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Batch	MS FSD DEC 2021 Cohort 1
Project Name	Sporty Shoes
Project Submission Date	18-05-2022

Source Code

ShoesWebApplication.java

```
package com.webshoe;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class ShoesWebApplication {

	public static void main(String[] args) {
		SpringApplication.run(ShoesWebApplication.class, args);
	}
}
```

SportyShoesSecurityConfiguration.java

```
package com.webshoe.configuration;

import org.springframework.context.annotation.Configuration;
import org.springframework.http.HttpMethod;
import
org.springframework.security.config.annotation.authentication.builders.AuthenticationManagerBuil
der;
import org.springframework.security.config.annotation.web.builders.HttpSecurity;
import
org.springframework.security.config.annotation.web.configuration.WebSecurityConfigurerAdapter;

@Configuration
public class SprotyShoesSecurityConfiguration extends WebSecurityConfigurerAdapter {

@Override
	protected void configure(HttpSecurity http) throws Exception {
		http.authorizeRequests()
		.antMatchers(HttpMethod.GET, "/admin/**").hasRole("ADMIN")
		.antMatchers("/users/**")
```

```
                .permitAll().and().httpBasic();
                http.csrf().disable();
        }


        @Override
        protected void configure(AuthenticationManagerBuilder auth) throws Exception {

        auth.inMemoryAuthentication().withUser("admin").password("{noop}admin").roles("ADMIN
");
        }

}
```

AdminController.java

```
package com.webshoe.controller;

import java.text.ParseException;
import java.util.List;
import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.DeleteMapping;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.RestController;

import com.webshoe.entity.Product;
import com.webshoe.entity.PurchaseReport;
import com.webshoe.entity.User;
import com.webshoe.service.ProductService;
import com.webshoe.service.PurchaseReportService;
import com.webshoe.service.UserService;



@RestController
@RequestMapping("/admin")
public class AdminController {

        @Autowired
        ProductService productService;

        @Autowired
        UserService userService;
```

```
	@Autowired
	private PurchaseReportService purchaseReportService;

	@GetMapping("/products")
	public ResponseEntity<List<Product>> getAllProducts() {
		List<Product> allProducts = productService.getAllProducts();
		if (allProducts.isEmpty()) {
			return new ResponseEntity<>(HttpStatus.NO_CONTENT);
		}
		ResponseEntity<List<Product>> responseEntity = new
ResponseEntity<List<Product>>(allProducts, HttpStatus.OK);
		return responseEntity;
	}

	@GetMapping("/products/categorize/{category}")
	public ResponseEntity<List<Product>>
getAllProductsBasedOnCategory(@PathVariable("category") String category) {
		System.out.println("Category to look for -> " + category);
		List<Product> allProductsBasedOnCategory =
productService.getAllProductBasedOnCatogary(category);
		if (allProductsBasedOnCategory.isEmpty()) {
			return new ResponseEntity<>(HttpStatus.NO_CONTENT);
		}
		ResponseEntity<List<Product>> responseEntity = new
ResponseEntity<List<Product>>(allProductsBasedOnCategory,
				HttpStatus.OK);
		return responseEntity;
	}

	@PostMapping("/products")
	public ResponseEntity<Product> addProduct(@RequestBody Product product) {
		Product temp = productService.addProduct(product);
		if (temp == null) {
			return new ResponseEntity<Product>(HttpStatus.BAD_REQUEST);
		}
		return new ResponseEntity<Product>(temp, HttpStatus.OK);

	}

	@GetMapping("/products/{productId}")
	public ResponseEntity<Product> getProductById(@PathVariable("productId") int id) {
		Optional<Product> product = productService.getProductById(id);
		if (!product.isPresent()) {
			return new ResponseEntity<Product>(HttpStatus.NO_CONTENT);
		}

		return new ResponseEntity<Product>(product.get(), HttpStatus.OK);
	}

	@DeleteMapping("/products/{productId}")
	public ResponseEntity<HttpStatus> deleteById(@PathVariable("productId") int id) {
```

```
		productService.deleteProductById(id);
		return new ResponseEntity<>(HttpStatus.OK);
	}

	@GetMapping("/users")
	public ResponseEntity<List<User>> getAllSignedUpUsers() {
		List<User> allSignedUpUsers = userService.allSignedUpUsers();
		if (allSignedUpUsers.isEmpty()) {
			return new ResponseEntity<List<User>>(HttpStatus.NO_CONTENT);
		}
		return new ResponseEntity<List<User>>(allSignedUpUsers, HttpStatus.OK);

	}

	@GetMapping("/users/{userName}")
	public ResponseEntity<User> getSignedUpUser(@PathVariable("userName") String
userName) {
		Optional<User> signedUpUser = userService.getSignedUpUserByName(userName);
		if (!signedUpUser.isPresent()) {
			return new ResponseEntity<User>(HttpStatus.NOT_FOUND);
		}
		return new ResponseEntity<User>(signedUpUser.get(), HttpStatus.OK);
	}

	@GetMapping("/purchasereport")
	public ResponseEntity<List<PurchaseReport>> getPurchaseReport() {
		List<PurchaseReport> purchaseReport =
purchaseReportService.getAllPurchaseReport();
		if (purchaseReport.isEmpty()) {
			return new
ResponseEntity<List<PurchaseReport>>(HttpStatus.NO_CONTENT);
		}
		return new ResponseEntity<List<PurchaseReport>>(purchaseReport,
HttpStatus.OK);

	}

	@GetMapping("/purchasereport/category/{category}")
	public ResponseEntity<List<PurchaseReport>>
getPurchaseReportBasedOnCategory(@PathVariable("category") String category) {
		List<PurchaseReport> purchaseReportBasedOnCategory =
purchaseReportService.getPurchaseReportBasedOnCategory(category);
		if (purchaseReportBasedOnCategory.isEmpty()) {
			return new
ResponseEntity<List<PurchaseReport>>(HttpStatus.NO_CONTENT);
		}
		return new
ResponseEntity<List<PurchaseReport>>(purchaseReportBasedOnCategory, HttpStatus.OK);

	}
```

```
	@GetMapping("/purchasereport/date/{date}")
	public ResponseEntity<List<PurchaseReport>>
getPurchaseReportBasedOnDate(@PathVariable("date") String date) throws ParseException {
		System.out.println("Date from url is : " + date);
		List<PurchaseReport> purchaseReportBasedOnCategory =
purchaseReportService.getPurchaseReportBasedOnDate(date);
		if (purchaseReportBasedOnCategory.isEmpty()) {
			return new
ResponseEntity<List<PurchaseReport>>(HttpStatus.NO_CONTENT);
		}
		return new
ResponseEntity<List<PurchaseReport>>(purchaseReportBasedOnCategory, HttpStatus.OK);

	}
}
```

