TALLINN UNIVERSITY OF TECHNOLOGY

School of Information Technologies

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Fruits and vegetables ordering

Building Distributed Systems

Project Scope

Supervisor: Andres Käver

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Author’s declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

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Project description

The aim of this project is to create a web app for an online fruits & vegetables ordering. At the time when more and more people have started to use online services, it is also important for every prospective food company to offer its customers the option of online ordering. The idea is also to save the customers time so they can do all the necessary shopping through the internet without moving from one place to other.

The idea and motivation for this project was born from the authors personal 7-year long working experience in the market sector, who personally do not like waiting for long in the store .

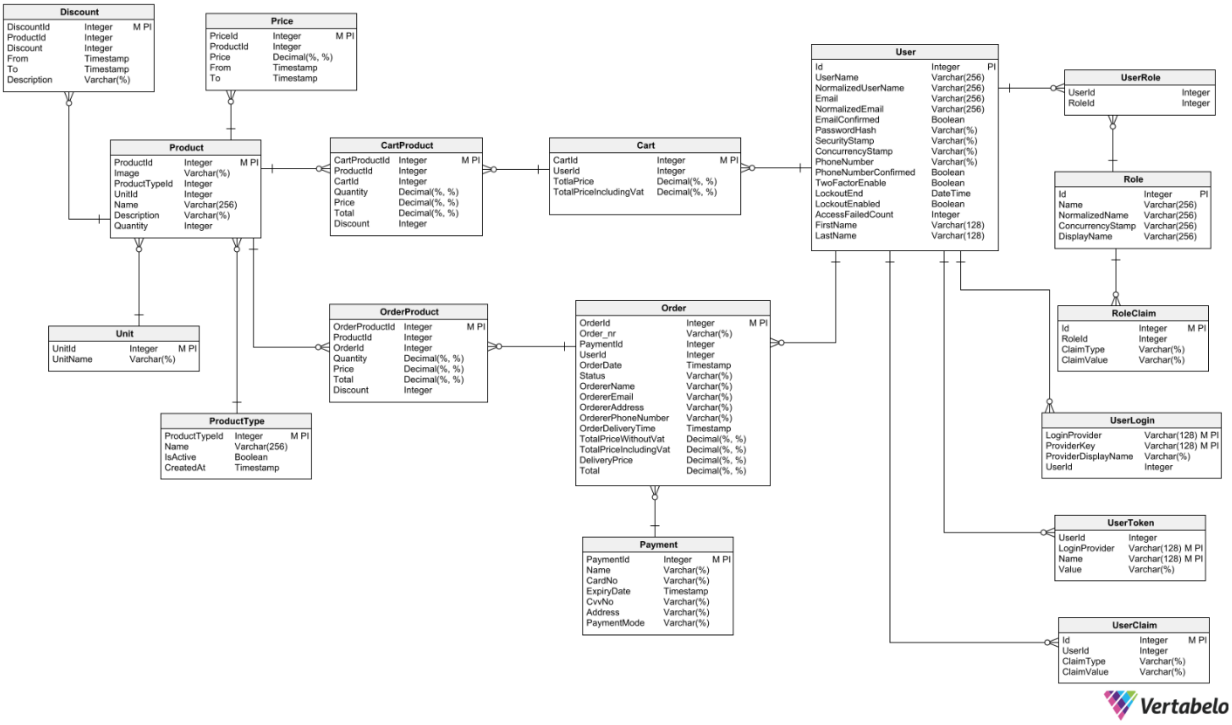
Online fruit ordering system that is proposed here, greatly simplifies the ordering process for both the customer and the company. System presents an interactive and up-to-date offers with all available options. Customer can choose one or more products to place an order which will land in the Cart. Customer can view and check all the order details in the cart before make a payment. At the end, customer gets order confirmation details. Once the order is placed it is entered in the database. This allows employees to quickly process all orders effectively with minimal delays and confusion.

The valid user can login to the system from the home page using their username and password. User should supply the correct username and password through the login form as per their subscription. Admin can get all the different options - control and manage different processes like view customers, add and list products, list payments, set prices, discounts, list stock and so on.

As mentioned, customer can add listed fruits and vegetables to cart and make an order. There are multiple payment methods for ordering – card, virtual wallet. In this it also shows the information and description of vegetables and fruits and keep information of orders done. Also provides various searching content, categories like fruits, vegetables.

The scope of this project is to make minimum viable product for ordering fruits and vegetables. This project will also take a lot of influence from already existing online fruit & vegetables applications.

Entity Relationship Diagram (ERD)



