

Online store with administrator panel

A brief description of the system

As part of the project, an application should be developed that allows for adding products to the store through the administrator panel. The system is to enable user registration and login as well as placing an order by the user.

Main functions of the system

Login panel.

Admin:

Adding categories for products.

Category tree overview.

Adding products.

Product list + edition.

User:

Registration.

Product list.

Product table with pagination.

Displaying the weather for the user's city.

General quidelines

Development of a website using Spring Boot, JPA (Hibernate) and ThymeLeaf as the view layer.

Introducing the application division into DAO, services, controllers and placing appropriate logics in each of them

Securing access to the application and functionalities using Spring Security.

Basic entities (proposal)

Category

name

parent and "children" categories (tree placement)

User account

login (e-mail) password (hash)

city

address (country, city, street, zip code)











logotype/thumbnail/avatar role (ADMIN/USER—entity) preferred channel to receive messages (mail/e-mail)

Product title

description thumbnail (url) category (entity) price product type (enum) author (entity)

Order line

Product (entity) Quantity of products Product price

Order

User name Total cost **Delivery address** User's address Date of order Order lines (entities) Customer (entity) Status (enum)

Author

first name last name

Role

Role name

Cart (not entity) Order lines



Functionalities

ADMIN:

Adding a category

- category name
- parent id

Category tree overview

- category search
- option to drag categories (change the position)

Adding a product

- name
- description
- image url
- inventory
- price
- product type (dropdown)
- category (dropdown)
- author (dropdown)

Product list

- list of all added products with their details listed
- button to edit the given product
- product search

USER:

User registration

- entering data into form fields + validation of these fields

Logging in

- possibility for the user to log in (after prior registration)
- possibility for the user to log out

Weather widget

- displaying weather based on the city of the user currently logged in



Product list

- possibility to display products as a list or as a grid
- product search
- adding product to cart

Table with products (operating using Ajax on the GET query and inserting parameters into the url)

- displaying products in a table with pagination (selection of the number of products on the page)
- sorting products in the table
- Ajax-based product search
- adding products to cart

Cart

- displaying products added to the cart
- option to order products from the cart -> redirects to a static thank you page and reduces the product stock

Additional tasks and extensions

- the ability to edit the user account (data)
- overview of user orders (from user and admin levels)
- adding author in the admin panel

Additional requirements

- An aesthetic and functional way of presenting data should be ensured.
- Data collected from users should be pre-validated.