

# **Make an E-commerce Website for Sporty Shoes ..**

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Core concepts that were used in the project are:

- Database
- Collections
- Exception Handling

Technologies that were used in the project are:

- Spring boot.
- Handling exceptions.
- Spring boot CRUD api
- JDBC
- Java classes
- MySQL

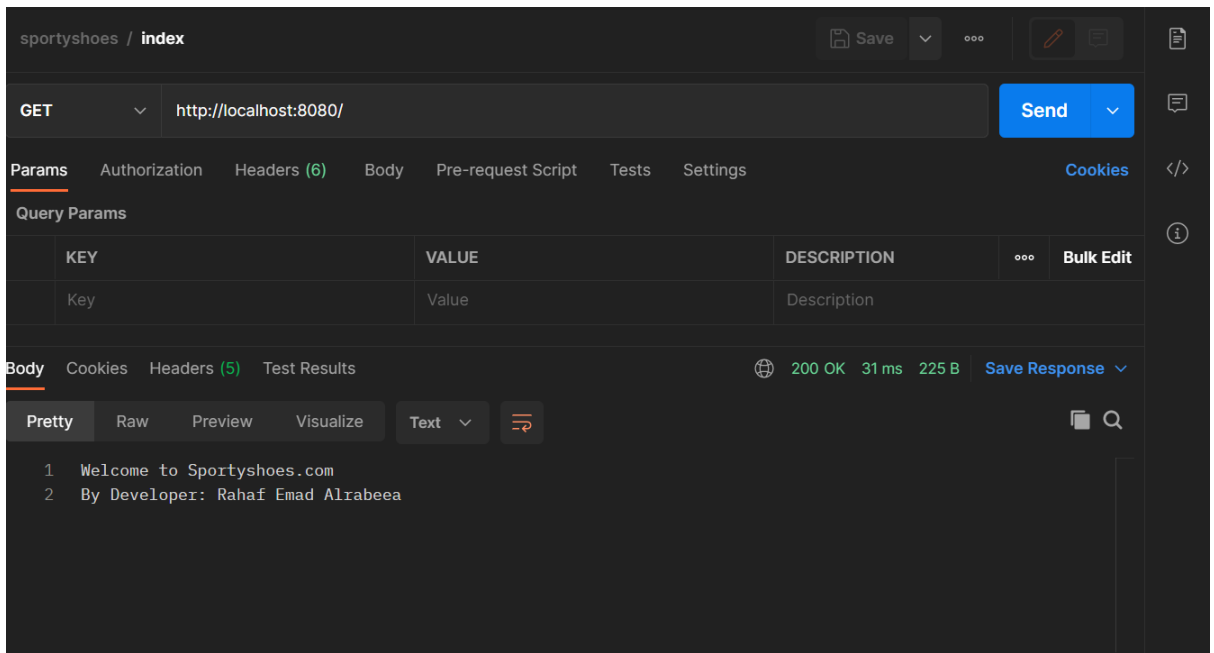
Application features:

- Sign up to the website.
- Sign in page for both user and admin.
- Edit username and password.
- Purchase a product.
- View a list of all products.
- Search a product by name.
- View details of a product.
- View account details.

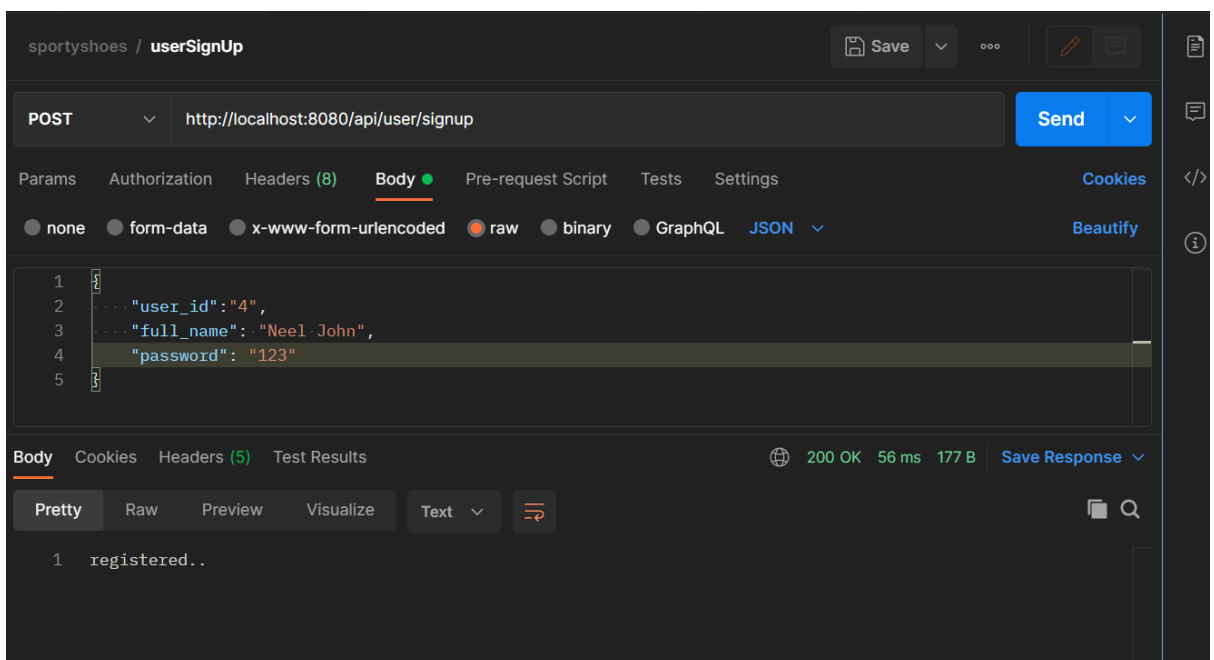
- View orders.
- Admin password change.
- Admin views list of all users.
- Admin views details of user.
- Admin searches user by name.
- Admin views all the products.
- Admin adds a new product to website.
- Admin views details of a product.
- Admin updates product details.
- Admin deletes product.
- Admin views all orders sorted by order date and order id ascending and descending.
- Admin views all orders for a specific product.
- Admin views all orders for a specific user.
- Close the application at any time.