Screens sketches

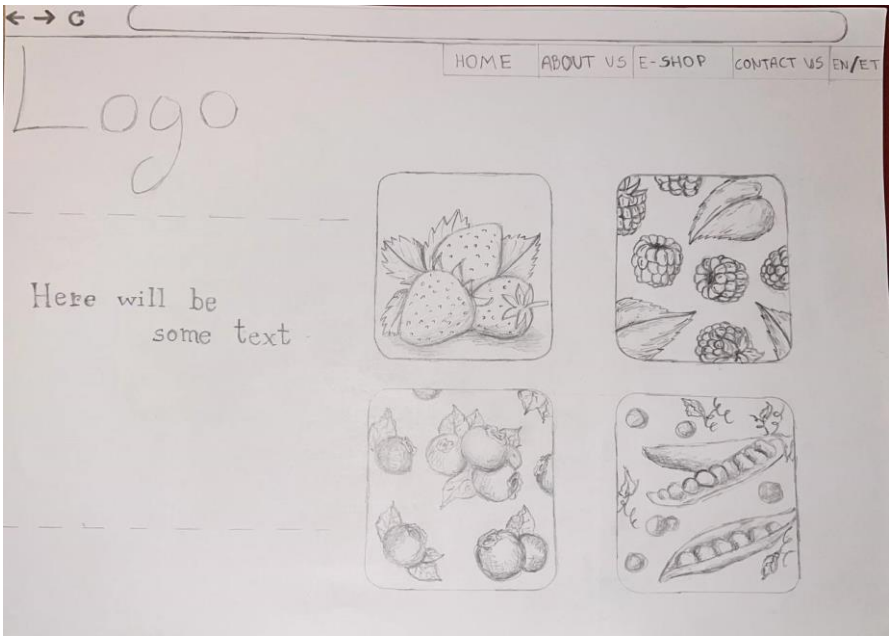


Figure 1. Client home page view mockup

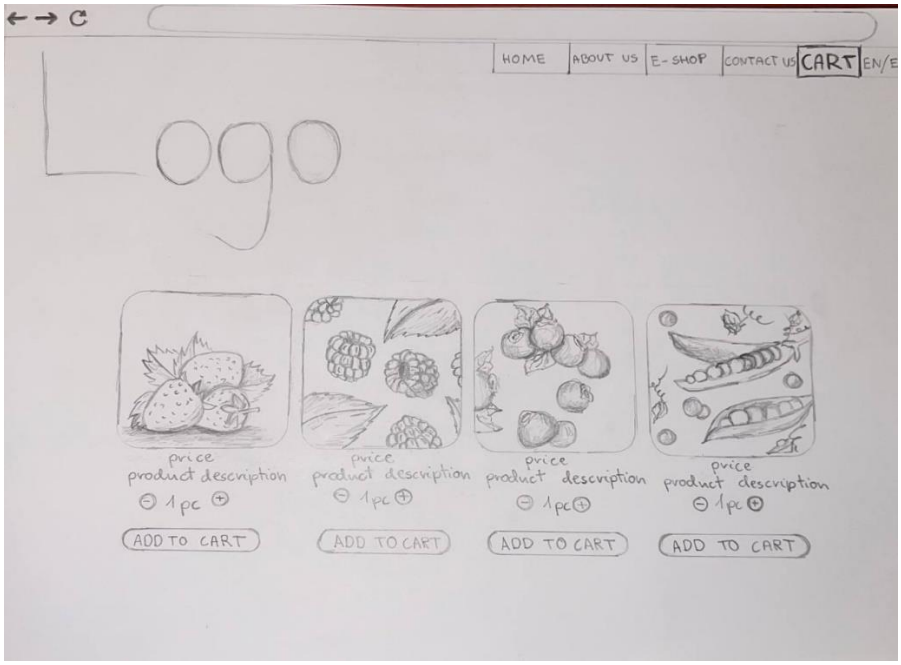


Figure 2. Client e-shop page view mockup

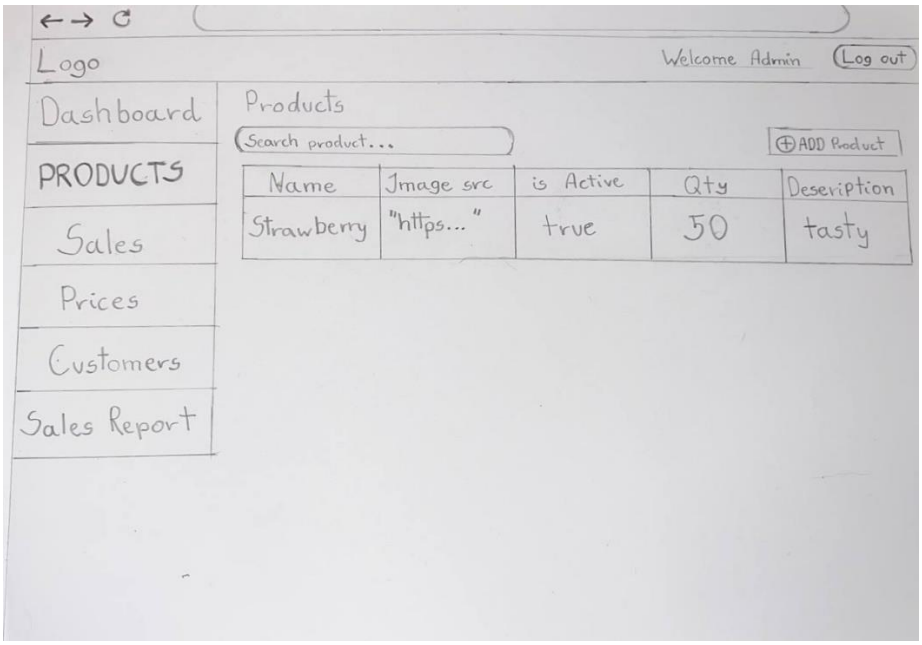


Figure 3. Admin products page view mockup

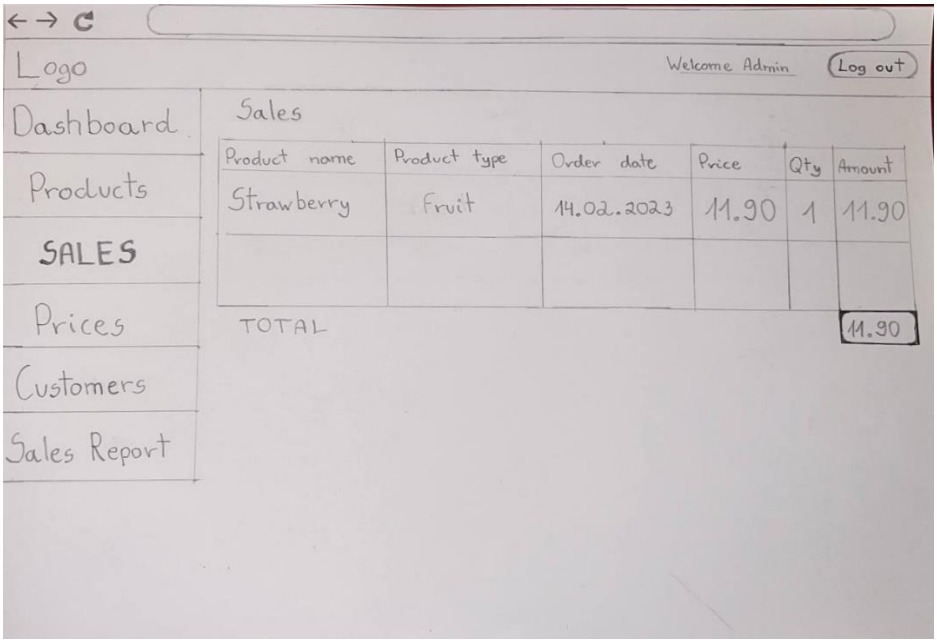


Figure 4. Admin sales page view mockup

Result

As result there was created FruitOrder shop using Vue framework for the frontend and C# for the backend. The application provides a role-based system where the admin has access to various management functionalities, such as adding products, setting product discounts and prices, viewing all orders, and tracking sales statistics like total sales amount etc. Users can register on the platform and browse the available products in the shop section. They can add desired items to their cart and have the flexibility to adjust the quantity or remove products. Once users are satisfied with their selections, they proceed to the order page, where they fill in necessary details like name, address, email, phone number, and delivery time. After completing the order information, they move to the payment page, where they enter their bank card details. Upon successful submission, users are redirected to a success page where they can view their currently made order details.

Backend and frontend are hosted and running in Azure. Host:
https://fruitorder.azurewebsites.net/

Project has also integration and unit (testing base service and ProductService as custom service) tests for identity and Product.

Program Interface documentation is created using Swagger utility, which is here:
https://distrib2223app.azurewebsites.net/swagger/index.html

