



Univerzitet Singidunum

Tehnički fakultet

Predmet: Internet Softverske Arhitekture

Tema: Spring Boot aplikacija sa grafičkim korisničkim interfejsom
(*Online prodavnica*)

Student:
Karailić Nikola
Broj indeksa: 2020204438

Aplikacija je zamišljena kao admin panel za online prodavnicu sa mogućnošću izlistavanja unosa iz baze podataka i CRUD operacijama.

Kao demonstracija, postoje i dve stranice namenjene krajnjem korisniku online prodavnice, gde se može videti spisak proizvoda ili pogledati sve informacije o proizvodu kao i recenzije drugih korisnika za taj proizvod. Druge funkcionalnosti online prodavnice nisu uključene (npr. Naručivanje proizvoda)

Mikroservisi: User, Product, Order *(nisu razdvojeni)*

MySQL Tabele: users, products, reviews, categories, orders, orders_products

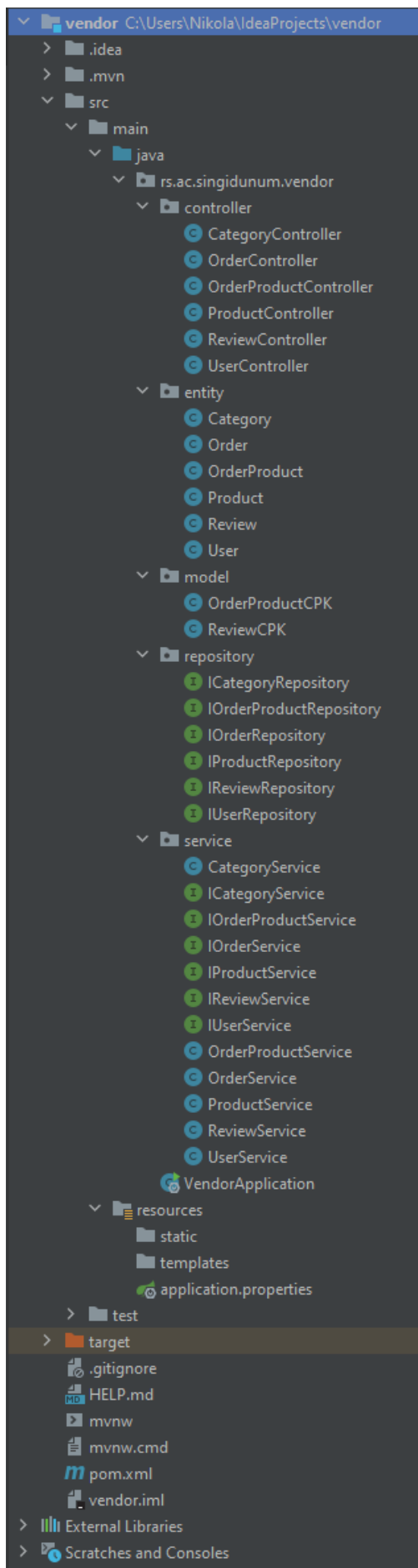
Backend: Spring Boot, Maven

Frontend: Angular

Slede screenshotovi grafičkog korisničkog interfejsa sa opisom funkcionalnosti.

Za detalje o kodu pogledati priloženu .zip arhivu.

Backend struktura



```

@Entity
@Table(name = "users")
public class User {
    @Id
    @Column(name = "id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(name = "firstname")
    private String firstname;
    @Column(name = "lastname")
    private String lastname;
    @Column(name = "password")
    private String password;
    @Column(name = "email")
    private String email;
    @Column(name = "phone")
    private String phone;
    @Column(name = "city")
    private String city;
    @Column(name = "postcode")
    private String postcode;
    @Column(name = "address1")
    private String address1;

    public User(){}

    public User(int id, String firstname, String lastname, String password, String email, String phone, String city, String postcode, String address1) {
        this.id = id;
        this.firstname = firstname;
        this.lastname = lastname;
        this.password = password;
        this.email = email;
        this.phone = phone;
        this.city = city;
        this.postcode = postcode;
        this.address1 = address1;
    }
}