The application was done in three sprints, the first sprint for sprint planning and preparing. Next, two sprint for developing and testing the application. Moving on to the first sprint we planned the flow of the development and how we are approaching the project. Furthermore, we developed the database tables and entered products, users' information and orders details. Then, we created the packages and java classes for each table in the database. Moving on, to the developing the repository packages to link the classes and the database code. Then, we created the services and rest api controllers to get to the code. Finally, we tested the website using postman.

Below you will find screenshots of the application:



The above screenshot displays the welcome page.



The user will signup via entering the above details.

sportyshoes / **userSignin** Save ... Edit ...

**POST** ▼ http://localhost:8080/api/user/signin?user\_id=4&password=123 ... Send ▼

**Params** ● Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	user_id	4			
<input checked="" type="checkbox"/>	password	123			
	Key	Value	Description		

**Body** Cookies Headers (5) Test Results 200 OK 33 ms 206 B Save Response ▼

**Pretty** Raw Preview Visualize Text ▼ ...

```
1 User has been authenticated successfully..
```

The user will enter his/her credentials to log in.

sportyshoes / **userSignin** Save ... Edit ...

**POST** ▼ http://localhost:8080/api/user/signin?user\_id=4&password=1234 ... Send ▼

**Params** ● Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	user_id	4			
<input checked="" type="checkbox"/>	password	1234			
	Key	Value	Description		

**Body** Cookies Headers (5) Test Results 200 OK 24 ms 187 B Save Response ▼

**Pretty** Raw Preview Visualize Text ▼ ...

```
1 Incorrect credentials..
```

If incorrect credentials are entered the above message will be displayed.

sportyshoes / **adminSignin** Save ... Edit Copy

**POST** ▼ http://localhost:8080/api/admin/signin?admin\_id=1&password=admin ... Send ▼

**Params** ● Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/>	admin_id	1			
<input checked="" type="checkbox"/>	password	admin			
	Key	Value	Description		

**Body** Cookies Headers (5) Test Results 200 OK 37 ms 206 B Save Response ▼

Pretty Raw Preview Visualize Text ▼ ↺

```
1 User has been authenticated successfully..
```

Admin sign in page.

sportyshoes / **changeAdminPassword** Save ... Edit Copy

**PATCH** ▼ http://localhost:8080/api/admin/1/update/password ... Send ▼

Params Authorization Headers (8) **Body** ● Pre-request Script Tests Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

```
1 {
2   ... "admin_id":1,
3   ... "admin_name":"Rahaf Alrabeea",
4   "password":"root"
5 }
6
```

**Body** Cookies Headers (5) Test Results 200 OK 21 ms 192 B Save Response ▼

Pretty Raw Preview Visualize Text ▼ ↺

```
1 Password has been changed..
```

Admin change password.

sportyshoes / **getAllUsers** Save ... ✎ 📄

**GET** ▼  Send ▼

**Params** Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Query Params

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
--	-----	-------	-------------	-----	-----------

**Body** Cookies Headers (5) Test Results 🌐 200 OK 75 ms 393 B Save Response ▼

**Pretty** Raw Preview Visualize **JSON** ▼ ↺

```
1  {
2    "user_id": 1,
3    "full_name": "Fatima Salam",
4    "password": null
5  },
6  {
7    "user_id": 2,
8    "full_name": "Jassim Abdulaziz",
9    "password": null
10  },
11 }
```

**Pretty** Raw Preview Visualize **JSON** ▼ ↺

```
12  {
13    "user_id": 3,
14    "full_name": "Dalal Fahad",
15    "password": null
16  },
17  {
18    "user_id": 4,
19    "full_name": "Neel John",
20    "password": null
21  },
22 }
```

List of all users.

sportyshoes / **getUserByName** Save ... ✎ 📄

**GET** ▼  Send ▼

**Params** ● Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

<input checked="" type="checkbox"/>	name	Fatima Salam	
	Key	Value	Description

**Body** Cookies Headers (5) Test Results 🌐 200 OK 24 ms 220 B Save Response ▼

**Pretty** Raw Preview Visualize **JSON** ▼ ↺

```
1  {
2    "user_id": 1,
3    "full_name": "Fatima Salam",
4    "password": null
5  }
```

Search user by name.

sportyshoes / **getUserById** Save ... Edit ...

**GET** ▼  Send ▼

**Params** Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

**Body** Cookies Headers (5) Test Results 200 OK 37 ms 222 B Save Response ▼

**Pretty** Raw Preview Visualize **JSON** ▼ ...

```
1 {
2   "user_id": 1,
3   "full_name": "Fatima Salam",
4   "password": "test"
5 }
```

Find user by user\_id.

sportyshoes / **editUserPassword** Save ... Edit ...