UserController.java

```
package com.webshoe.controller;

import java.security.SecureRandom;
import java.util.Date;
import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
import org.springframework.transaction.annotation.Transactional;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.ResponseBody;
import org.springframework.web.bind.annotation.RestController;

import com.webshoe.entity.Product;
import com.webshoe.entity.User;
import com.webshoe.service.ProductService;
import com.webshoe.service.PurchaseReportService;
import com.webshoe.service.UserService;


@RestController
@RequestMapping("/users")
public class UserController {

	@Autowired
	private UserService userService;

	@Autowired
	private ProductService productService;

	@Autowired
	private PurchaseReportService purchaseReportService;

	@PostMapping("/signup")
	public @ResponseBody String register(@RequestBody(required = false)
User user) {
		if (user == null) {
			return "Enter Valid User Details - User details should
not be Null";
```

```
            }else if(user.getUserName() == null || user.getUserPassword()==
null || user.getUserEmail() == null) {
                  return "Enter Valid User Details - All the fields(Name,
Password, Email) are mandatory";
            }
            int strength = 10;
            BCryptPasswordEncoder bCryptPasswordEncoder = new
BCryptPasswordEncoder(strength, new SecureRandom());
            String encodedPassword =
bCryptPasswordEncoder.encode(user.getUserPassword());
            user.setUserPassword(encodedPassword);
            user.setUserName(user.getUserName().toLowerCase());
            userService.signUp(user);
            return "Signed Up Successfully!";
      }

      @PostMapping("/{userId}/buy/{productName}")
      @Transactional
      public @ResponseBody String buyProductByName(@PathVariable(name =
"userId") int userID,
                  @PathVariable("productName") String productName) {
            Optional<Product> product =
productService.getProductByName(productName);
            if (product.isPresent()) {
                  Optional<User> user =
userService.getSignedUpUserById(userID);
                  if (user.isPresent()) {
                        User user2 = user.get();
                        user2.addProduct(product.get());
                        Product product2 = product.get();
                        product2.addUser(user.get());
                        userService.saveUserWithProduct(user2);
                        productService.addProduct(product2);

      purchaseReportService.savePurchaseReport(product2.getProductName(),
product2.getCategory(),
                                    product2.getProductPrice(),
user2.getUserName(), user2.getUserEmail(), new Date());
                        return "You have successfully bought : " +
product.get().getProductName();
                  } else {
                        return "User Not Found! to buy the Product";
                  }
            }
            return "Product Not Found!";
      }
}
```

Product.java

```
package com.webshoe.entity;

import java.util.ArrayList;
import java.util.List;

import javax.persistence.CascadeType;
import javax.persistence.Entity;
import javax.persistence.FetchType;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
```

```
import javax.persistence.ManyToMany;
import javax.persistence.Table;

import com.fasterxml.jackson.annotation.JsonIgnoreProperties;


@Entity
@Table(name = "product")
//Added below line to not get Infinite loop when retriving user and product details
@JsonIgnoreProperties({ "hibernateLazyInitializer", "handler", "users" })
public class Product {

	@Id
	@GeneratedValue(strategy = GenerationType.IDENTITY)
	private int productId;

	private String productName;

	private int productPrice;

	private String category;

	@ManyToMany(fetch = FetchType.LAZY, cascade = { CascadeType.PERSIST,
CascadeType.MERGE }, mappedBy = "products")
	private List<User> users = new ArrayList<User>();

	public void addUser(User user) {
		this.users.add(user);
	}

	@Override
	public String toString() {

		return "Custom ToString -> Product";
	}

	public int getProductId() {
		return productId;
	}

	public void setProductId(int productId) {
		this.productId = productId;
	}

	public String getProductName() {
		return productName;
	}

	public void setProductName(String productName) {
		this.productName = productName;
	}
```

```
	public int getProductPrice() {
		return productPrice;
	}

	public void setProductPrice(int productPrice) {
		this.productPrice = productPrice;
	}

	public String getCategory() {
		return category;
	}

	public void setCategory(String category) {
		this.category = category;
	}

	public List<User> getUsers() {
		return users;
	}

	public void setUsers(List<User> users) {
		this.users = users;
	}

	public Product(int productId, String productName, int productPrice, String category,
List<User> users) {
		super();
		this.productId = productId;
		this.productName = productName;
		this.productPrice = productPrice;
		this.category = category;
		this.users = users;
	}

	public Product() {
		super();
	}

	public Product(String productName, int productPrice, String category, List<User> users) {
		super();
		this.productName = productName;
		this.productPrice = productPrice;
		this.category = category;
		this.users = users;
	}

}
```

PurchaseReport.java

```
package com.webshoe.entity;
import java.util.Date;
```

```
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Temporal;
import javax.persistence.TemporalType;


@Entity
public class PurchaseReport {

	@Id
	@GeneratedValue(strategy = GenerationType.IDENTITY)
	private int id;

	private String categoryOfProduct;

	private String productName;

	private int priceOfTheProduct;

	private String userWhoBoughtTheProduct;

	private String userEmailBoughtTheProduct;

	@Temporal(TemporalType.DATE)
	private Date dateOfProductPurchase;

	public PurchaseReport(String productName, String categoryOfProduct, int
priceOfTheProduct, String userWhoBoughtTheProduct, String userEmailBoughtTheProduct, Date
dateOfProductPurchase) {
		this.productName = productName;
		this.categoryOfProduct = categoryOfProduct;
		this.userWhoBoughtTheProduct = userWhoBoughtTheProduct;
		this.dateOfProductPurchase = dateOfProductPurchase;
		this.userEmailBoughtTheProduct = userEmailBoughtTheProduct;
		this.priceOfTheProduct = priceOfTheProduct;
	}

	public int getId() {
		return id;
	}

	public void setId(int id) {
		this.id = id;
	}

	public String getCategoryOfProduct() {
		return categoryOfProduct;
	}
```

```
	public void setCategoryOfProduct(String categoryOfProduct) {
		this.categoryOfProduct = categoryOfProduct;
	}

	public String getProductName() {
		return productName;
	}

	public void setProductName(String productName) {
		this.productName = productName;
	}

	public int getPriceOfTheProduct() {
		return priceOfTheProduct;
	}

	public void setPriceOfTheProduct(int priceOfTheProduct) {
		this.priceOfTheProduct = priceOfTheProduct;
	}

	public String getUserWhoBoughtTheProduct() {
		return userWhoBoughtTheProduct;
	}

	public void setUserWhoBoughtTheProduct(String userWhoBoughtTheProduct) {
		this.userWhoBoughtTheProduct = userWhoBoughtTheProduct;
	}

	public String getUserEmailBoughtTheProduct() {
		return userEmailBoughtTheProduct;
	}

	public void setUserEmailBoughtTheProduct(String userEmailBoughtTheProduct) {
		this.userEmailBoughtTheProduct = userEmailBoughtTheProduct;
	}

	public Date getDateOfProductPurchase() {
		return dateOfProductPurchase;
	}

	public void setDateOfProductPurchase(Date dateOfProductPurchase) {
		this.dateOfProductPurchase = dateOfProductPurchase;
	}

	public PurchaseReport(int id, String categoryOfProduct, String productName, int
priceOfTheProduct,
			String userWhoBoughtTheProduct, String userEmailBoughtTheProduct, Date
dateOfProductPurchase) {
		super();
		this.id = id;
```

```
		this.categoryOfProduct = categoryOfProduct;
		this.productName = productName;
		this.priceOfTheProduct = priceOfTheProduct;
		this.userWhoBoughtTheProduct = userWhoBoughtTheProduct;
		this.userEmailBoughtTheProduct = userEmailBoughtTheProduct;
		this.dateOfProductPurchase = dateOfProductPurchase;
	}

	public PurchaseReport() {
		super();
	}

	@Override
	public String toString() {
		return "PurchaseReport [id=" + id + ", categoryOfProduct=" + categoryOfProduct + ",
productName=" + productName
				+ ", priceOfTheProduct=" + priceOfTheProduct + ",
userWhoBoughtTheProduct=" + userWhoBoughtTheProduct
				+ ", userEmailBoughtTheProduct=" + userEmailBoughtTheProduct +
", dateOfProductPurchase="
				+ dateOfProductPurchase + "]";
	}



}
```