```

User Entity

```

@Entity
@Table(name = "products")
public class Product {
    @Id
    @Column(name = "product_id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int product_id;
    @Column(name = "title")
    private String title;
    @Column(name = "price")
    private int price;
    @Column(name = "description")
    private String description;
    @ManyToOne(fetch = FetchType.EAGER) // Immediate loading
    @JoinColumn(name = "category")
    private Category category;
    @Column(name = "stock")
    private int stock;

    public Product() { }

    public Product(int product_id, String title, Category category, String description, int stock, int price) {
        this.product_id = product_id;
        this.title = title;
        this.price = price;
        this.description = description;
        this.category = category;
        this.stock = stock;
    }
}

```

Product Entity

```

@Entity
@Table(name = "categories")
public class Category {
    @Id
    @Column(name = "id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(name = "title")
    private String title;

    public Category() { }

    public Category(int id, String title) {
        this.id = id;
        this.title = title;
    }
}

```

Category Entity

```

@Entity
@Table(name = "orders")
public class Order {

    @Id
    @Column(name = "id")
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(name = "userid")
    private int user_id;
    @Column(name = "status")
    private String status;
    @Column(name = "date")
    private String date;

    public Order() { }

    public Order(int id, int user_id, String status, String date) {
        this.id = id;
        this.user_id = user_id;
        this.status = status;
        this.date = date;
    }
}

```

Order Entity

```

@Entity
@Table(name = "orders_products")
@IdClass(OrderProductCPK.class)
public class OrderProduct {

    @Id
    private int order_id;
    @Id
    private int product_id;
    @Column(name = "quantity")
    private int quantity;

    public OrderProduct() { }

    public OrderProduct(int order_id, int product_id, int quantity) {
        this.order_id = order_id;
        this.product_id = product_id;
        this.quantity = quantity;
    }
}

```

OrderProduct Entity

```

@Entity
@Table(name = "reviews")
@IdClass(ReviewCPK.class)
public class Review {

    @Id
    private int product_id;
    @Id
    private int user_id;
    @Column(name = "text")
    private String text;
    @Column(name = "rating")
    private int rating;

    public Review() { }

    public Review(int product_id, int user_id, String text, int rating) {
        this.product_id = product_id;
        this.user_id = user_id;
        this.text = text;
        this.rating = rating;
    }
}

```

Review Entity

Shop

Category Price Range



Mountain Hike



Forest Hike



Bernt



Tony



Ruben 2.0



Johannes



Učitavanje proizvoda iz baze podataka i njihovo prikazivanje

HOME / SHOP / BACKPACKS / MOUNTAIN HIKE



Mountain Hike

€299.00 - Out of stock

High-performance mountain backpack. Functionality includes gear loops, cord detailing, compressions straps, large front pocket and smaller pocket in the lid. Expertly crafted from sustainable fabrics, with technical details and function at its core.

ADD TO CART

Reviews (3)

Write a review

Adrienne Foster



If you love the outdoors, then you'll love our ultralight backpack. It's expertly crafted from sustainable fabrics and has technical details and function at its core. Explore the outdoors with Mountain Hike!

Simon Cleveland



Mountain Hike is a high-performance backpack for the adventuresome traveler. It offers unparalleled durability and functionality with a minimalistic and sustainable design. It's the perfect backpack for all your outdoor adventures.

Miriam Byers























For the backcountry explorer who wants to be free to explore the world and live a life full of adventure, the mountain hike backpack is built for alpinists, climbers, and adventurers alike. The perfect balance of weight, durability, and performance have made this one of our most popular backpacks.