**PATCH** ▼  Send ▼

**Params** Authorization Headers (8) **Body** ● Pre-request Script Tests Settings Cookies

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL **JSON** ▼ Beautify

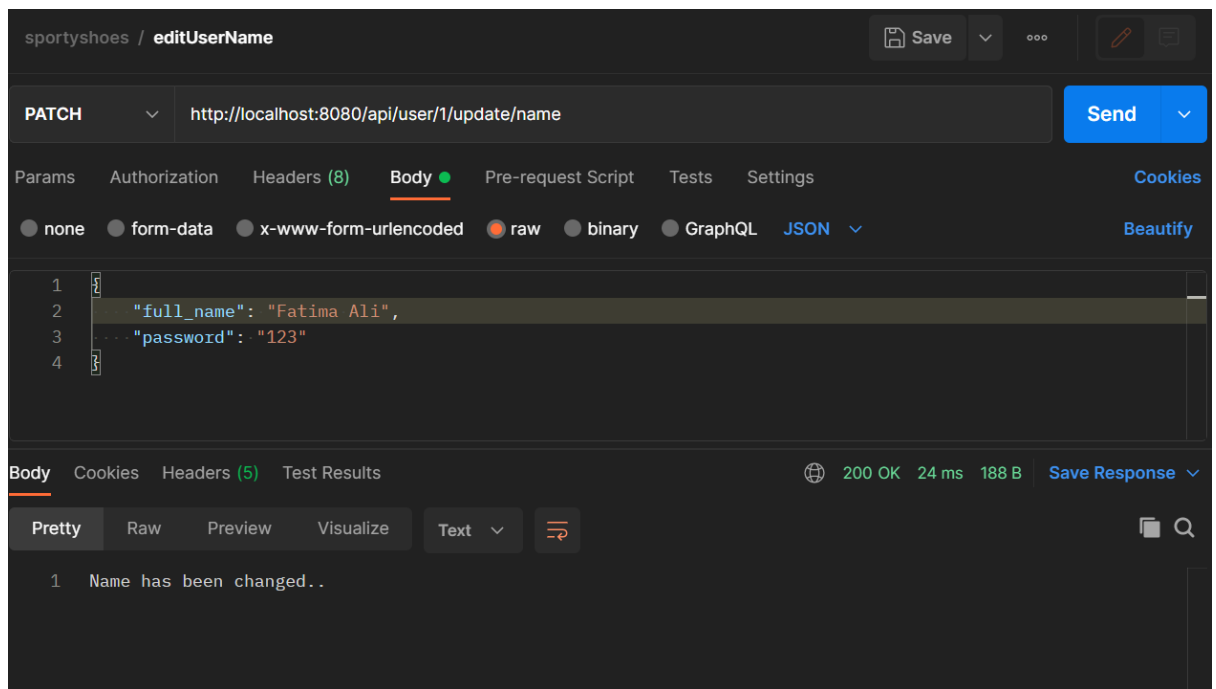
```
1 {
2   ... "full_name": "Fatima Salam",
3   "password": "123"
4 }
```

**Body** Cookies Headers (5) Test Results 200 OK 24 ms 192 B Save Response ▼

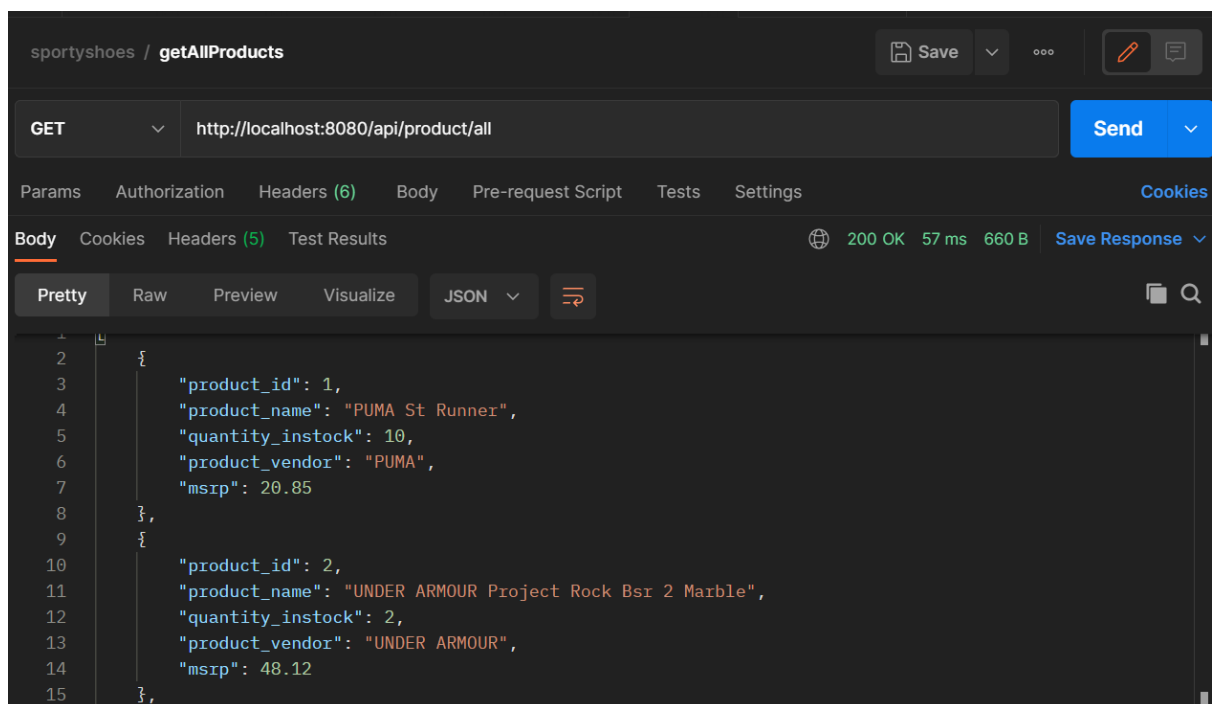
**Pretty** Raw Preview Visualize **Text** ▼ ...

```
1 Password has been changed..
```

Edit user password.



Edit user name.