Implemented User Interface Views

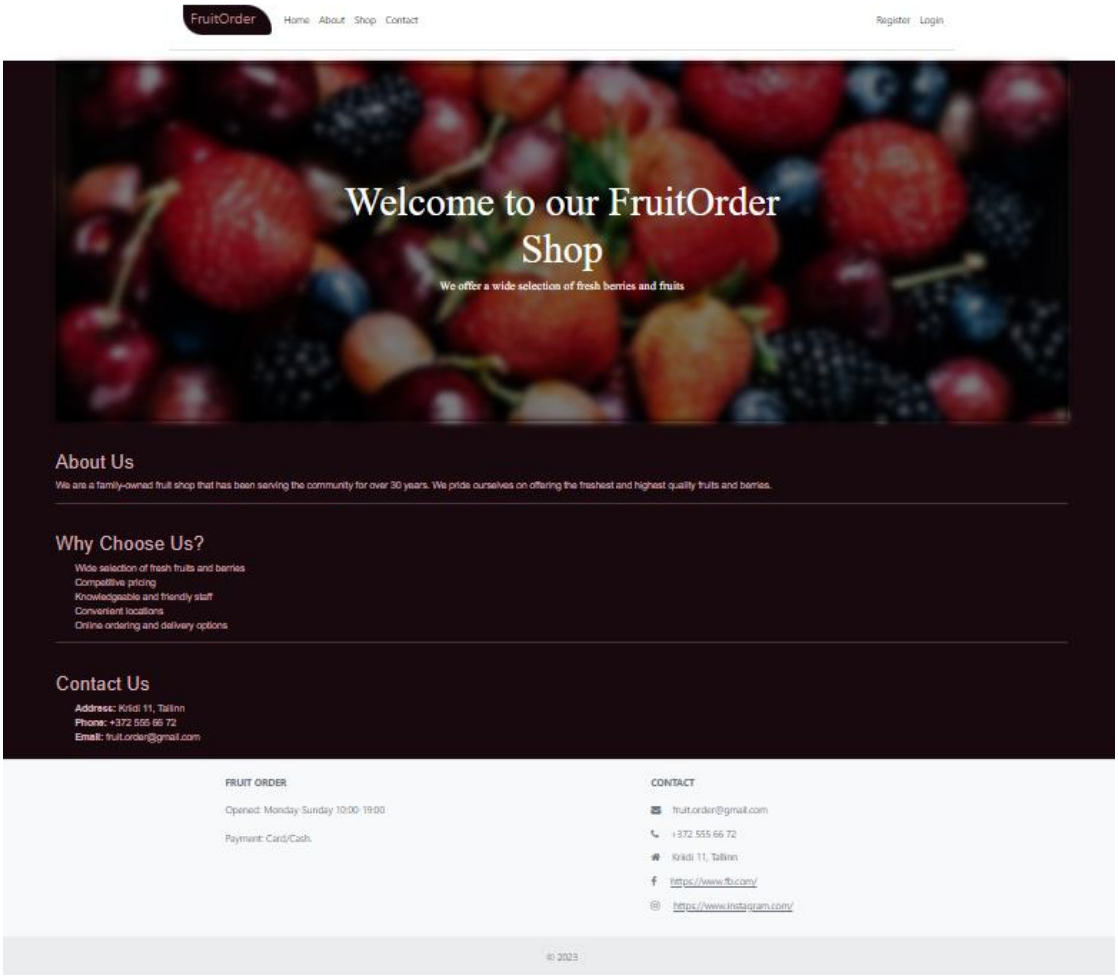


Figure 5. Unauthorized user home view

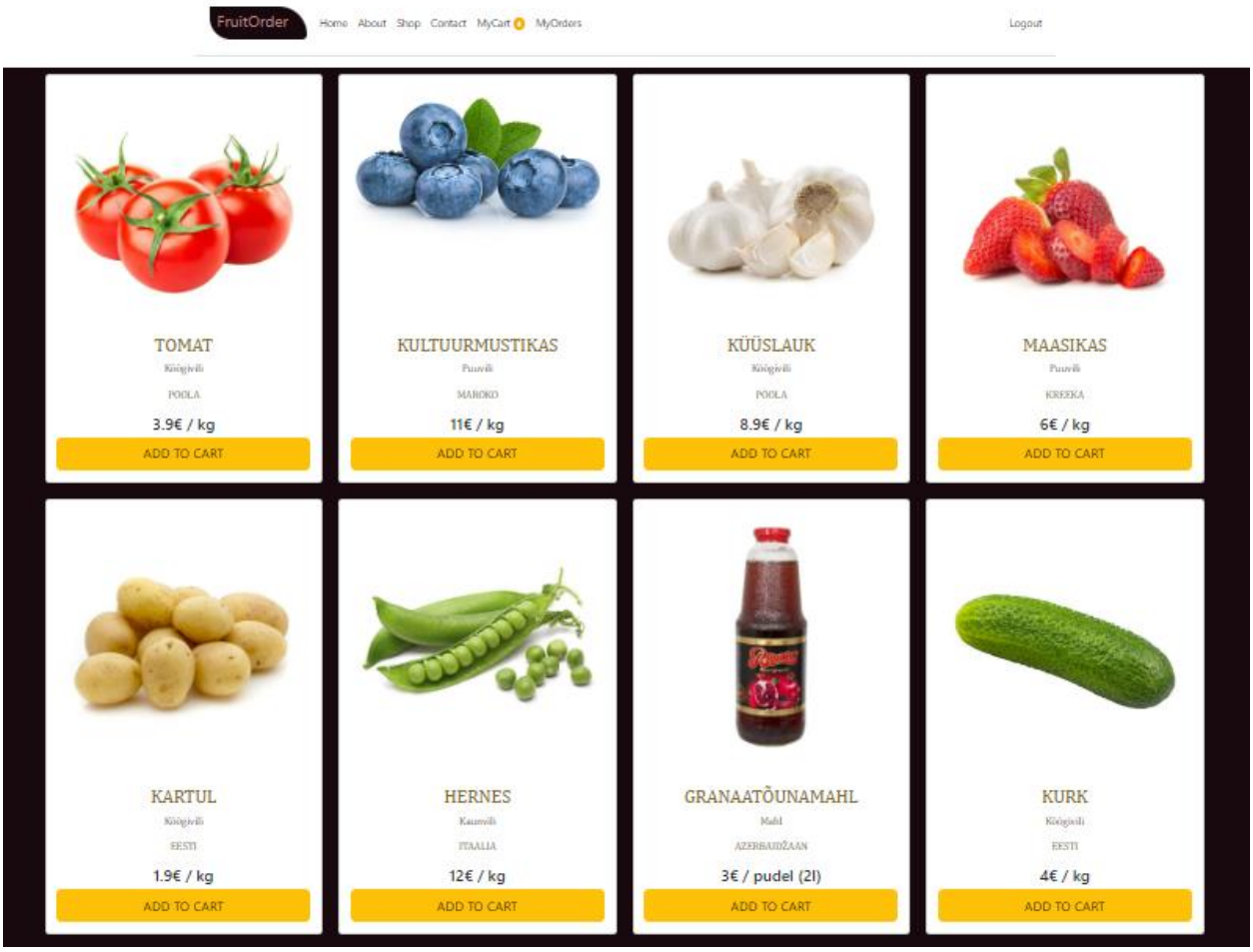


