

Project 3: E-commerce Website for Sporty Shoes

Documentation

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Sprint planning

There were 4 sprints planned. Tasks achieved in these sprints are listed below:

Sprint 1

- Project instruction understanding
- Application planning
- Basic web app structure
- DB structure draft and POJOs creation

Sprint 2

- DB tables and POJOs connection
- Repository and service classes implementation
- Admin login and change password feature

Sprint 3

- Front-end design
- Listing, Add, Edit and Delete functions
- Searching and filtering features

Sprint 4

- Exception handling
- Program testing
- USPs definition and enhancement proposals

User-view: Administrative portal description

There are 2 versions of the Home page. In the first picture, the Home page without logging in is shown:

SS Home Login

Welcome on Sporty Shoes administrative portal

Please log in to make any changes

After logging in (username “admin”, password “password123”),

SS Home Login

Log In

more options are displayed in the top panel. Also, if wanted, the admin can change the password on the Home page.

SS Home View Products View Users Purchase Report Logout

Hello admin!

In case you want to change your password, fill this form:

Old Password*:

New Password*:

New Password Again*:

After clicking on the “Change password” button, an informative message is displayed - either that the password has been changed successfully or that the admin has made a mistake while trying to change it (in that case the admin is informed about what went wrong as shown in the picture below).

Hello admin!

In case you want to change your password, fill this form:

New passwords are not the same.

Old Password*:

New Password*:

New Password Again*:

Change password

On the View Products page, all existing products are listed:

Products

[ADD A NEW PRODUCT](#)

Product ID	Product Name	Price	Sport	Sex	Edit	Delete
1	Latin Basic	299	dancing	female	Edit	Delete
2	Happy Bare Foot	199			Edit	Delete
3	Nature Feeling	415	hiking	male	Edit	Delete
4	Fast & Furious	259	running		Edit	Delete

By clicking on the “ADD A NEW PRODUCT” link, an empty form for adding a product is displayed. It is mandatory to set the product’s name and price - otherwise the product is not inserted to the database. Remaining two boxes, sport and sex category, can be filled in later.

[SS](#) [Home](#) [View Products](#) [View Users](#) [Purchase Report](#) [Logout](#)

Add a new product

Product Name*:

Price*:

Sport Category:

Sex Category:

female
male
unisex

Every product can be also edited or deleted by clicking on the corresponding link. In the next picture, a form for editing an existing product is shown. The admin can edit the price and both categories of the product, but the product's ID and name are read-only.

[SS](#) [Home](#) [View Products](#) [View Users](#) [Purchase Report](#) [Logout](#)

Edit an existing product

Product ID*:

Product Name*:

Price*:

Sport Category:

Sex Category:

In this application, deleting a product means that the product's hidden status is set to archived. It causes that the product is not displayed in the product list anymore but its details still can be found in the database. This approach can serve for additional features as for example listing user's purchase history.

On the next page, the admin can view all the signed-up users. Also searching by the user's email and last name is possible. In the following pictures, firstly the complete list of users is displayed, secondly searching by last name "Morgan" is shown:

[SS](#) [Home](#) [View Products](#) [View Users](#) [Purchase Report](#) [Logout](#)

Users

Search by Email

Search by Last Name

User's E-mail	First Name	Last Name	City	Purchases IDs
hall.pete@gmail.com	Peter	Hall	Manchester	3
hannah.m@yahoo.com	Hannah	Morgan	Oxford	
j.morgan@yahoo.com	Jane	Morgan	Oxford	
julia.davis@gmail.com	Julia	Davis	London	1
nick3@gmail.com	Nick	Harris	Glasgow	2

[SS](#) [Home](#) [View Products](#) [View Users](#) [Purchase Report](#) [Logout](#)

Users

Search by Email

Search by Last Name

User's E-mail	First Name	Last Name	City	Purchases IDs
hannah.m@yahoo.com	Hannah	Morgan	Oxford	
j.morgan@yahoo.com	Jane	Morgan	Oxford	

On the Purchase Report page, the admin can see either all purchases made or he/she can filter the purchases by the purchase date or status. First picture below shows the complete purchase report, the other one demonstrates filtering by the purchase date set on “Today” to show that no purchase has been made that day.

SS Home View Products View Users Purchase Report Logout					
Purchase Report					
Filter by Purchase Date: Today Last Week Last Month All					
Filter by Purchase Status: Paid Sent Delivered All					
Purchase ID	Purchase Date	Purchase Status	User ID	Products Purchased IDs	Total Price
1	2023-03-30	delivered	julia.davis@gmail.com	1	299
2	2023-04-24	sent	nick3@gmail.com	2 3	614
3	2023-04-27	paid	hall.pete@gmail.com	2 4	468