Viewing all products.



sportyshoes / **getProductById** Save ... Edit Comments

**GET** ... **http://localhost:8080/api/product/all/1** Send ...

**Params** Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

**Body** Cookies Headers (5) Test Results 200 OK 19 ms 271 B Save Response ...

**Pretty** Raw Preview Visualize **JSON** ... ...

```
1 {  
2   "product_id": 1,  
3   "product_name": "PUMA St Runner",  
4   "quantity_instock": 10,  
5   "product_vendor": "PUMA",  
6   "msrp": 20.85  
7 }
```

Viewing all products by product\_id.

sportyshoes / **getProductByName** Save ... Edit Comments

**GET** ... **http://localhost:8080/api/product/search?name=PUMA St Runner** Send ...

**Params** ... Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

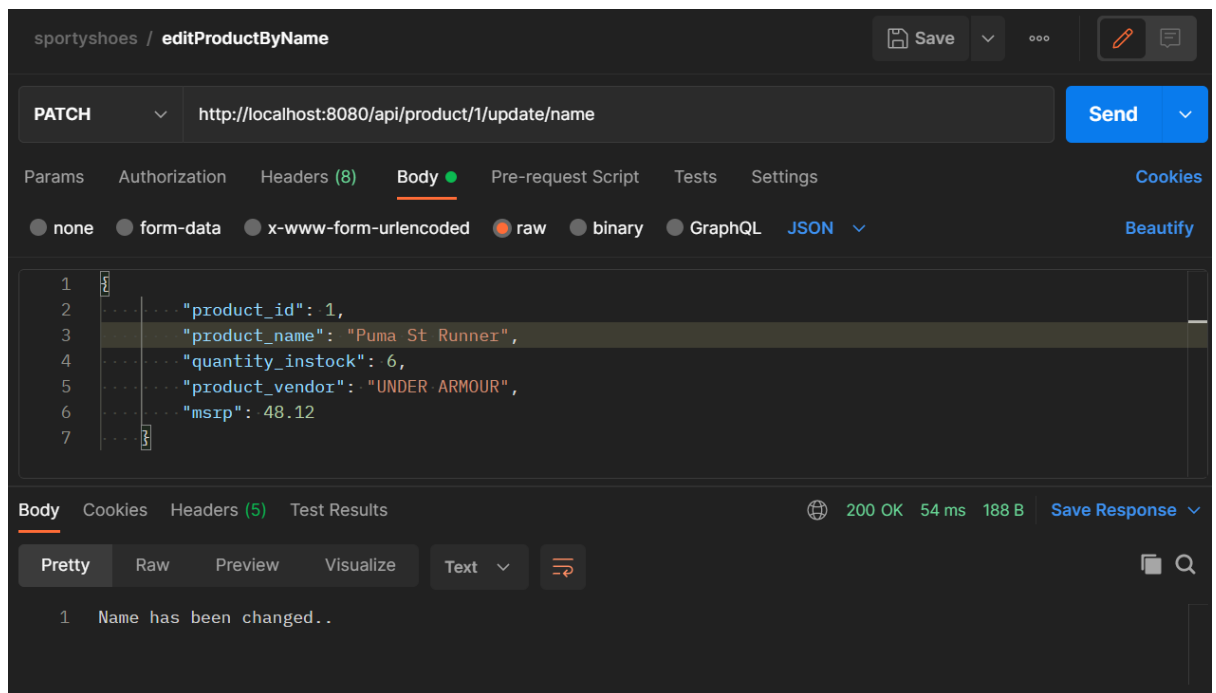
name	PUMA St Runner	
Key	Value	Description

**Body** Cookies Headers (5) Test Results 200 OK 16 ms 271 B Save Response ...

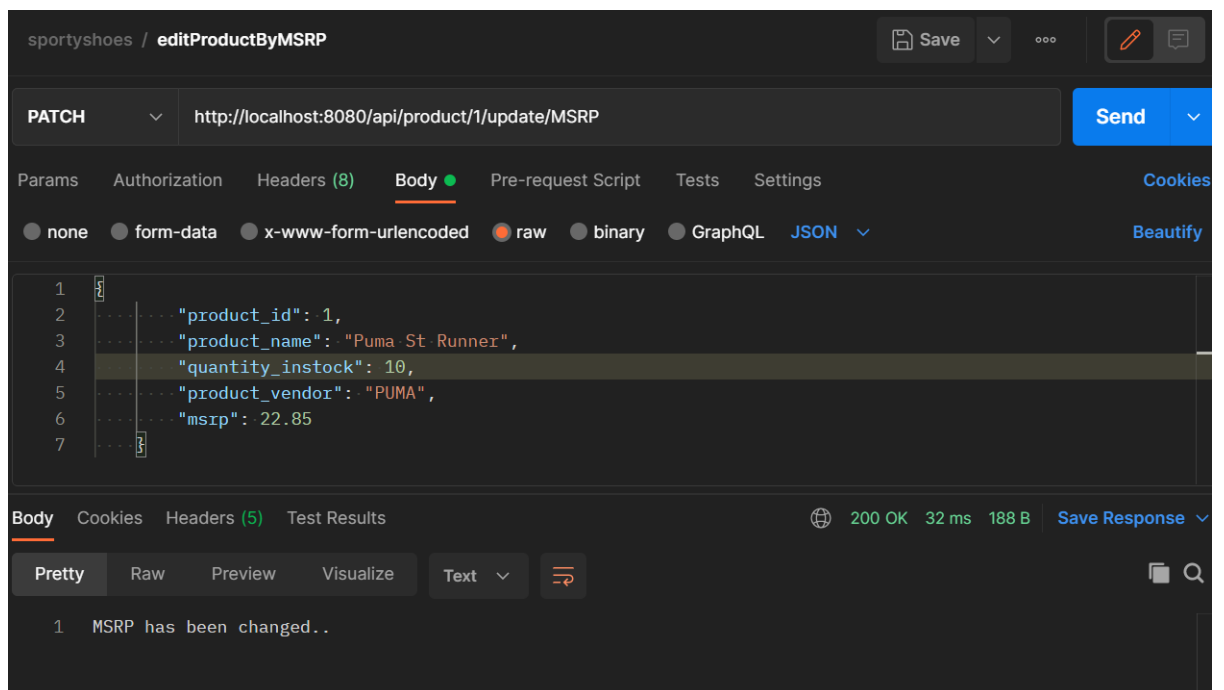
**Pretty** Raw Preview Visualize **JSON** ... ...

```
1 {  
2   "product_id": 1,  
3   "product_name": "PUMA St Runner",  
4   "quantity_instock": 10,  
5   "product_vendor": "PUMA",  
6   "msrp": 20.85  
7 }
```