Učitavanje i prikaz svih detalja o proizvodu

Učitavanje i prikaz recenzija proizvoda

Users

Users ListAdd New User

First Name	Last Name	E-mail	Password	Phone	City	Postcode	Address	Actions
Odessa	Rodriguez	rhoncus.Proin@fe		(069) 75867501	Marabá	1436	P.O. Box 514, 4766 Neque. Road	 
Jamie	James	penatibus.et.magi		(044) 86658525	Oyen	09234	Ap #502-297 Semper Avenue	 
Xaviera	Dominguez	quam.Pellentesqu		(012) 98282375	Hull	44551	Ap #944-5899 Ut Street	 
Victor	West	congue.turpis.In@		(047) 13544374	Ahmedabad	6006 QV	Ap #552-2618 Sed, Ave	 
Adrienne	Foster	dis.parturient.mor		(076) 56422680	Victoria	2047 AW	P.O. Box 790, 1235 Mus. Av.	 
Dawn	Heath	diam.eu@nonsolli		(009) 20822331	Manchester	3508	P.O. Box 624, 614 Et Avenue	 
Alice	Parks	neque.pellentesqu		(001) 73536768	Baardegem	46614	819-6743 Ipsum. Ave	 
Simon	Cleveland	mollis@ante.co.ul		(099) 24182032	Rives	8428 KC	Ap #825-7380 Sed Av.	 
Tatiana	Wooten	Lorem@tristiques		(010) 94257159	Andalo	9920	P.O. Box 937, 1412 Faucibus Rd.	 
Doris	Clements	pharetra@sapient		(060) 24422719	Tofield	3309 JE	3606 Mi Avenue	 