User.java

```
package com.webshoe.entity;

import java.util.ArrayList;
import java.util.List;

import javax.persistence.CascadeType;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.FetchType;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.JoinColumn;
import javax.persistence.JoinTable;
import javax.persistence.ManyToMany;
import javax.persistence.Table;


@Entity
@Table(name = "user")
public class User {

	@Id
	@GeneratedValue(strategy = GenerationType.IDENTITY)
```

```
	private int userId;

	@Column(name = "name")
	private String userName;

	@Column(name = "email")
	private String userEmail;

	@Column(name = "password")
	private String userPassword;

	@ManyToMany(fetch = FetchType.LAZY, cascade = { CascadeType.PERSIST,
CascadeType.MERGE })
	@JoinTable(name = "USER_PRODUCT", joinColumns = @JoinColumn(name = "USER_ID"),
inverseJoinColumns = @JoinColumn(name = "PRODUCT_ID"))
	private List<Product> products = new ArrayList<Product>();

	public User(String userName, String userEmail) {
		this.userEmail = userEmail;
		this.userName = userName;
	}

	public void addProduct(Product product) {
		this.products.add(product);
	}

	@Override
	public String toString() {
		return "Custom ToString -> User [userId=" + userId + ", userName=" + userName + ",
userEmail=" + userEmail + ", userPassword="
				+ userPassword + ", products=" + products + "]";
	}

	public int getUserId() {
		return userId;
	}

	public void setUserId(int userId) {
		this.userId = userId;
	}

	public String getUserName() {
		return userName;
	}

	public void setUserName(String userName) {
		this.userName = userName;
	}

	public String getUserEmail() {
		return userEmail;
```

```
	}

	public void setUserEmail(String userEmail) {
		this.userEmail = userEmail;
	}

	public String getUserPassword() {
		return userPassword;
	}

	public void setUserPassword(String userPassword) {
		this.userPassword = userPassword;
	}

	public List<Product> getProducts() {
		return products;
	}

	public void setProducts(List<Product> products) {
		this.products = products;
	}

	public User(int userId, String userName, String userEmail, String userPassword,
List<Product> products) {
		super();
		this.userId = userId;
		this.userName = userName;
		this.userEmail = userEmail;
		this.userPassword = userPassword;
		this.products = products;
	}

	public User(String userName, String userEmail, String userPassword, List<Product> products)
{
		super();
		this.userName = userName;
		this.userEmail = userEmail;
		this.userPassword = userPassword;
		this.products = products;
	}

	public User() {
		super();
	}


}
```

ProductRepository.java

```
package com.webshoe.repository;

import java.util.List;
```

```
import java.util.Optional;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import org.springframework.data.repository.query.Param;
import org.springframework.stereotype.Repository;

import com.webshoe.entity.Product;

@Repository
public interface ProductRepository extends JpaRepository<Product, Integer>{

	@Query(value = "select p from Product p where p.category=:category")
	List<Product> findAllByCategory(@Param("category") String category);

	@Query(value = "select p from Product p where p.productName=:productName")
	Optional<Product> findByName(@Param("productName") String name);
}
```

PurchaseReportRepository.java

```
package com.webshoe.repository;

import java.util.Date;
import java.util.List;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import org.springframework.data.repository.query.Param;
import org.springframework.stereotype.Repository;

import com.webshoe.entity.PurchaseReport;



@Repository
public interface PurchaseReportRepository extends JpaRepository<PurchaseReport, Integer> {

	@Query("select pr from PurchaseReport pr where pr.categoryOfProduct=:category")
	List<PurchaseReport> findAllByCategory(@Param("category") String category);

	@Query("select pr from PurchaseReport pr where pr.dateOfProductPurchase=:date")
	List<PurchaseReport> findAllByDate(@Param("date") Date date);

}
```

UserRepository.java

```
package com.webshoe.repository;

import java.util.Optional;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import org.springframework.data.repository.query.Param;
```

```
import org.springframework.stereotype.Repository;

import com.webshoe.entity.User;



@Repository
public interface UserRepository extends JpaRepository<User, Integer> {

	@Query(value = "select u from User u where u.userName=:userName")
	Optional<User> findUserByName(@Param("userName")String userName);

}
```

ProductService.java

```
package com.webshoe.service;

import java.util.List;
import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.webshoe.entity.Product;
import com.webshoe.repository.ProductRepository;



@Service
public class ProductService {

	@Autowired
	ProductRepository productRepository;

	public Product addProduct(Product product) {
		return productRepository.save(product);
	}

	public Product addProductWithUser(Product product) {
		return productRepository.save(product);
	}

	public Optional<Product> getProductById(int id) {
		Optional<Product> proOptional = productRepository.findById(id);
		return proOptional;
	}



	public Optional<Product> getProductByName(String name) {
		Optional<Product> proOptional = productRepository.findByName(name);
		return proOptional;
	}
```

```
	public List<Product> getAllProducts() {
		return productRepository.findAll();
	}

	public List<Product> getAllProductBasedOnCatogary(String category) {
		return productRepository.findAllByCategory(category);
	}

	public void deleteProductById(int prdId) {
		productRepository.deleteById(prdId);
	}

}
```