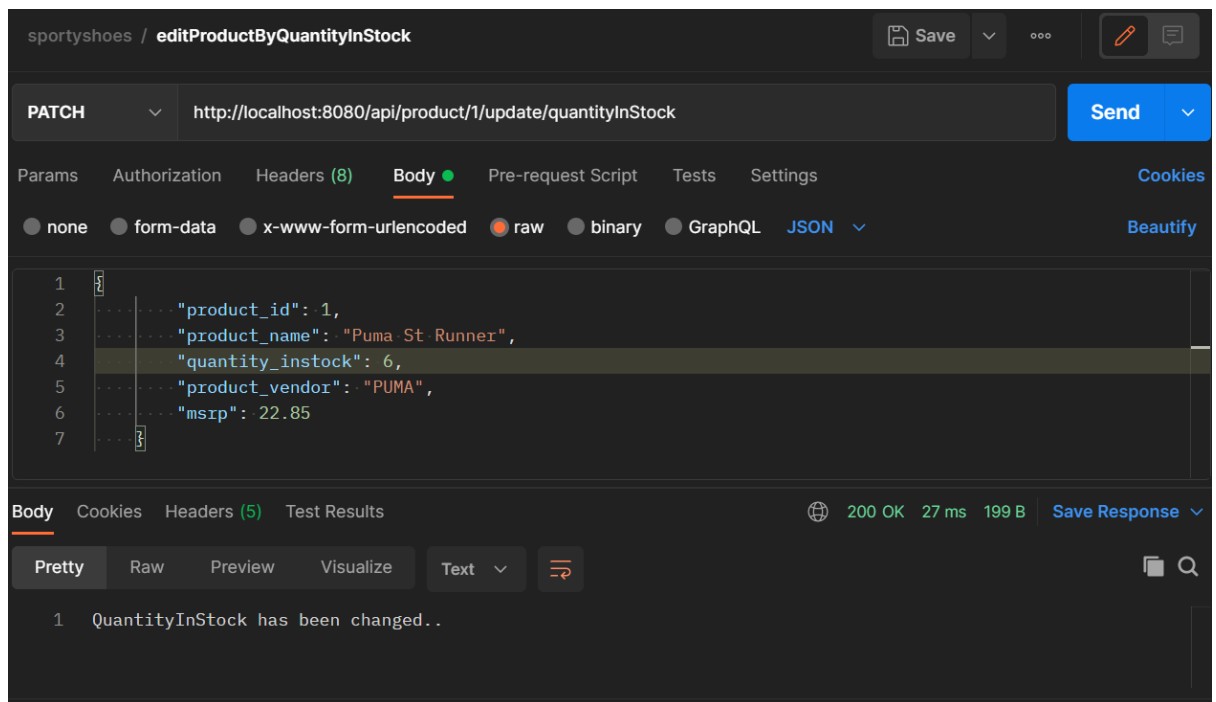
Viewing product by product name.



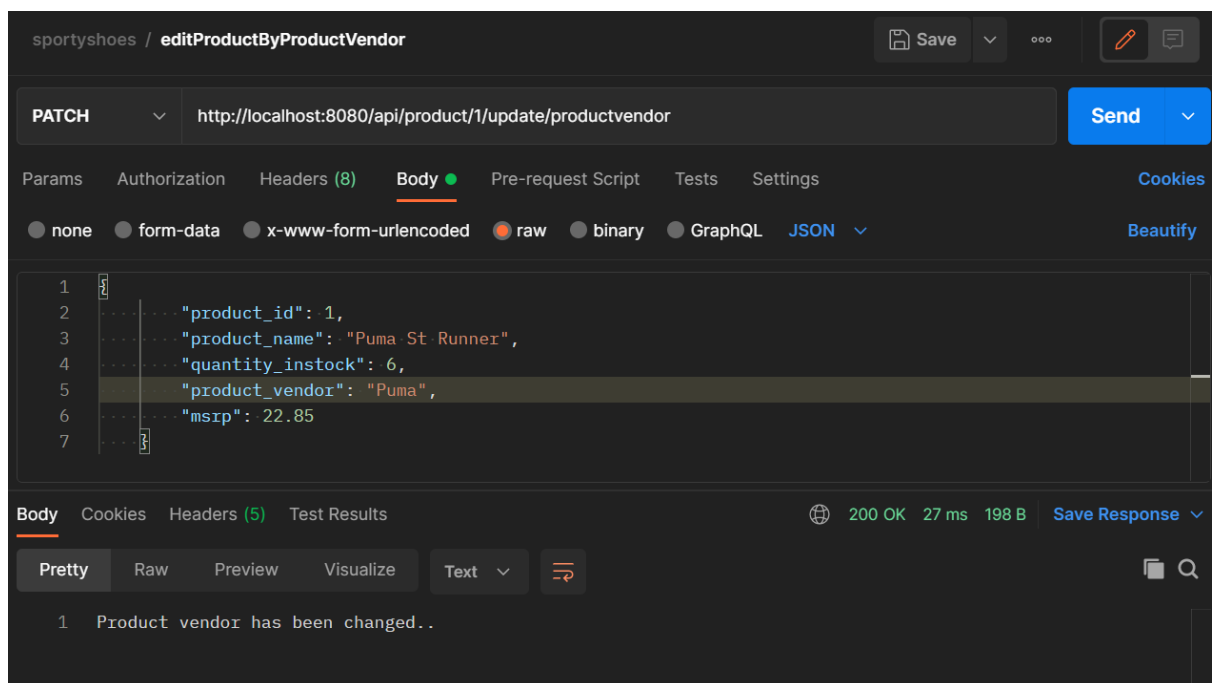
Edit product by name.