Figure 6. Authorized user's shop view

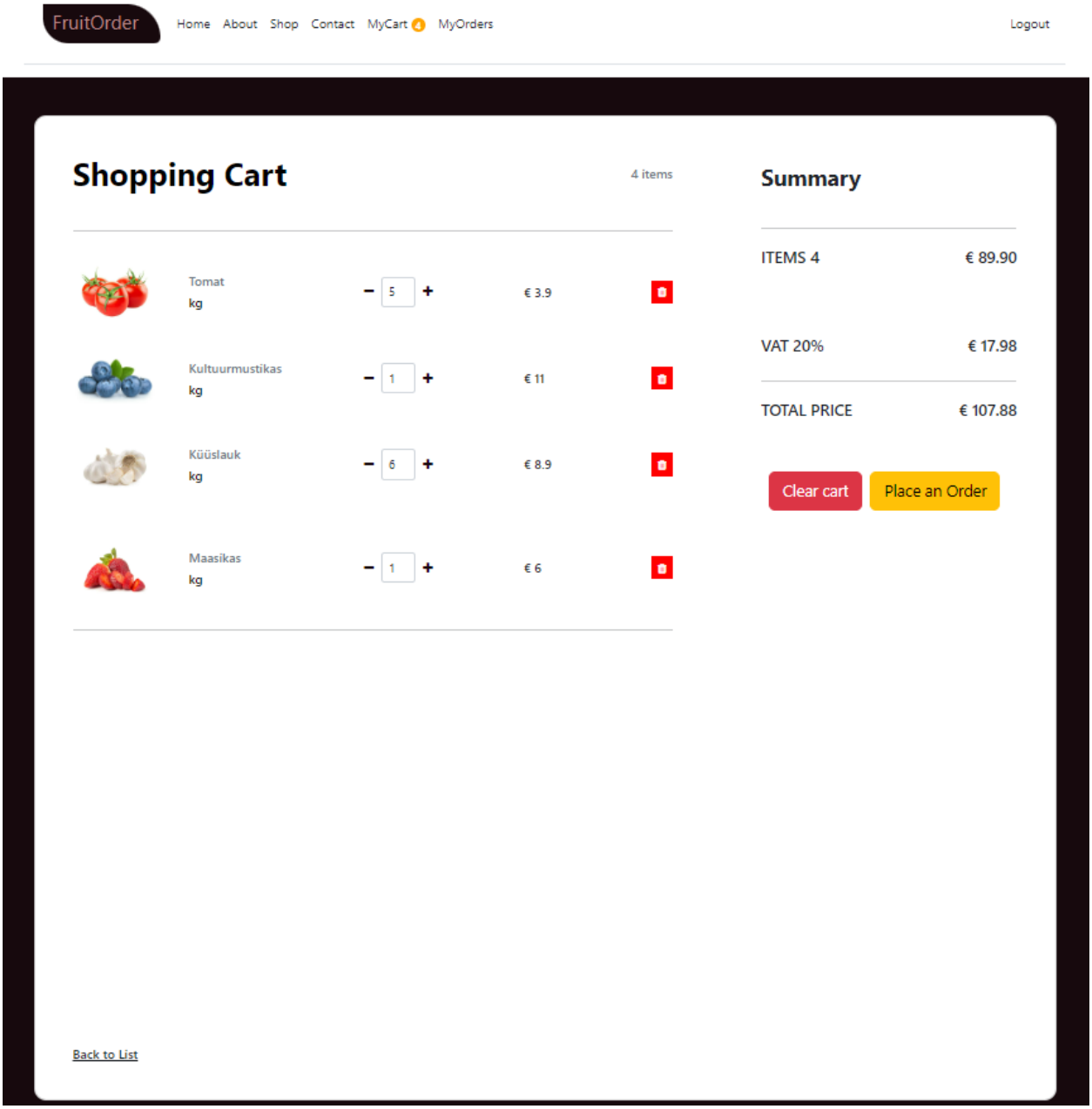


Figure 7. Authorized user's cart view