PurchaseReportService.java

```
package com.webshoe.service;

import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.webshoe.entity.PurchaseReport;
import com.webshoe.repository.PurchaseReportRepository;


@Service
public class PurchaseReportService {

	@Autowired
	private PurchaseReportRepository purchaseReportRepository;

	public void savePurchaseReport(String productName, String category, int productPrice,
String userName, String userEmail, Date date) {
		PurchaseReport purchaseReport = new PurchaseReport(productName, category,
productPrice, userName, userEmail, date);
		purchaseReportRepository.save(purchaseReport);
	}



	public List<PurchaseReport> getAllPurchaseReport() {
		List<PurchaseReport> purchaseReports = purchaseReportRepository.findAll();
		return purchaseReports;
	}

	public List<PurchaseReport> getPurchaseReportBasedOnCategory(String category) {
		List<PurchaseReport> purchaseReports =
```

```
purchaseReportRepository.findAllByCategory(category);
		return purchaseReports;
	}

	public List<PurchaseReport> getPurchaseReportBasedOnDate(String date) throws
ParseException {
		List<PurchaseReport> purchaseReports =
purchaseReportRepository.findAllByDate(new SimpleDateFormat("yyyy-MM-dd").parse(date));
		return purchaseReports;
	}

}
```

UserService.java

```
package com.webshoe.service;

import java.util.List;
import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.webshoe.entity.User;
import com.webshoe.repository.UserRepository;

@Service
public class UserService {

	@Autowired
	UserRepository userRepository;

	public User signUp(User user) {
		return userRepository.save(user);
	}

	public User saveUserWithProduct(User user) {
		return userRepository.save(user);
	}

	public List<User> allSignedUpUsers() {
		return userRepository.findAll();
	}
	public Optional<User> getSignedUpUserByName(String name) {
		Optional<User> user = userRepository.findUserByName(name);
		return user;
	}
		public Optional<User> getSignedUpUserById(int id) {
		Optional<User> user = userRepository.findById(id);
		return user;
	}
}
```

Application.properties

```
spring.datasource.url=jdbc:mysql://localhost:3306/sportyshoes
spring.datasource.username=root
spring.datasource.password=Nagaraju@211

spring.datasource.driverClassName=com.mysql.jdbc.Driver
spring.jpa.properties.hibernate.dialect =
org.hibernate.dialect.MySQL5Dialect

spring.mvc.pathmatch.matching-strategy=ant-path-matcher
spring.jpa.generate-ddl=true
spring.jpa.hibernate.ddl-auto= update
spring.jpa.show-sql=true
spring.jpa.properties.hibernate.format_sql=true
logging.level.org.hibernate.type=trace


server.port = 8081
```

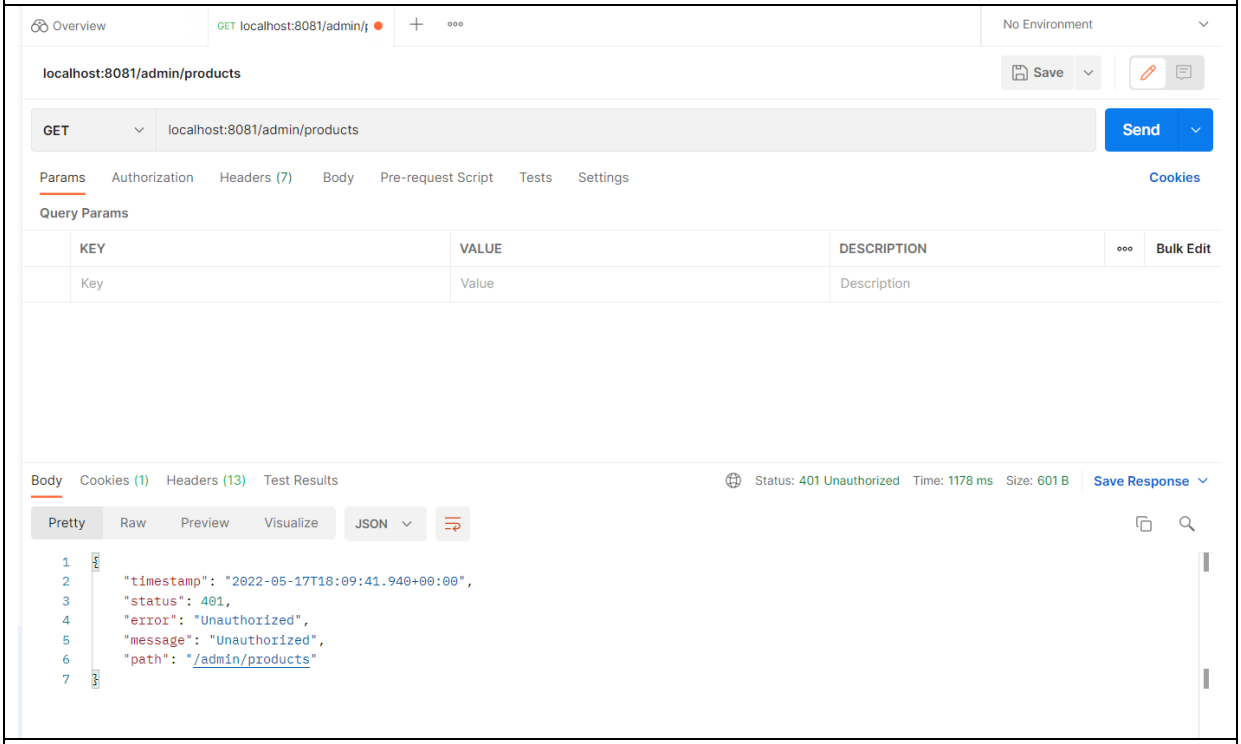
Pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
      <modelVersion>4.0.0</modelVersion>
      <parent>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-starter-parent</artifactId>
            <version>2.6.4</version>
            <relativePath /> <!-- lookup parent from repository -->
      </parent>
      <groupId>com.webshoe</groupId>
      <artifactId>shoes-web</artifactId>
      <version>0.0.1-SNAPSHOT</version>
      <name>shoes-web</name>
      <description>Online web Service</description>
      <properties>
            <java.version>1.8</java.version>
      </properties>
      <dependencies>
            <dependency>
                  <groupId>org.springframework.boot</groupId>
                  <artifactId>spring-boot-starter-data-jpa</artifactId>
            </dependency>
            <!--
https://mvnrepository.com/artifact/com.fasterxml.jackson.dataformat/jackson
-dataformat-xml -->
     <dependency>
    <groupId>com.fasterxml.jackson.dataformat</groupId>
    <artifactId>jackson-dataformat-xml</artifactId>
    </dependency>
            <dependency>
                  <groupId>org.springframework.boot</groupId>
                  <artifactId>spring-boot-starter-security</artifactId>
            </dependency>
            <dependency>
                  <groupId>org.springframework.boot</groupId>
                  <artifactId>spring-boot-starter-web</artifactId>
```

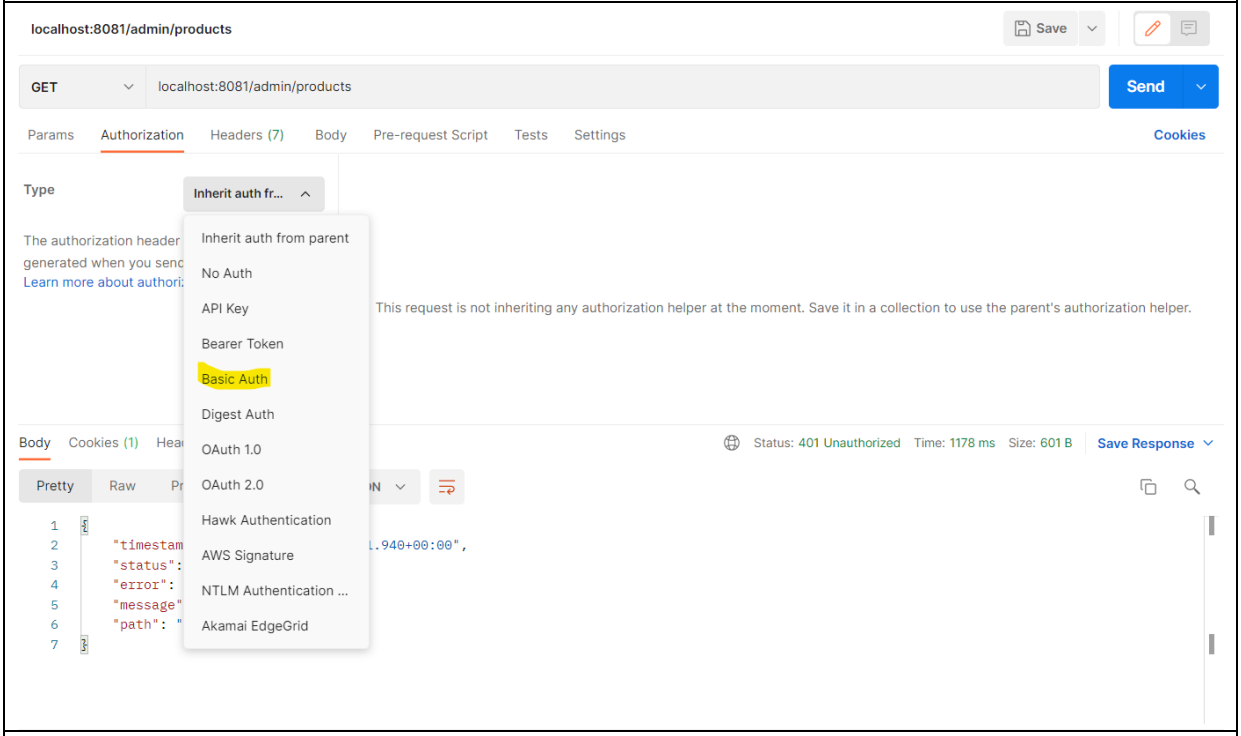
```
		</dependency>