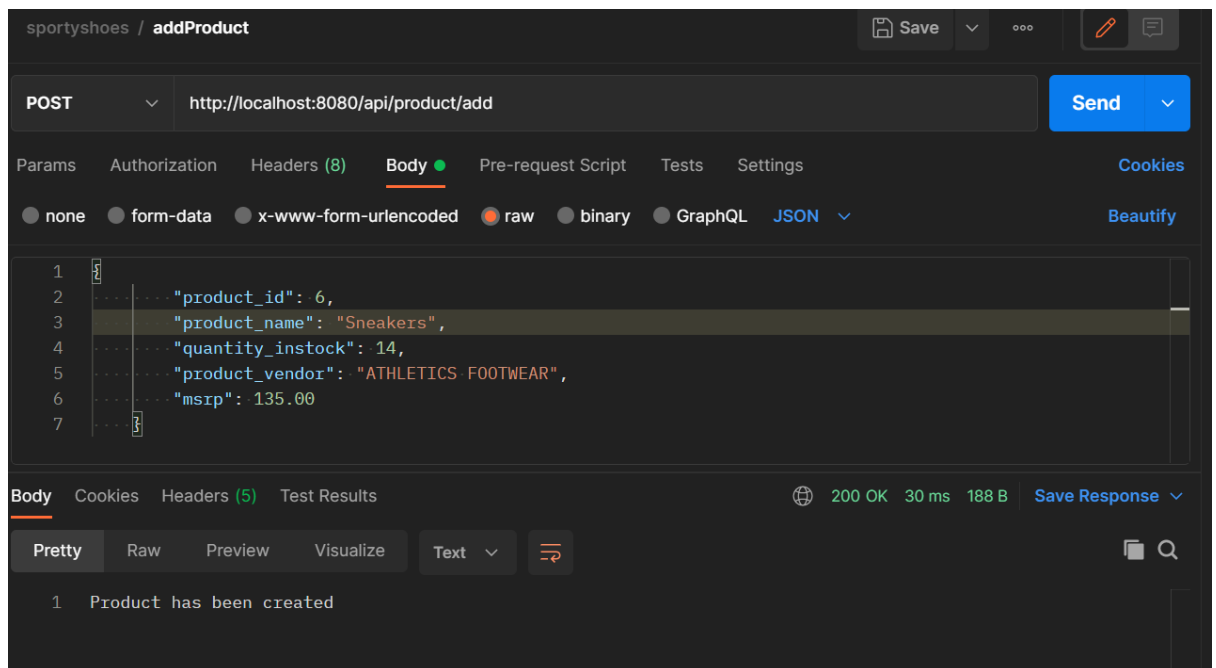
Edit product by MSRP.



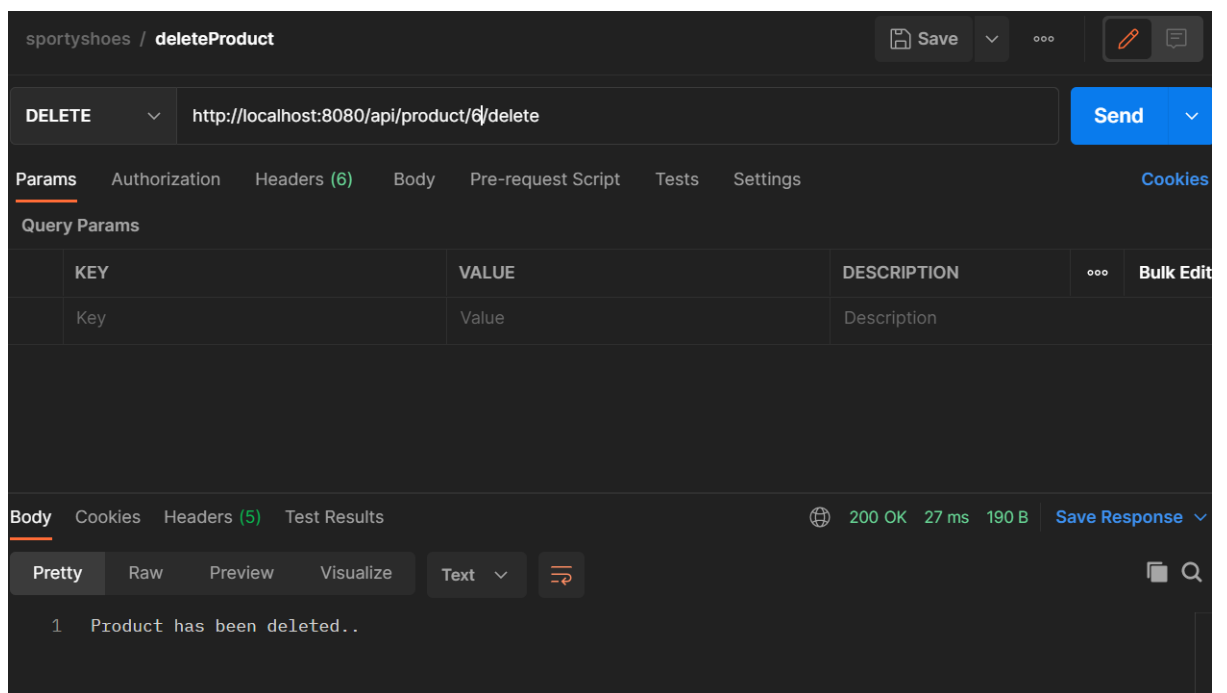
Edit product by quantity in stock.



