called and returned all the matching product.

The request is made the following way:

curl – request GET --url <https://online.pharmacy.capstone.herokuapp.com/api/products:name>

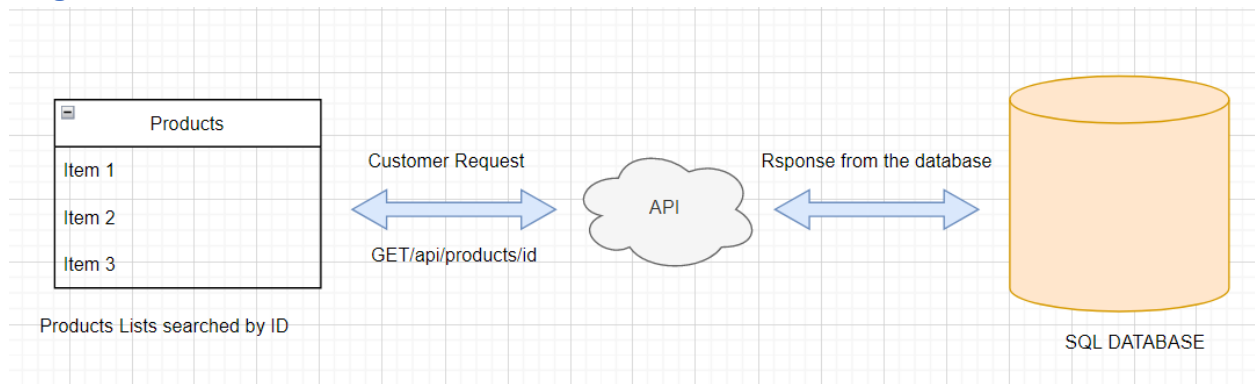
Successful response

```
package.json  Untitled-1 1
1  {
2    "id": 1,
3    "Product_name": "Acetaminiphen",
4    "Prodduct_Category": "PRN",
5    "Product_Info": "Good for headache"
6  },
7
```

Error response

```
[
  {
    "code": 404,
    "message": "Product not available"
  }
]
```

Diagram



3_ Get a product by name

Method: GET

URL: <https://online.pharmacy.capstone.herokuapp.com/api/products:name>

Upon logging on to the app, the users will be able to access a specific product by knowing its name. Once the user clicks on the product search box from the front end the service endpoint mentioned above will be called and returned all the matching product.

The request is made the following way:

curl – request GET --url <https://online.pharmacy.capstone.herokuapp.com/api/products:name>

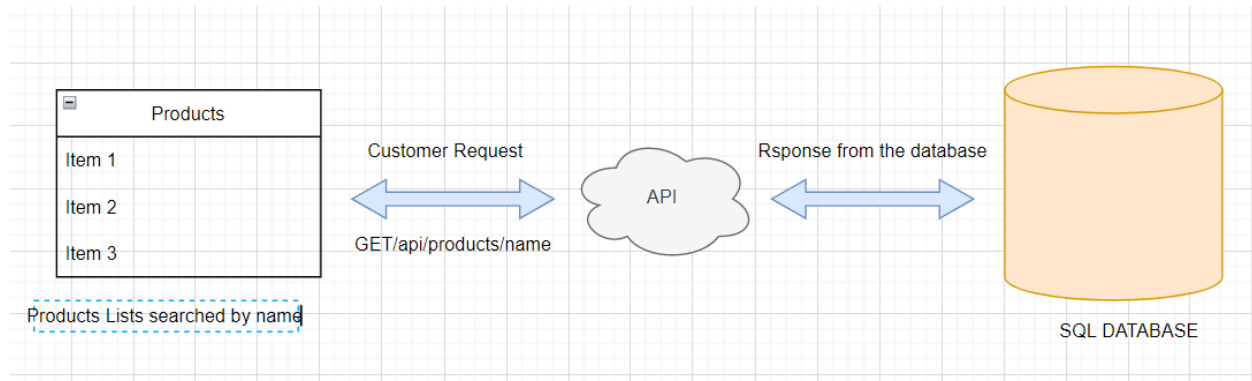
Successful response

```
package.json  Untitled-1 1 •
1  [
2    {
3      "id": 3,
4      "Product_name": "Ibuprofen",
5      "Product_Category": "Doctor's prescription required",
6      "Product_Info": "Good foe bellyache"
7    },
8  ]
```

Error response

```
[
  {
    "code": 404,
    "message": "Product not available"
  }
]
```

Diagram



4_ Get Products by Category

Method: GET

URL: <https://online.pharmacy.capstone.herokuapp.com/api/products:category>

Upon logging on to the app, the users will be able to access a specific product by knowing its name. Once the user clicks on the product search box from the front end the service endpoint mentioned above will be called and returned all the products that belong to that specific category.