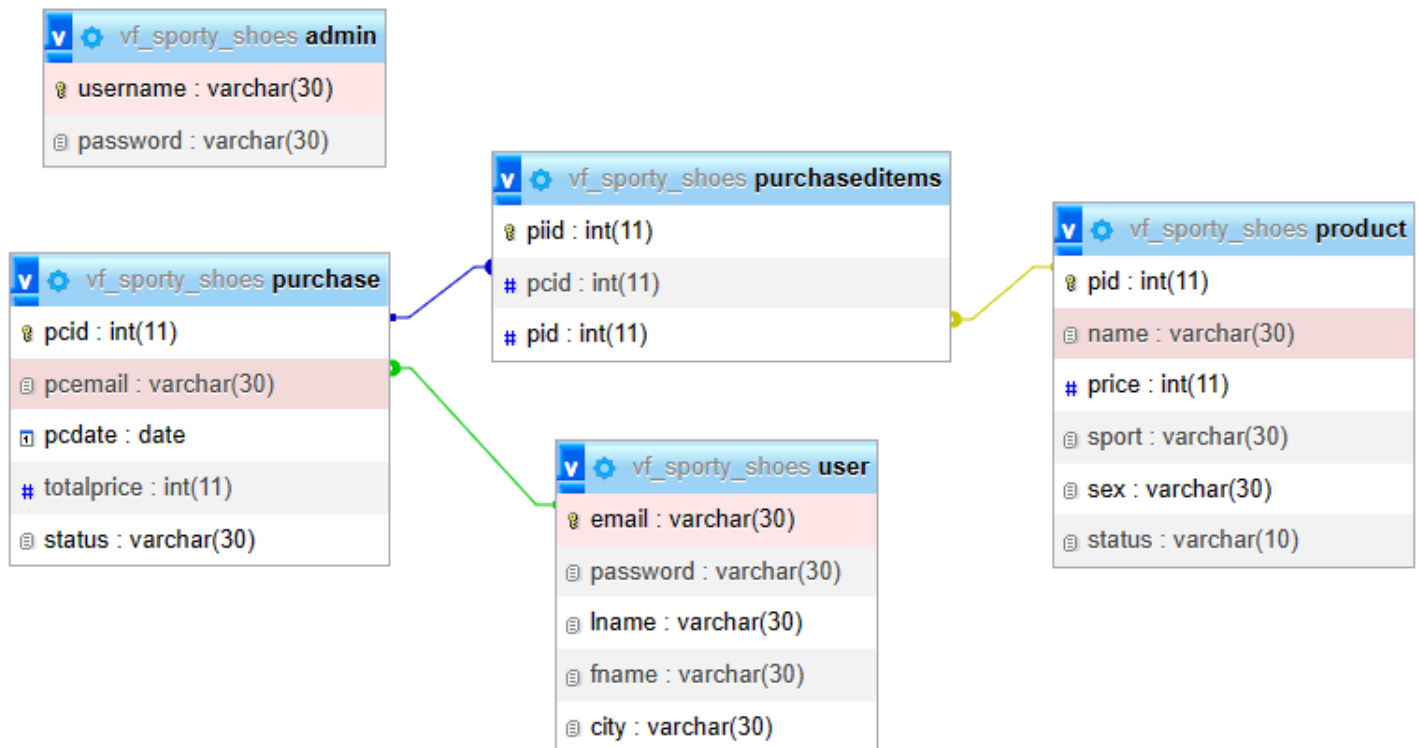
SS Home View Products View Users Purchase Report Logout					
Purchase Report					
Filter by Purchase Date: Today Last Week Last Month All					
Filter by Purchase Status: Paid Sent Delivered All					
Purchase ID	Purchase Date	Purchase Status	User ID	Products Purchased IDs	Total Price

The last option on the top serves for logging out. The admin is then redirected back to the Home page:

SS Home Login	
Welcome on Sporty Shoes administrative portal	
Please log in to make any changes	

Developer-view: Algorithms and flowcharts

In the MySQL admin app, a database containing following tables was created:



The connection to this database was created using the Spring Boot framework with Hibernate and POJOs files were mapped to tables using annotations.

Spring Boot framework was also very useful for creating clearer structure of this application, for example by unifying many related functions under one controller class.

For deploying the application, Apache Tomcat server was used.

All necessary dependencies were integrated in Maven's pom.xml file.

To make web page content more dynamic, JSP files instead of HTML files were used.

Core concepts, frameworks & programs used

- Object-oriented programming concepts (POJOs, implementing interfaces,..)
- DB connection via MySQL and Hibernate
- Dynamic web application using Spring Boot framework
- Dependencies integrated by Maven
- Deploying on Apache Tomcat server

GitHub repository

[mianto5/FSDp_Project3: Java Full-Stack Development Program: Project 3 solution \(github.com\)](#)

Conclusion and enhancing possibilities

Sporty Shoes administrative portal is a simple application for tracking and categorizing company's products, for viewing and searching signed-up customers and purchases made by them. The admin can easily add, edit and delete products or list products, users and purchases thanks to user-friendly graphic interface. All data is saved in a database, so they are not lost after the application ends.

This application is an early product. Many enhancing possibilities can be designed, for example it would be convenient to create an environment for customers to do the shopping comfortably and to see their purchase history. The GUI could be also designed in a more sophisticated and esthetic way in the future and more filters for better targeted browsing could be added.