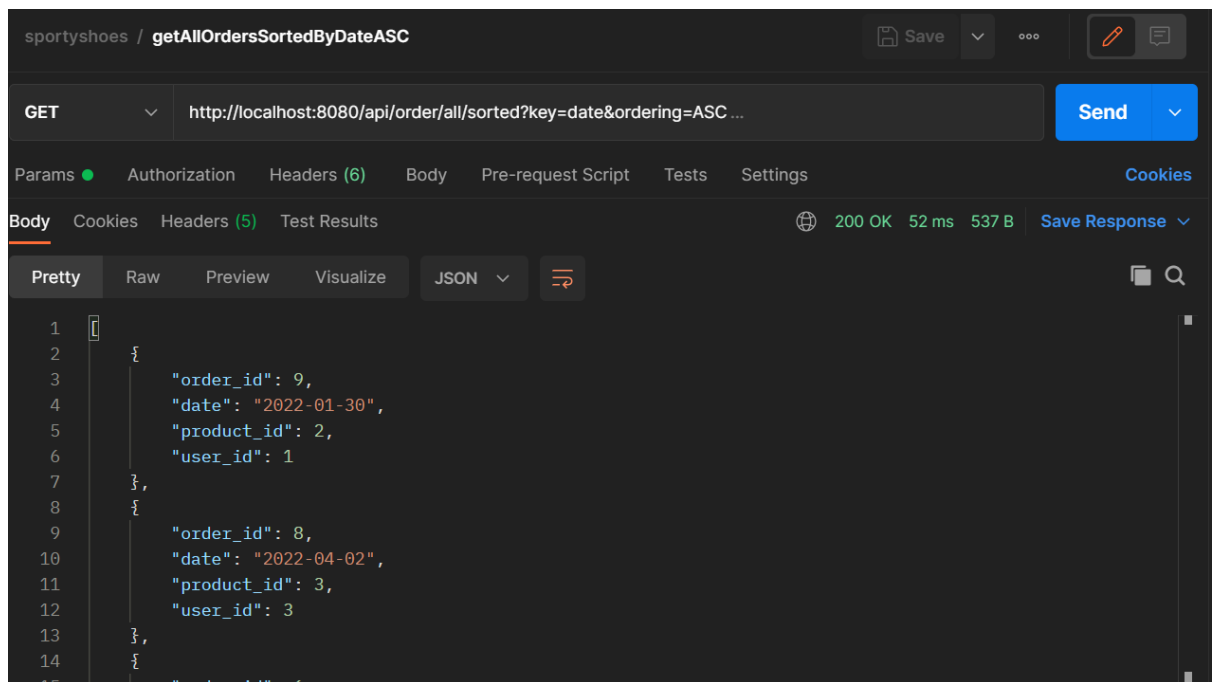
Edit product by product vendor.



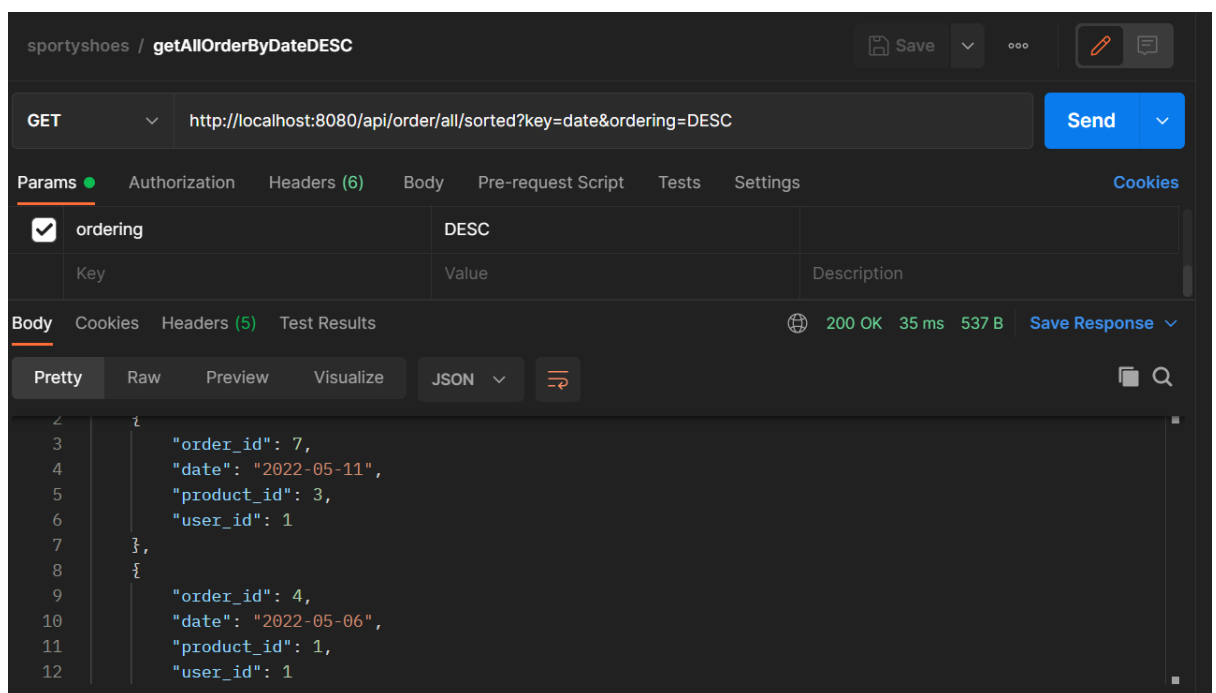
Add a product.



Delete a product.