		<dependency>
			<groupId>org.springframework.boot</groupId>
			<artifactId>spring-boot-devtools</artifactId>
			<scope>runtime</scope>
			<optional>true</optional>
		</dependency>
		<dependency>
			<groupId>mysql</groupId>
			<artifactId>mysql-connector-java</artifactId>
			<scope>runtime</scope>
		</dependency>
		<dependency>
			<groupId>org.springframework.boot</groupId>
			<artifactId>spring-boot-starter-test</artifactId>
			<scope>test</scope>
		</dependency>
		<dependency>
			<groupId>org.springframework.security</groupId>
			<artifactId>spring-security-test</artifactId>
			<scope>test</scope>
		</dependency>
		<!-- <dependency> <groupId>io.springfox</groupId>
<artifactId>springfox-boot-starter</artifactId>
			<version>3.0.0</version> </dependency> <dependency>
<groupId>io.springfox</groupId>
			<artifactId>springfox-swagger-ui</artifactId>
<version>3.0.0</version> </dependency> -->
		<dependency>
			<groupId>io.springfox</groupId>
			<artifactId>springfox-swagger2</artifactId>
			<version>2.9.2</version>
		</dependency>

		<dependency>
			<groupId>io.springfox</groupId>
			<artifactId>springfox-swagger-ui</artifactId>
			<version>2.9.2</version>
		</dependency>

	</dependencies>

	<build>
		<plugins>
			<plugin>
				<groupId>org.springframework.boot</groupId>
				<artifactId>spring-boot-maven-plugin</artifactId>
			</plugin>
		</plugins>
	</build>