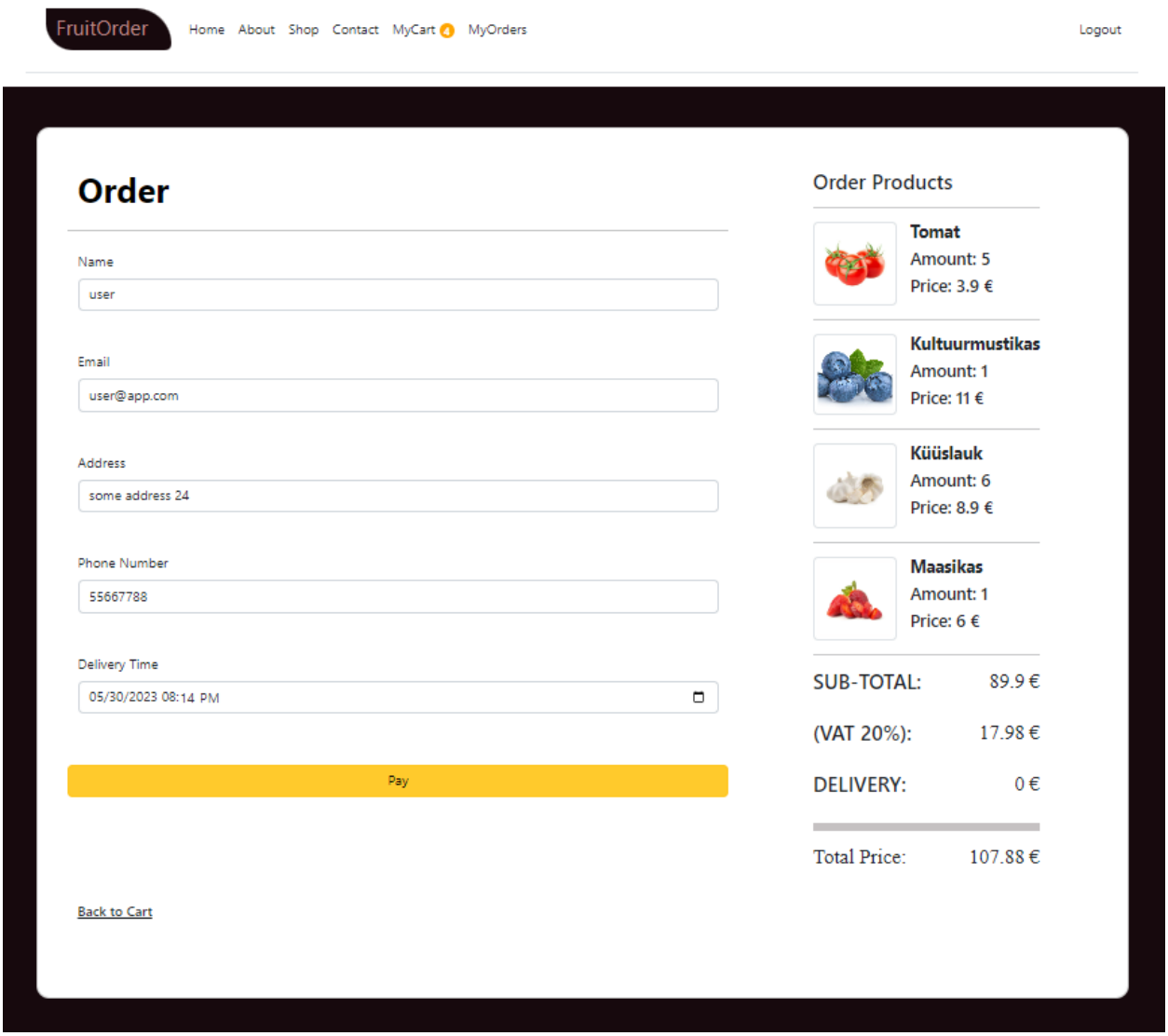


Figure 8. Authorized user's order view

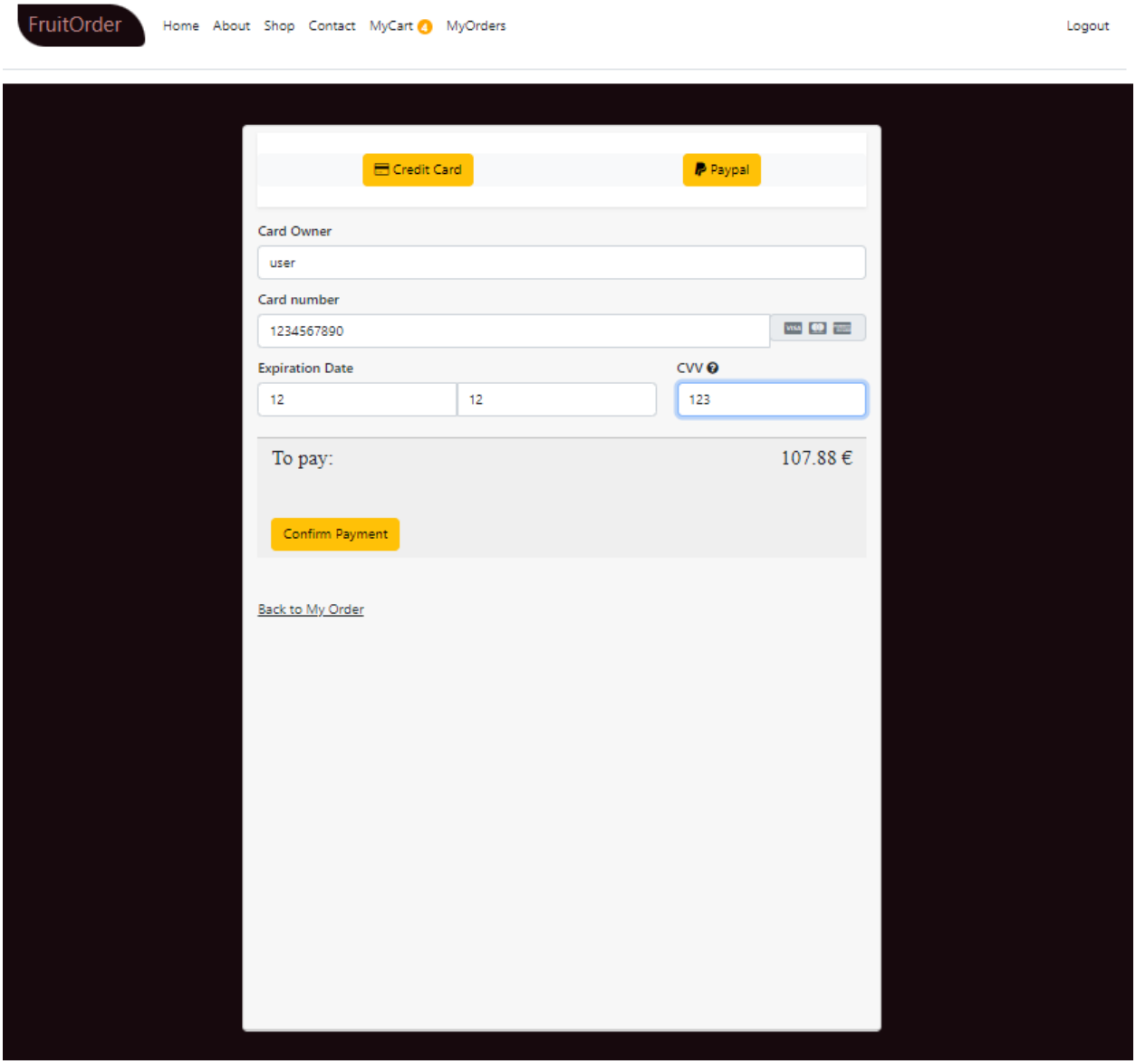