The request is made the following way:

```
curl - request GET --url
https://online.pharmacy.capstone.herokuapp.com/api/products:category
```

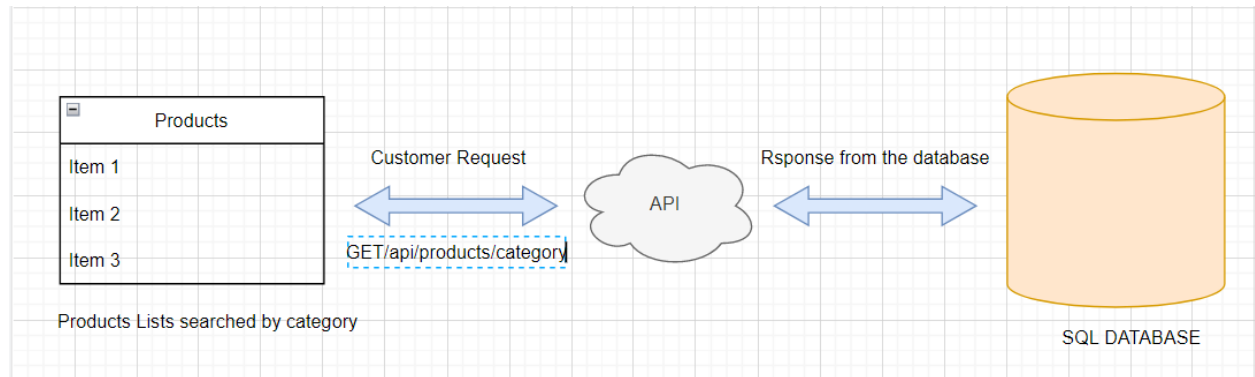
Successful response

```
package.json  Untitled-1 1
1  [
2    {
3      "id": 1,
4      "Product_name": "Acetaminiphen",
5      "Prodduct_Category": "PRN",
6      "Product_Info": "Good for headache"
7    },
8  ]
```

Error response

```
[
  {
    "code": 404,
    "message": "Product not available"
  }
]
```

Diagram



CUSTOMER ROUTE:

1_ Customer login

Method: GET

URL: <https://online.pharmacy.capstone.herokuapp.com/api/users:username>

In order to log in, the user will be asked to put his/her login credentials. Once the user successfully enters the correct credentials, the service endpoint above will be called and redirect him to the home page of the application

The request is made the following way:

curl – request GET --url <https://online.pharmacy.capstone.herokuapp.com/api/users:username>

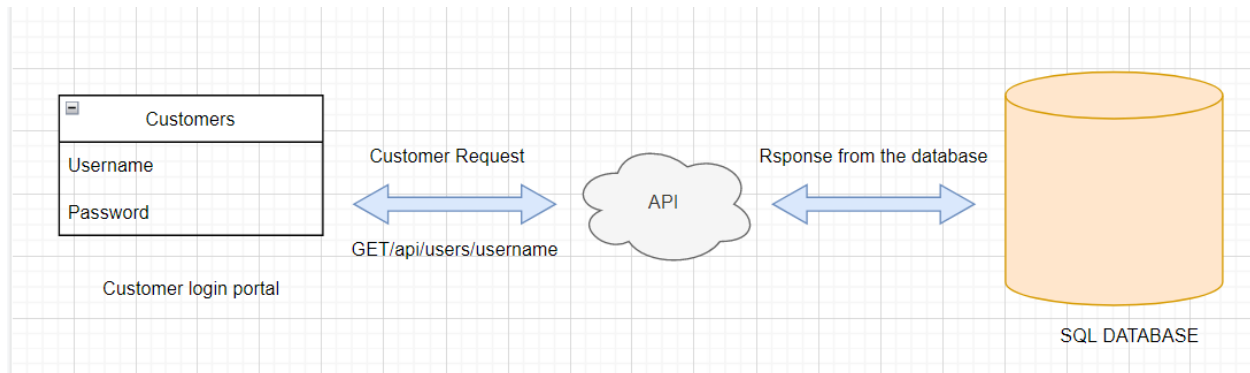
Successful response

```
{
  "id": 3,
  "username": "Colby",
  "Password": "Tomalin23!",
  "status": "true"
},
```

Error response

```
[
  {
    "code": 404,
    "message": "Invalid entry"
  }
]
```

Diagram



2_ Information Update

Method: PUT

URL: <https://online.pharmacy.capstone.herokuapp.com/api/users:update>

Customers may manifest the need to change some pieces of information related to them from time to time. In order to get their needs satisfied, they will be able to update their profile by clicking the “update profile”. The service endpoint above will be called and redirect the user to the his/her profile page. Once the changes are made and submitted, they will be updated in the database.