</project>
```

Screen Shots

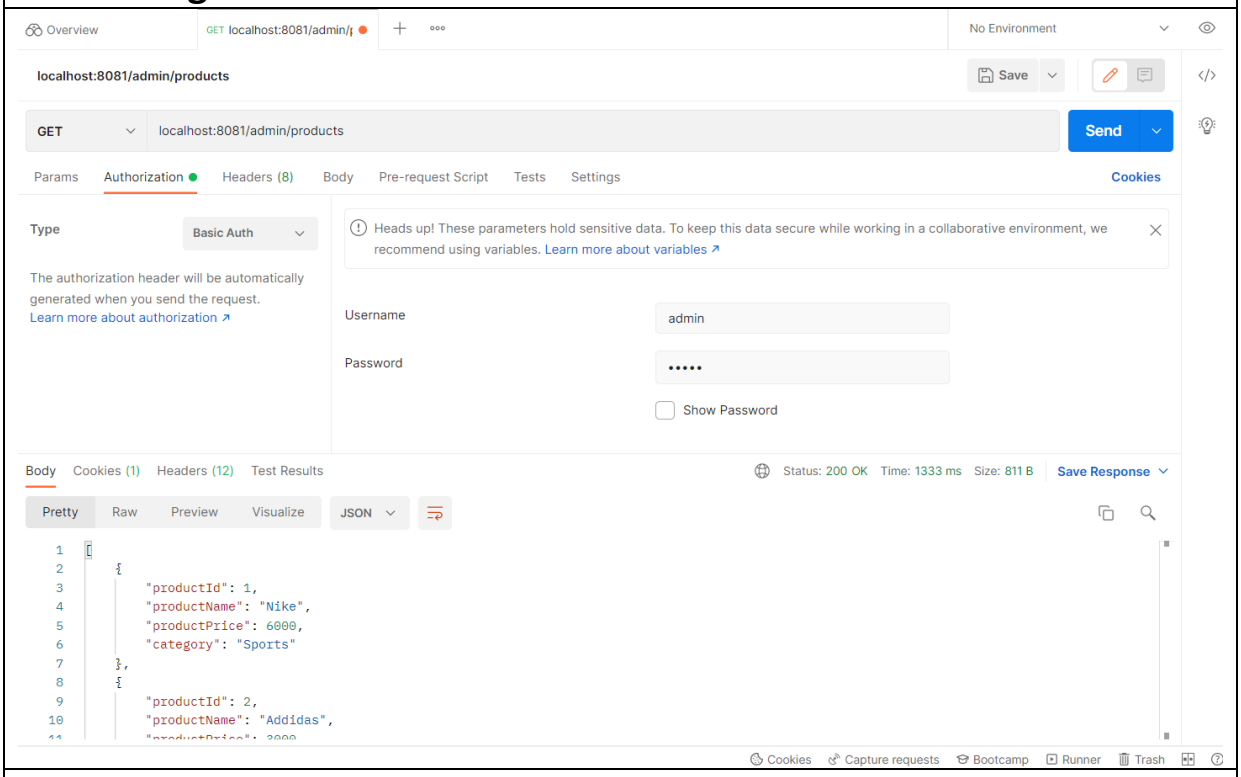
Products



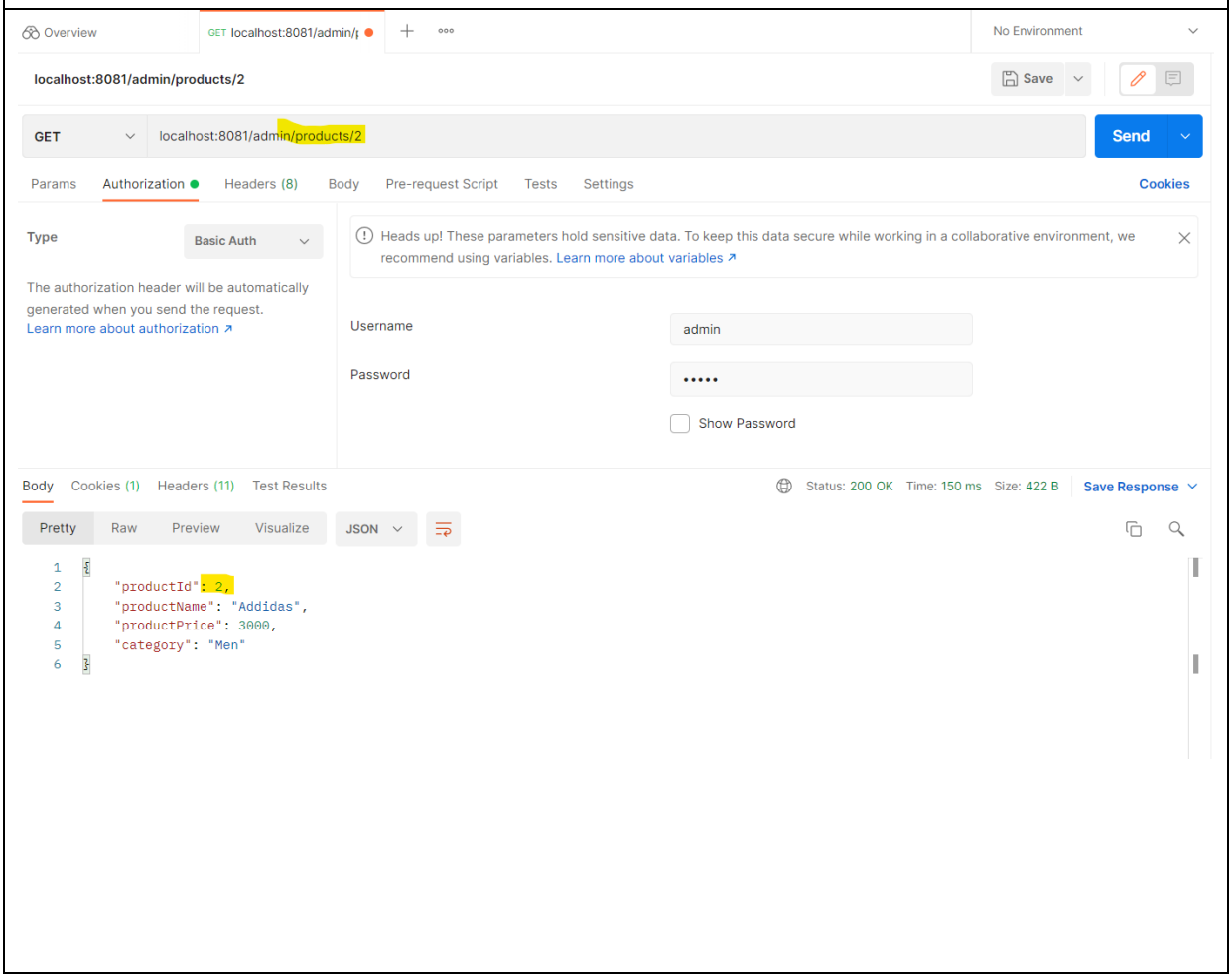
Get Method