Figure 9. Authorized user's payment view

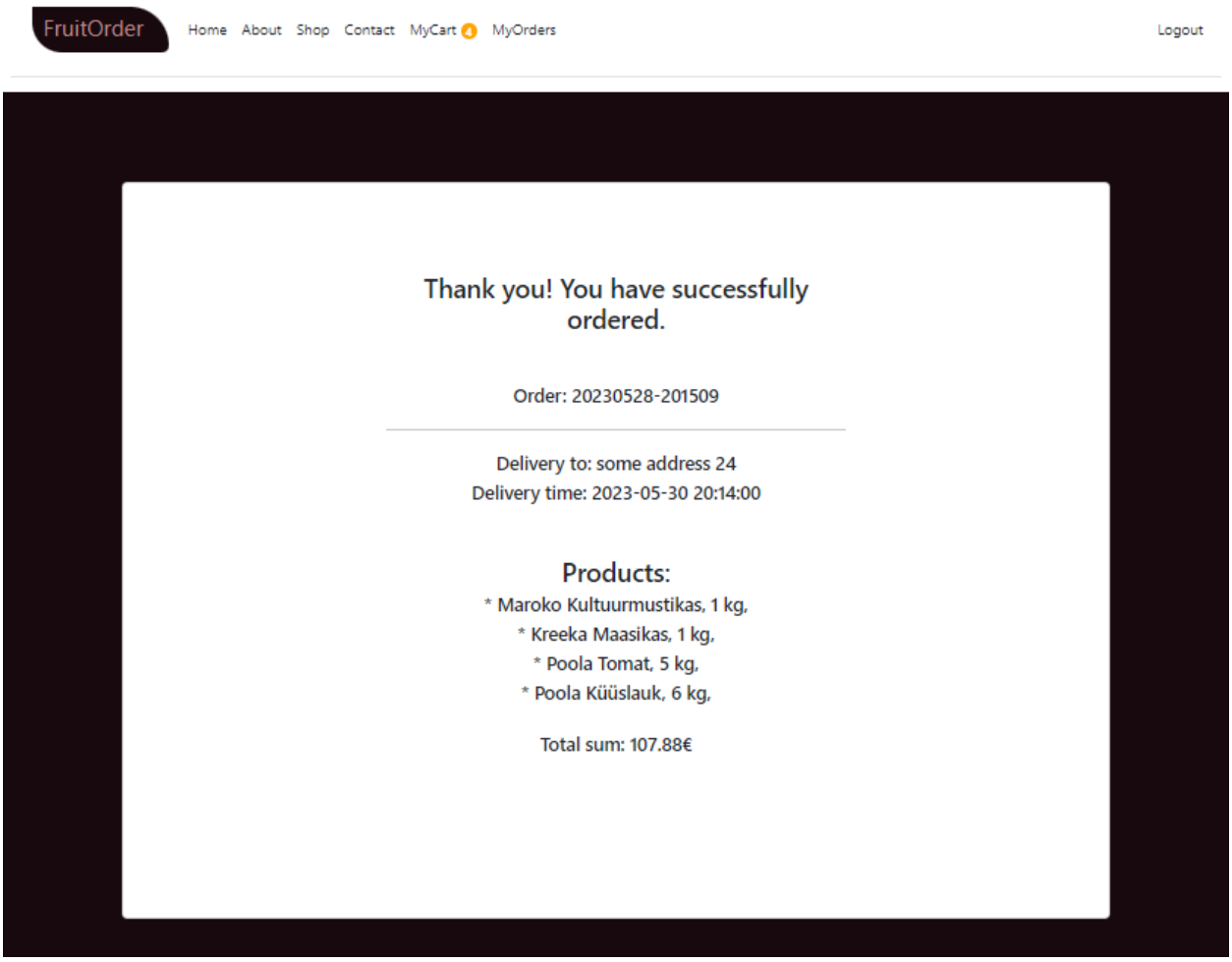


Figure 10. Authorized user's success page view (payment confirmation)