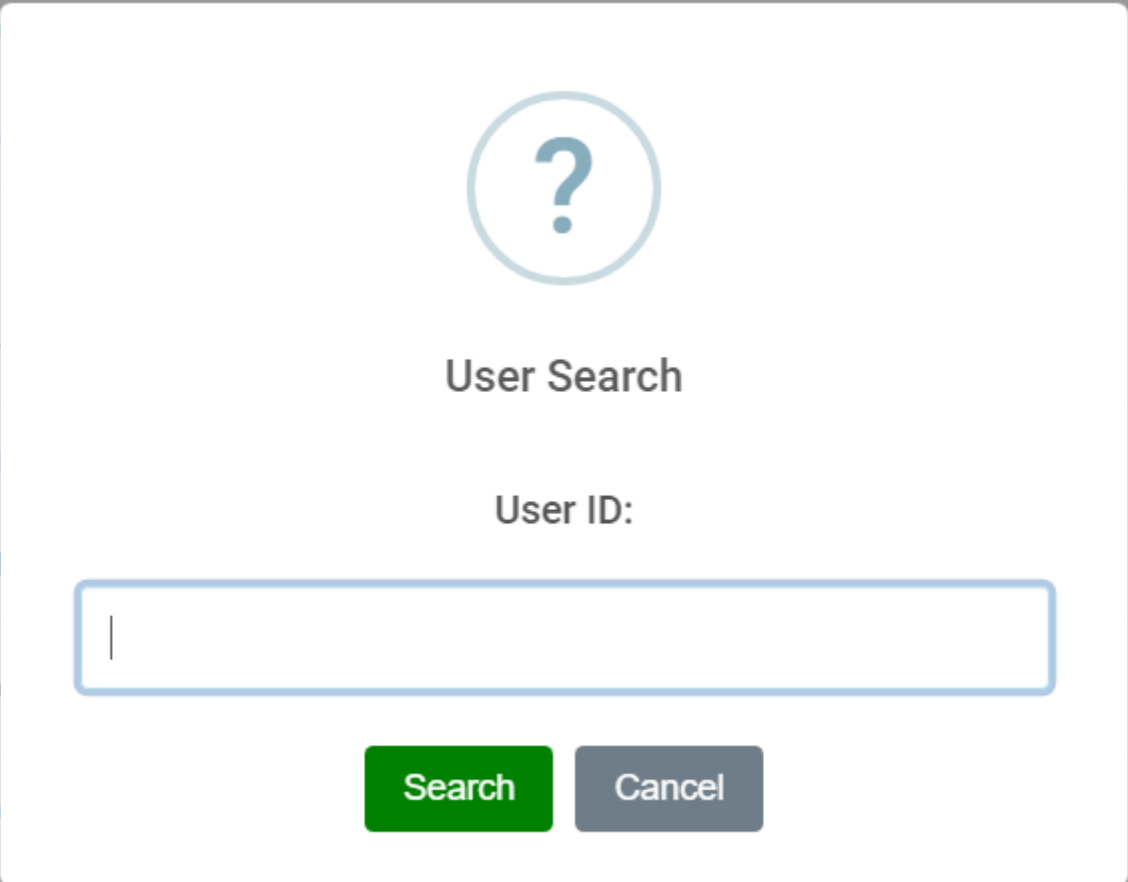
Items per page: 101 – 10 of 100<>

List UsersFind a User

Učitavanje i prikaz podataka iz tabele „users“, sa mogućnošću pretrage, brisanja, izmene svih podataka i dodavanja novih korisnika

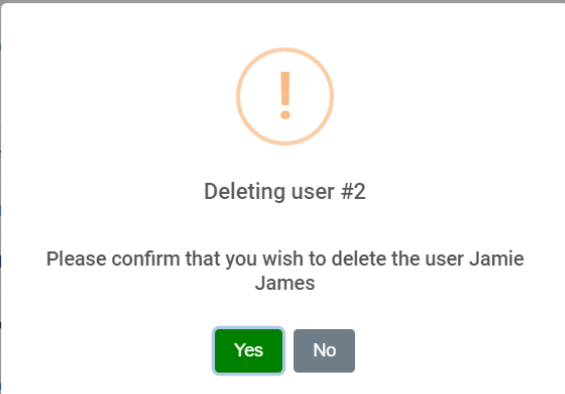
Odessa	Rodriguez	rhoncus.Proin@fe		(069) 75867501	Marabá	1436	4766 Neque. Road	 
Jamie	James	penatibus.et.magi*****		(044) 86658525	Oyen	09234	Ap #502-297 Sem	 
Xaviera	Dominguez	quam.Pellentesqu		(012) 98282375	Hull	44551	Ap #944-5899 Ut	 

Izmena podataka o korisniku

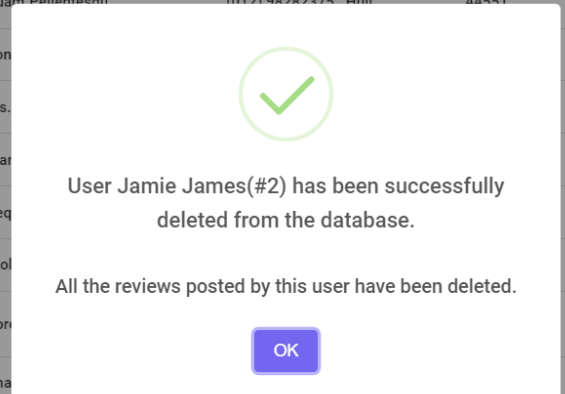


A modal dialog box titled "User Search". At the top center is a large blue question mark icon. Below it, the text "User Search" is displayed. Underneath is the label "User ID:" followed by a long, empty text input field with a blue border. At the bottom of the dialog are two buttons: a green "Search" button and a grey "Cancel" button.

Pretraga korisnika



A modal dialog box with a white background and a grey border. At the top center is an orange exclamation mark icon. Below it, the text "Deleting user #2" is displayed. Underneath is the text "Please confirm that you wish to delete the user Jamie James". At the bottom are two buttons: a green "Yes" button and a grey "No" button.



A modal dialog box with a white background and a grey border. At the top center is a green checkmark icon. Below it, the text "User Jamie James(#2) has been successfully deleted from the database." is displayed. Underneath is the text "All the reviews posted by this user have been deleted." At the bottom is a single purple "OK" button.