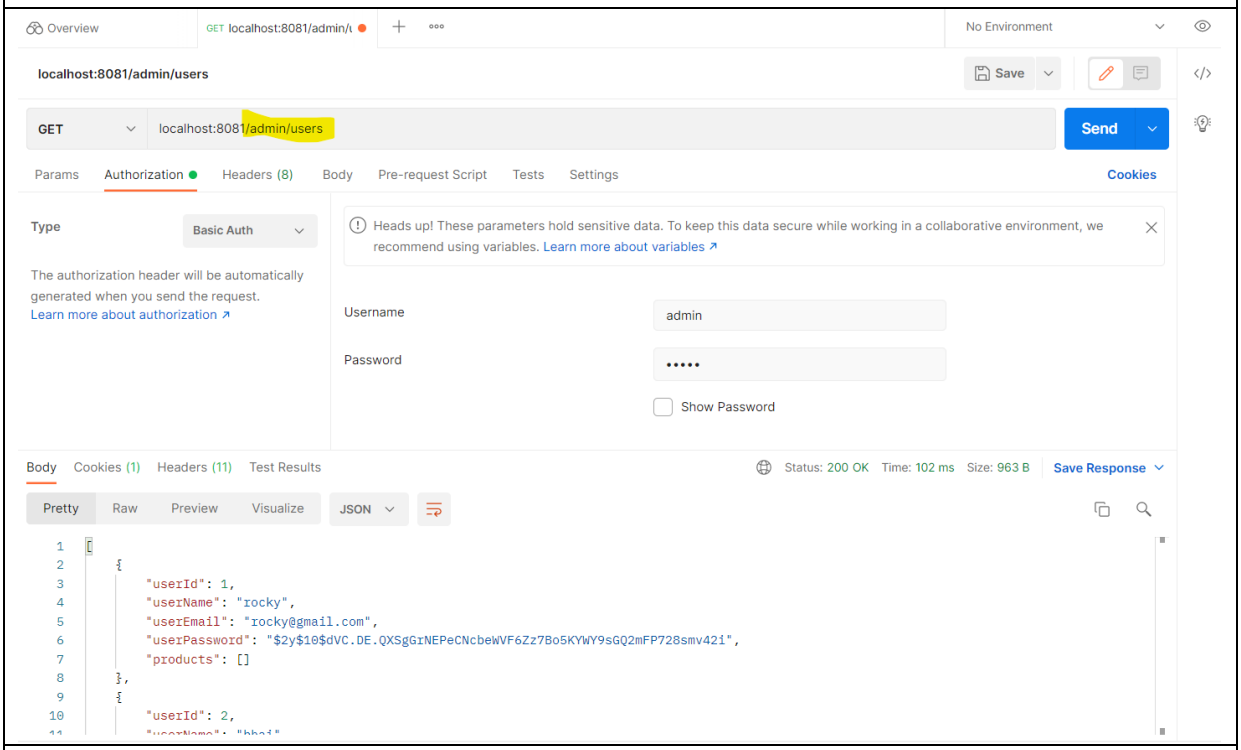
Admin Page



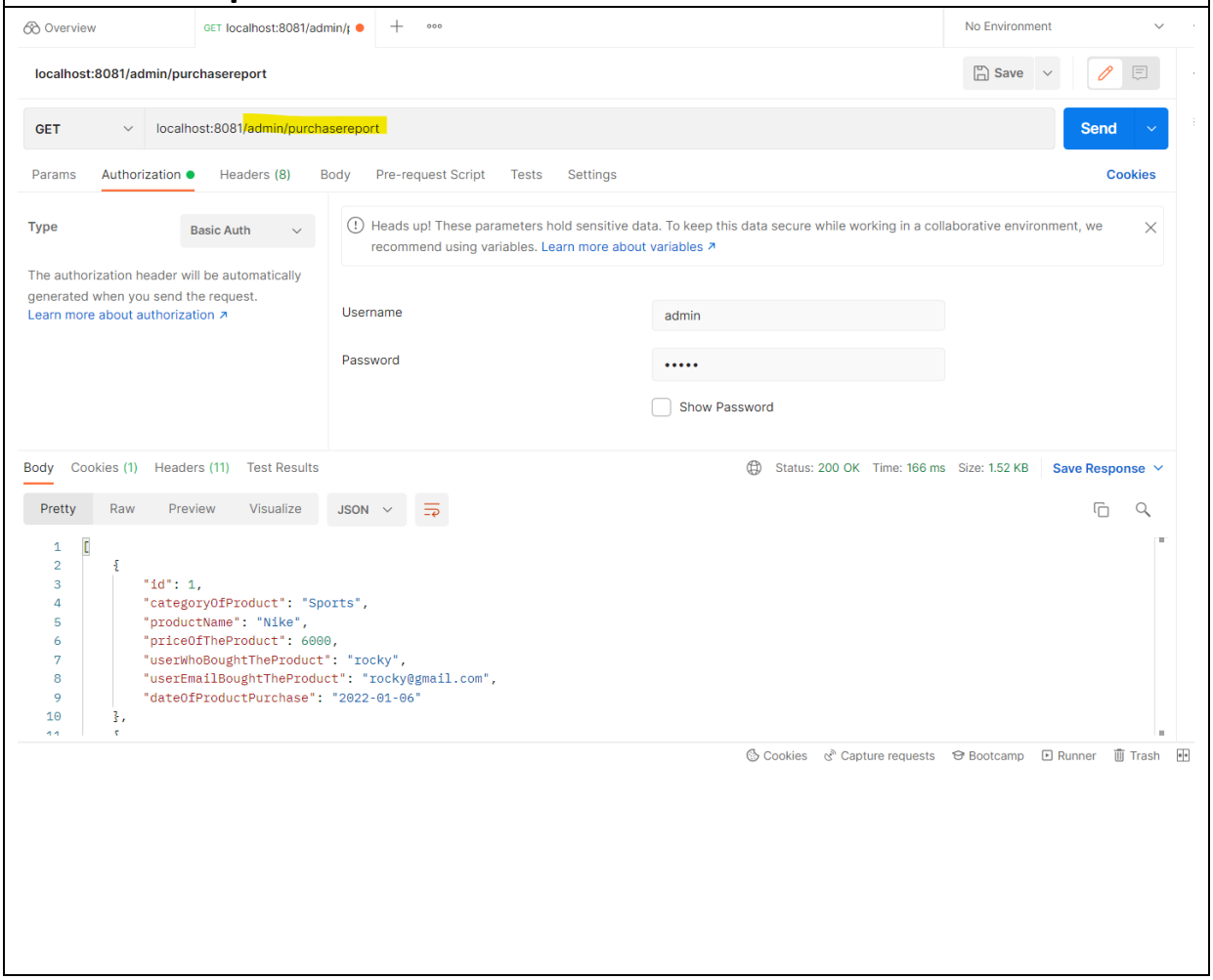
Products



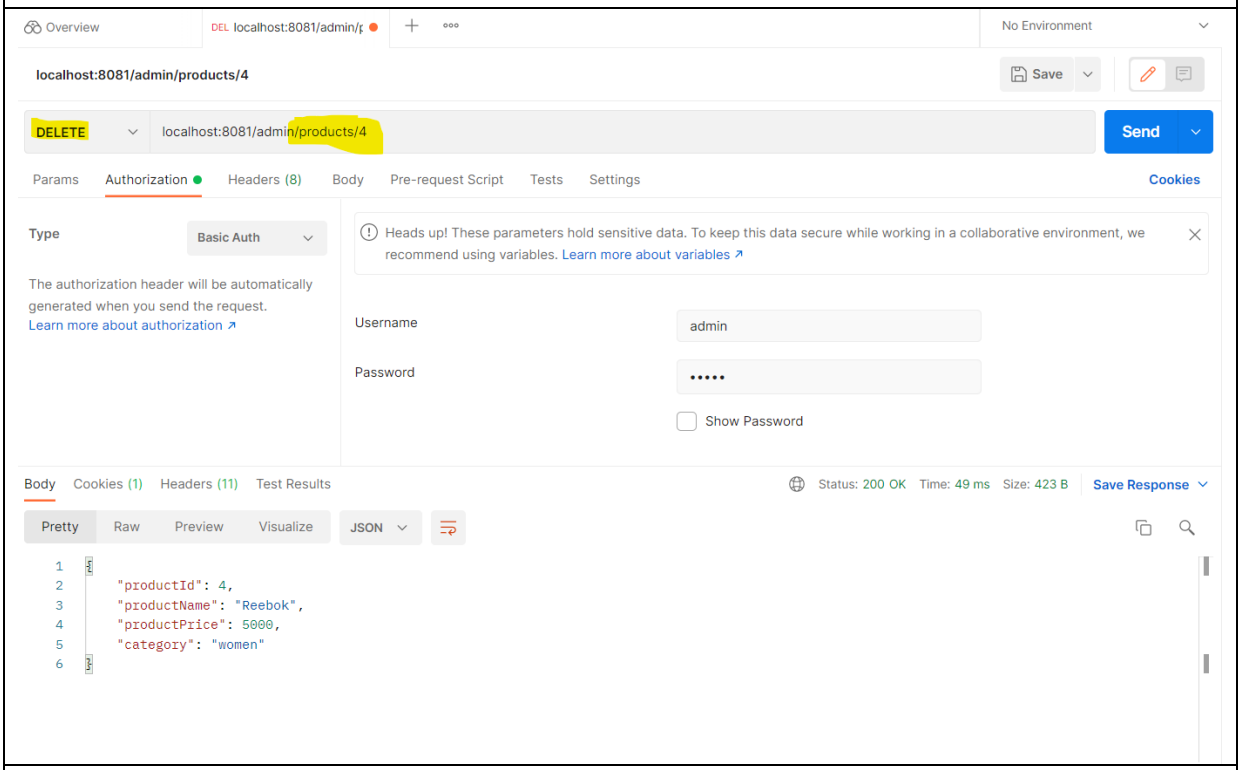
User