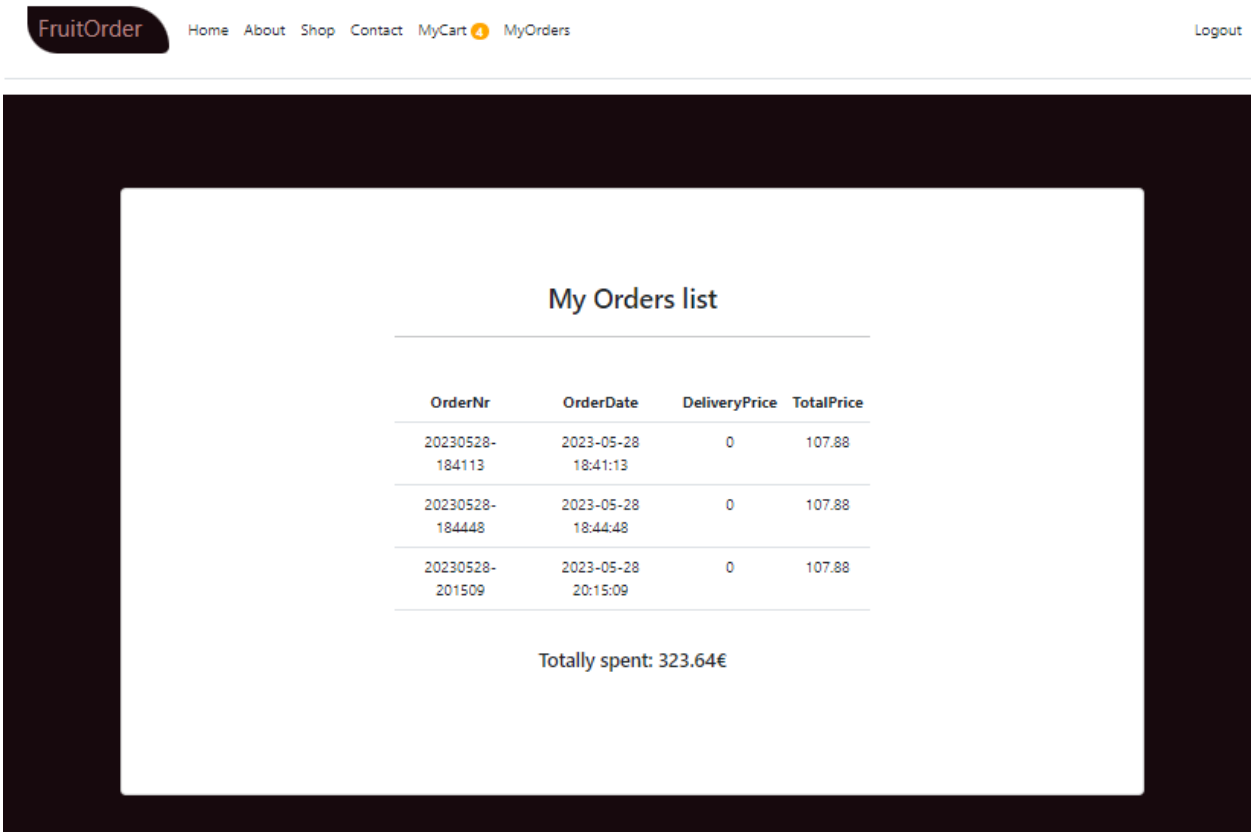


Figure 11. Authorized user's all orders list view

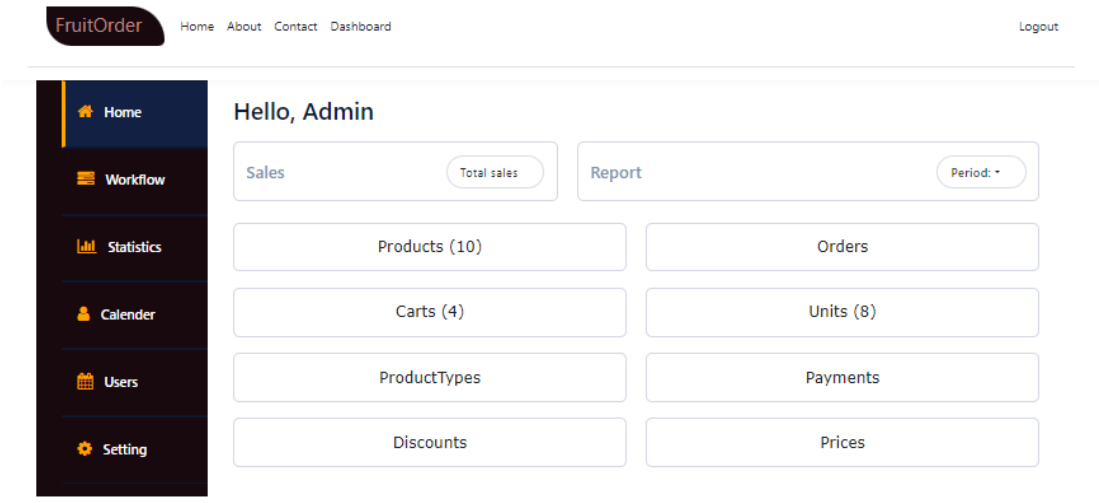


Figure 12. Admin's dashboard view

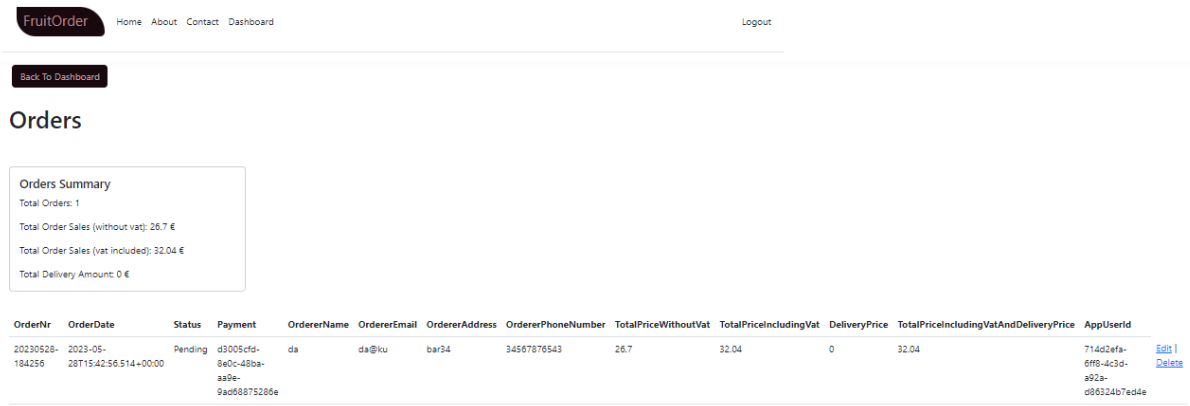


Figure 13. Admin’s orders view with some statistics