Brisanje korisnika

Users

Users List

Add New User

Login Info

E-mail address *



Password *



Repeat password *



Delivery Address

First Name *

Last Name *

Phone Number *



City *



Postcode *



Address *

































Create User

Dodavanje novog korisnika

Products

Products ListCreate New ProductCategory Management

Product Title	Category	Stock	Price	Actions
Mountain Hike	Backpacks	Out Of Stock	€299.00	  
Forest Hike	Backpacks	1	€199.00	  
Bernt	Backpacks	Out Of Stock	€149.00	  
Tony	Backpacks	1	€99.00	  
Ruben 2.0	Backpacks	1	€179.00	  
Johannes	Backpacks	1	€159.00	  
Erland Lightweight	Backpacks	1	€99.00	  
Baetis	Backpacks	1	€249.00	  
Atle	Backpacks	1	€159.00	  
Zeke	Backpacks	1	€199.00	  

Items per page: 101 – 10 of 34<>

List ProductsFind a Product





















Učitavanje i prikaz podataka iz tabele „products“, sa mogućnošću pretrage, brisanja, izmene svih podataka i dodavanja novih proizvoda

Products

Products List

Create New Product

Category Management

Title	Actions	
Backpacks		
Weekend Bags		
Briefcases		
Wallets		
Items		
TestCategory		
TestCategory		
TestCategory		
My Category		
Some category		

[Create New Category](#)

Učitavanje i prikaz podataka iz tabele „categories“, sa mogućnošću brisanja, izmene i dodavanja novih kategorija

Reviews

User	Product Name	Rating	Text
Adrienne Foster	Mountain Hike	5	If you love the outdoors, then you'll love our ultralight backpack. It's expertly crafted from sustainable fabrics and has technical details and function at its core. Explore the outdoors with Mountain Hike!
Simon Cleveland	Mountain Hike	5	Mountain Hike is a high-performance backpack for the adventuresome traveler. It offers unparalleled durability and functionality with a minimalistic and sustainable design. It's the perfect backpack for all your outdoor adventures.
Miriam Byers	Mountain Hike	5	For the backcountry explorer who wants to be free to explore the world and live a life full of adventure, the mountain hike backpack is built for alpinists, climbers, and adventurers alike. The perfect balance of weight, durability, and performance have made this one of our most popular backpacks.

List Reviews

Filter by User

Filter by Product

Učitavanje i prikaz podataka iz tabele „reviews“, povezivanje sa korisnicima i proizvodima.

Mogućnost filtriranja recenzija po kriterijumu User ID ili Product ID

Orders

Orders List

Create New Order






Order No.	Buyer	Date	Status	
#1	Adrienne Foster	10/08/2021 14:44	Cancelled	
#2	Miriam Byers	11/08/2021, 08:55	Finished	
#3	Benedict Huffman	17/08/2021, 19:45	Finished	
#4	Aspen Wiley	19/08/2021, 18:31	Finished	
#5	Rose Moody	22/08/2021, 18:50	In Transit	
#6	Myles Morrison	23/08/2021, 16:16	In Transit	
#7	Velma Dickerson	25/08/2021, 10:01	Cancelled	
#8	Velma Dickerson	25/08/2021, 10:05	Cancelled	
#9	Velma Dickerson	25/08/2021, 10:20	In Transit	
#10	Velma Dickerson	25/08/2021, 18:19	In Transit	

Items per page: 10

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List Orders

Order No.	Buyer	Date	Status	
#1	Adrienne Foster	10/08/2021 14:44	Cancelled	
<div><div>Delivery Info</div><div>Adrienne Foster Victoria 2047 AW P.O. Box 790, 1235 Mus. Av. (076) 56422680</div></div> <div><div></div><div>Mountain Hike</div><div>Qty: 5</div><div>Cost: €1495.00</div><div></div></div> <div><div></div><div>Astrid</div><div>Qty: 1</div><div>Cost: €199.00</div><div></div></div> <div><div>Add Product</div><div>Delete Order</div></div>				

Učitavanje i prikaz podataka iz tabele „orders“ i „orders_products“ (tabela koja sadrži proizvode koji su naručeni)

Klikom na bilo koju stavku, otvara se dodatni prozor koji prikazuje podatke iz tabele „orders_products“ i povlači podatke iz tabele „products“ kako bi se prikazale informacije i svakom proizvodu.

Mogućnost kreiranja nove porudžbine, dodavanja proizvoda u svaku porudžbinu ili uklanjanje proizvoda iz porudžbine

Mogućnost brisanja porudžbine