All orders sorted by order date ascending.



All orders sorted by order date descending.

sportyshoes / **getAllOrderByIdsASC** Save ... Edit Comments

**GET** ▼ http://localhost:8080/api/order/all/sorted?key=order\_id&ordering=ASC Send ▼

**Params** ● Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Key	Value	Description
<input checked="" type="checkbox"/> ordering	ASC	

**Body** Cookies Headers (5) Test Results 200 OK 46 ms 537 B Save Response ▼

**Pretty** Raw Preview Visualize JSON ▼ ≡

```
1 [
2   {
3     "order_id": 4,
4     "date": "2022-05-06",
5     "product_id": 1,
6     "user_id": 1
7   },
8   {
9     "order_id": 5,
10    "date": "2022-05-05",
11    "product_id": 3,
12    "user_id": 2
13  }
14 ]
```

All orders sorted by order id ascending.

sportyshoes / **getAllOrdersByIdDESC** Save ... Edit Comments

**GET** ▼ http://localhost:8080/api/order/all/sorted?key=order\_id&ordering=DESC Send ▼

**Params** ● Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

Key	Value	Description
<input checked="" type="checkbox"/> ordering	DESC	

**Body** Cookies Headers (5) Test Results 200 OK 18 ms 537 B Save Response ▼

**Pretty** Raw Preview Visualize JSON ▼ ≡

```
1 [
2   {
3     "order_id": 9,
4     "date": "2022-01-30",
5     "product_id": 2,
6     "user_id": 1
7   },
8   {
9     "order_id": 8,
10    "date": "2022-04-02",
11    "product_id": 3,
12    "user_id": 3
13  }
14 ]
```

All orders sorted by order id descending.

sportyshoes / **getAllOrdersByProductId** Save ... ✎ 🗨

**GET** ⌵ http://localhost:8080/api/product/1/order/all Send ⌵

**Params** Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
	Key	Value	Description		

**Body** Cookies Headers (5) Test Results 🌐 200 OK 11 ms 227 B Save Response ⌵

**Pretty** Raw Preview Visualize **JSON** ⌵ ↻ 📄 🔍

```
1  [
2    {
3      "order_id": 4,
4      "date": "2022-05-06",
5      "product_id": 1,
6      "user_id": 1
7    }
8  ]
```

All orders by product id.

sportyshoes / **getAllOrdersByUserId** Save ... ✎ 🗨

**GET** ⌵ http://localhost:8080/api/user/1/order/all Send ⌵

**Params** Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

	KEY	VALUE	DESCRIPTION	...	Bulk Edit
	Key	Value	Description		

**Body** Cookies Headers (5) Test Results 🌐 200 OK 19 ms 351 B Save Response ⌵

**Pretty** Raw Preview Visualize **JSON** ⌵ ↻ 📄 🔍

```
3      "order_id": 4,
4      "date": "2022-05-06",
5      "product_id": 1,
6      "user_id": 1
7    },
8    {
9      "order_id": 7,
10     "date": "2022-05-11",
11     "product_id": 3,
12     "user_id": 1
```

All orders by user id.

To conclude, this project will help the admin a lot in his/her everyday use. It is developed in a way to make their life easier as it is user-friendly and easy to learn. In the future, we would like to add a frontend website so that its easier. This project aims to design and develop a backend sporty shoes website spring boot framework. The goal of this project is to apply JDBC concepts and spring boot.

This is the link to github:

<https://github.com/rahafAlrabeea/sportyshoes.com>

you will also find the code of the database below.

```
CREATE SCHEMA `sportyshoes` ;
```

```
use sportyshoes;
```

```
CREATE TABLE `users` (  
  `user_id` int NOT NULL AUTO_INCREMENT,  
  `full_name` varchar(200) NOT NULL,  
  `password` varchar(55) NOT NULL,  
  primary key (`user_id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `users` (`full_name`, `password`) VALUES  
( 'Fatima Salam', '1234'),  
( 'Abdulaziz Jassim', '1234'),  
( 'Dalal Fahad', '1234');
```

```
CREATE TABLE `admins` (  
  `admin_id` int NOT NULL AUTO_INCREMENT,  
  `admin_name` varchar(55) NOT NULL,  
  `password` varchar(55) NOT NULL,  
  primary key (`admin_id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `admins` (`admin_name`, `password`) VALUES  
( 'Rahaf Alrabeea', 'admin');
```



```
CREATE TABLE `products` (  
  `product_id` int NOT NULL AUTO_INCREMENT,  
  `product_name` varchar(200) NOT NULL,  
  `MSRP` decimal(5,2) NOT NULL,  
  `quantity_instock` int NOT NULL,  
  `product_vendor` varchar(55) NOT NULL,  
  primary key (`product_id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `products` (`product_name`, `MSRP`, `quantity_instock`, `product_vendor`) VALUES  
( 'PUMA St Runner', 20.85,10,'PUMA'),  
( 'UNDER ARMOUR Project Rock Bsr 2 Marble', 48.12, 2,'UNDER ARMOUR'),  
( 'SKECHERS Summits',15.70 ,40,'SKECHERS');
```

```
CREATE TABLE `orders` (  
  `order_id` int NOT NULL AUTO_INCREMENT,  
  `date` date NOT NULL,  
  `user_id` int NOT NULL,  
  `product_id` int NOT NULL,  
  primary key (`order_id`),  
  foreign key (`user_id`) references `users`(`user_id`),  
  foreign key (`product_id`) references `products`(`product_id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `orders` (`date`, `user_id`, `product_id`) VALUES  
( '2022-5-6', 1,6),  
( '2022-5-5',2,4),  
( '2022-5-1',3,5),  
( '2022-05-11', '1', '3'),  
( '2022-04-2', '3', '3'),  
( '2022-01-30', '1', '2');
```