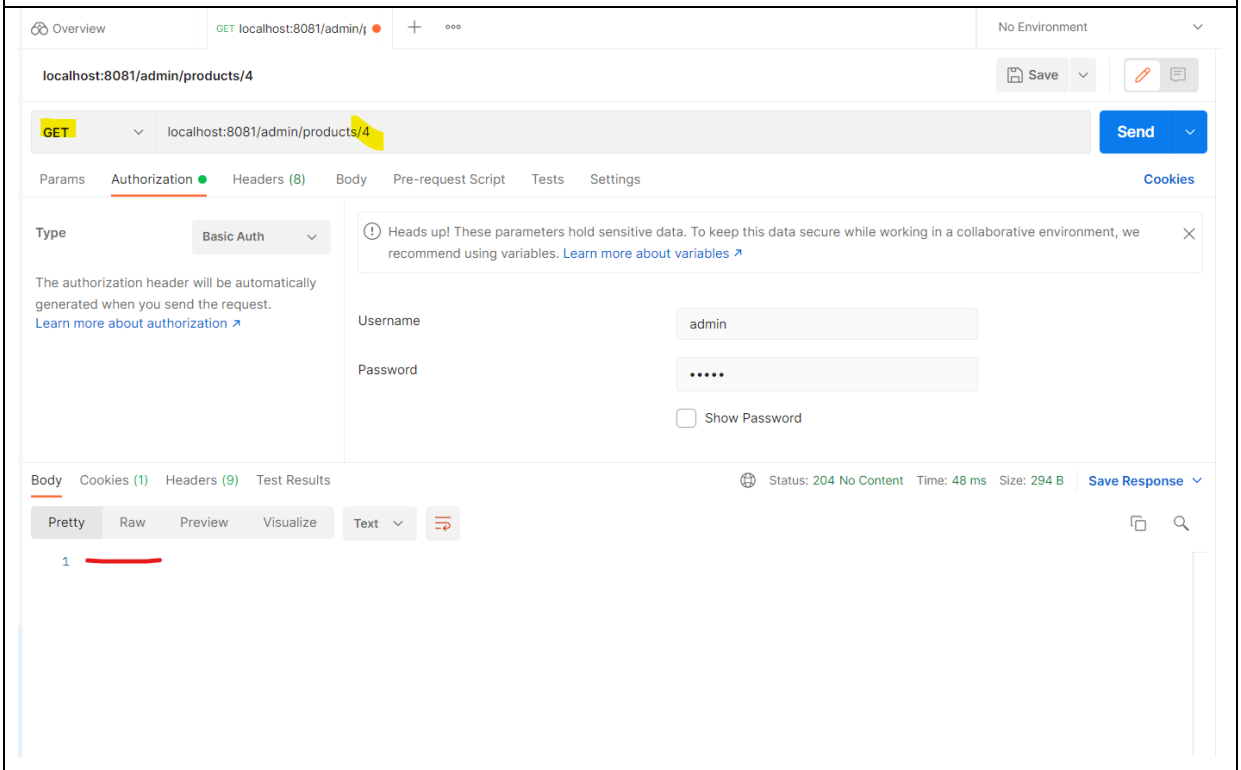
Purchase Report



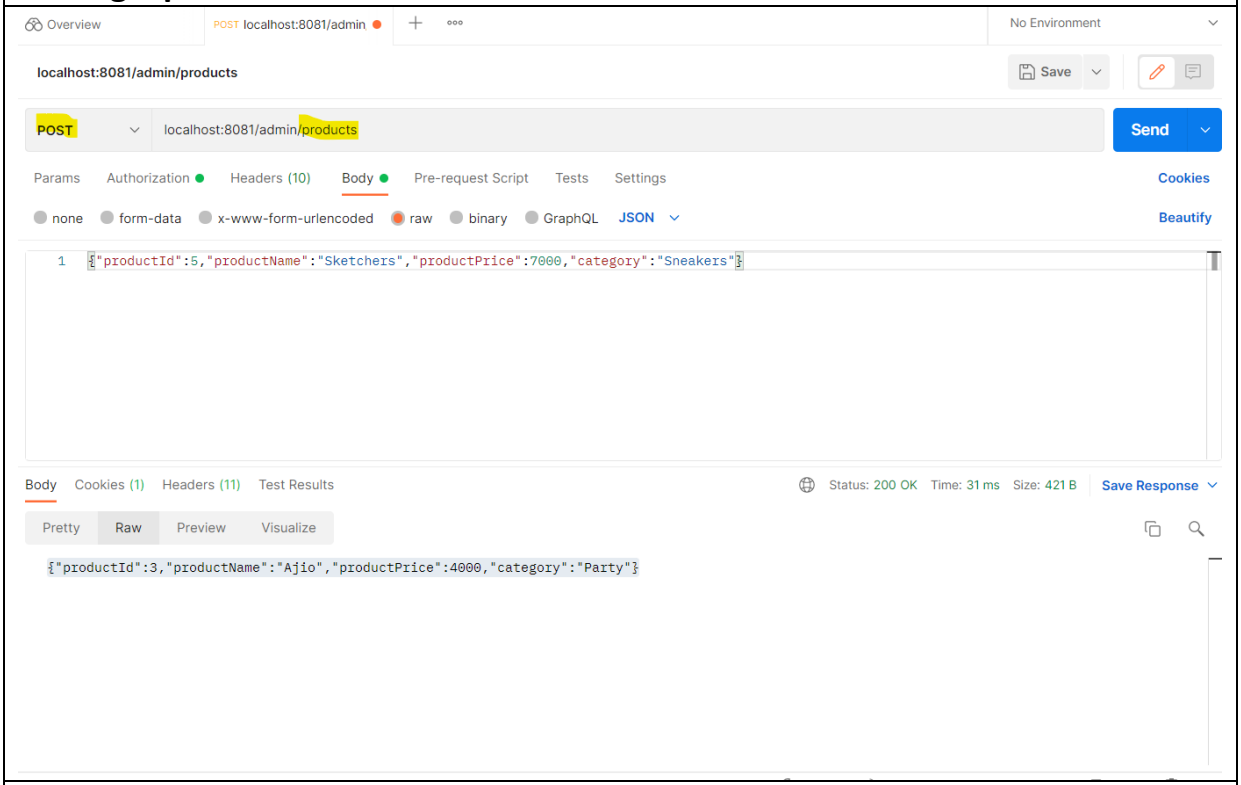
Delete



After Deletion



Adding a product



After Insertion