The request is made the following way:

curl – request PUT --url <https://online.pharmacy.capstone.herokuapp.com/api/users:update>

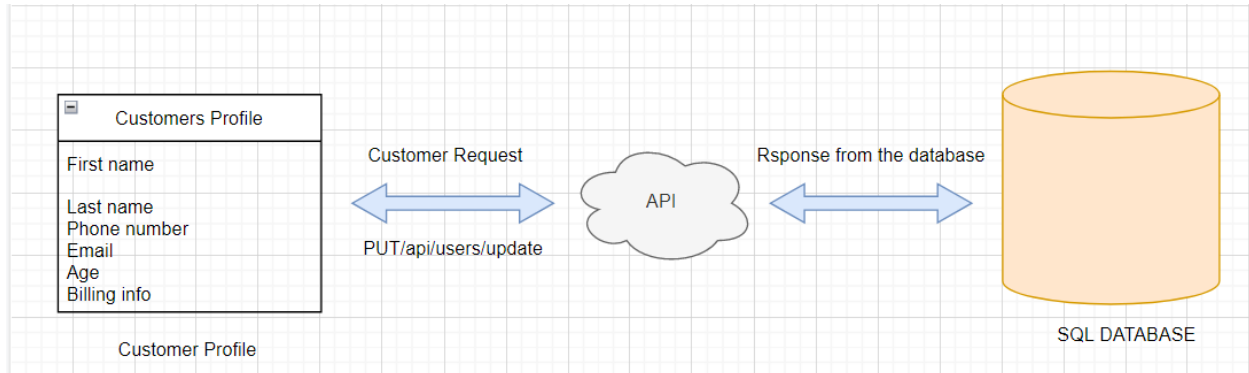
Successful response

```
[
  {
    "id": 5,
    "Product_name": "Viagra",
    "Product_Category": "OTC",
    "Product_Info": "Sexual performance booster",
    "status": "available"
  }
]
```

Error response

```
{
  "code": 404,
  "message": "Information missing, update failed"
}
```

Diagram



3_ Get orders history

Method: GET

URL: <https://online.pharmacy.capstone.herokuapp.com/api/users:orders>

The users have the privilege to pull up all his transactions made within the last three years. The service endpoint above will be called and display a list of all orders placed within the last three years.

The request is made the following way:

curl – request GET --url <https://online.pharmacy.capstone.herokuapp.com/api/users:orders>

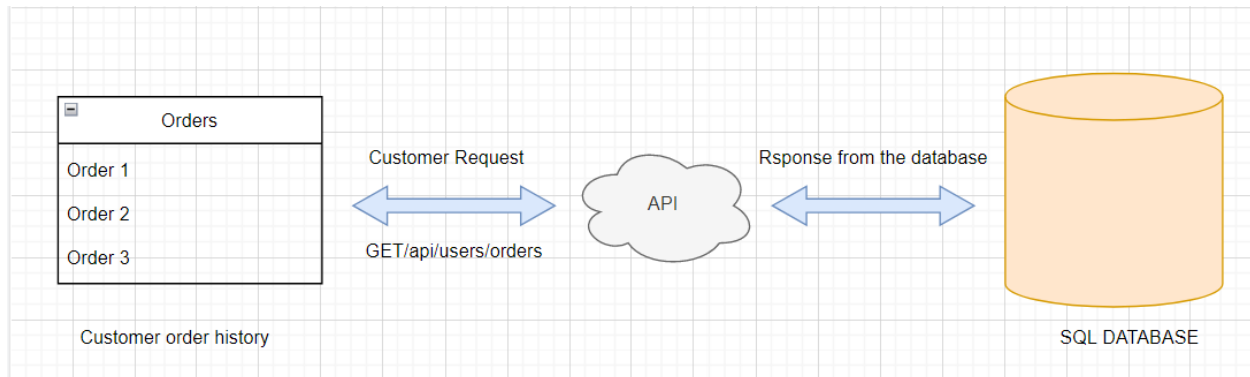
Successful response

```
[
  {
    "orderid": 5,
    "Product_name": "Viagra",
    "Product_category": "OTC",
    "customer_name": "Jean Philippe",
    "orderDate": "03/23/2022"
  },
  ]
```


Error response

```
{
  "code": 404,
  "message": "No order found"
}
```

Diagram



REVIEW ROUTE

Post a review

Method: POST

URL: <https://online.pharmacy.capstone.herokuapp.com/api/SubmitReview>

The users will have the opportunity to post feedback regarding the service provided by our pharmacy. In the review section, they will click on the 'Review' button to post their comments. The service endpoint above will be called and post the comments on the review section.

The request is made the following way:

curl – request POST --url <https://online.pharmacy.capstone.herokuapp.com/api/SubmitReview>

Successful response

```
{
  "orderid": 3,
  "custome_name": "Colby",
  "comment": "Service is excellent. I get my medicine delivered to me within hours",
}
```

Error response

```
{
  "code": 404,
  "message": "Unable to post review"
}
```

Diagram

