

Pharmaceutical distributor

Document development

version	Description	Date
1.0	Initial version of the documentation.	25-01-2024
1.1_260124	Updated version of the chapters 1, 2, 3.1-3.3.	26-01-2024
2.0_080224	Chapters 3.4-3.5 and 4 added.	08-02-2024
2.1_090224	Chapters 3.5.2 and 3.5.3 updated.	09-02-2024
3.0_140324	Chapters 3.4-3.5 updated; chapters 3.6 and 5 added.	14-03-2024

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1 Vision

1.1 Vision and short description of the project

The vision of the project is to create a comprehensive solution for a pharmaceutical distribution platform with dual functionality. The primary goal is to effectively manage the internal operations of a pharmaceutical distributor through the *Store System Management* component. At the same time, the project aims to provide the registered customers with an efficient and user-friendly *Online Store*, enabling them to quickly place orders.

This project is a response to the growing market demand for optimized distribution processes. The anticipated outcome is an integrated and optimized process that benefits both the pharmaceutical distributor and its registered customers. The challenge is to integrate a robust inventory management system for a wide range of products.

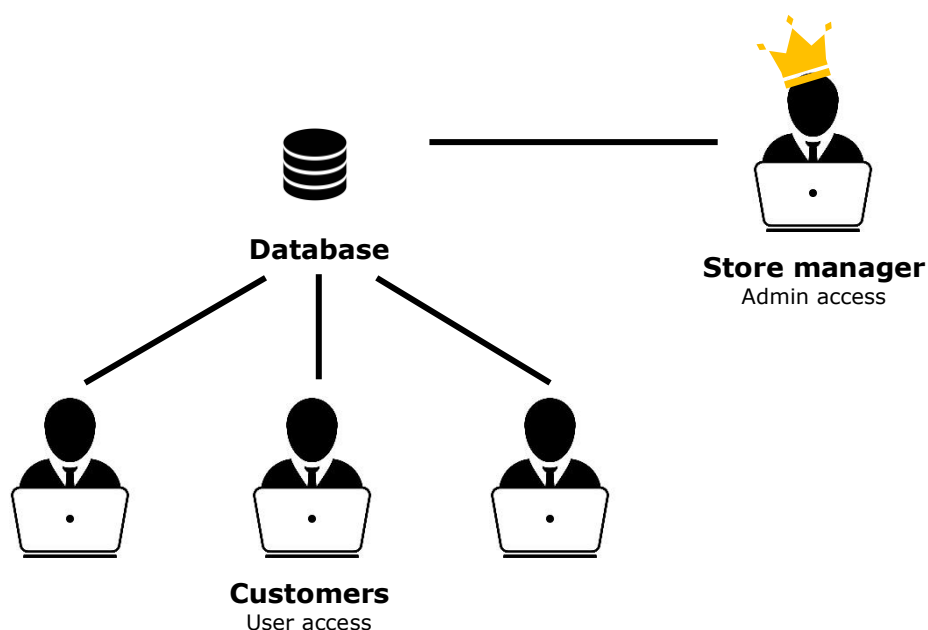
Benefits:

- Increased operational efficiency of pharmaceutical distributor.
- Effective and smooth purchasing processes for pharmacies.

2 Rough specification

2.1 Connection with existing systems

The project requires integration within a relational database management system (RDBMS). Connecting to a database, in this case Derby, allows the application to interact with the data stored in the database. This interaction can include querying data, inserting records, updating data and deleting records. In the project modular architecture, Derby is situated within the Server module as an embedded database. This embedded approach is common for a lightweight and self-contained database solution.



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2.2 Overview of the required functionality

The intended functionality aims to develop a robust and user-friendly application that enhances operational efficiency and customer convenience. The basic aspects are outlined as follows:

1. User account management:

Create a user-friendly system for account creation, authentication and management, satisfying the needs of both the pharmaceutical distributor and its registered customers.

2. Product catalog management:

Provide a system for creating a comprehensive product catalog, ensuring accurate representation of pharmaceutical products, their availability and prices.

3. Order processing system:

Establish a streamlined system for order submission, tracking and management, providing registered customers with a smooth and hassle-free experience.

4. Inventory control:

Utilize real-time inventory tracking to guarantee order accuracy and optimize overall warehouse management processes.

5. Reporting:

Implement reporting tools to extract valuable insights into sales trends, inventory levels and other critical metrics. These tools aid in decision-making regarding procurement and business development strategies.

2.3 Essential quality requirements and framework conditions

The project utilizes Java, JavaFX and Apache Derby database technologies. It is designed for compatibility with standard hardware configurations, ensuring thorough compatibility testing. The architecture prioritizes performance optimization and is scalable to handle growing data volumes and user loads. The first version of the software is expected to be available in mid-March 2024.

3 Detailed specification

3.1 System actors (personas)

In the Pharmaceutical Distributor Store application, two key actors interact with the system:

Admin: uses the application for internal operations and decision-making.

Customer: uses the application to browse and purchase pharmaceutical products.

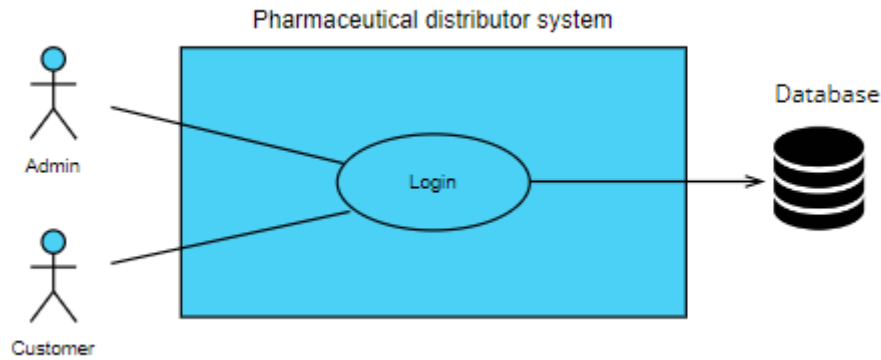
Both actors connect to the application that serves as an interface, linking users to the underlying database for real-time data access.

3.2 Detailed functional requirements (scenarios & screens)

3.2.1 <Login>

3.2.1.1 Business use case / mode of operation

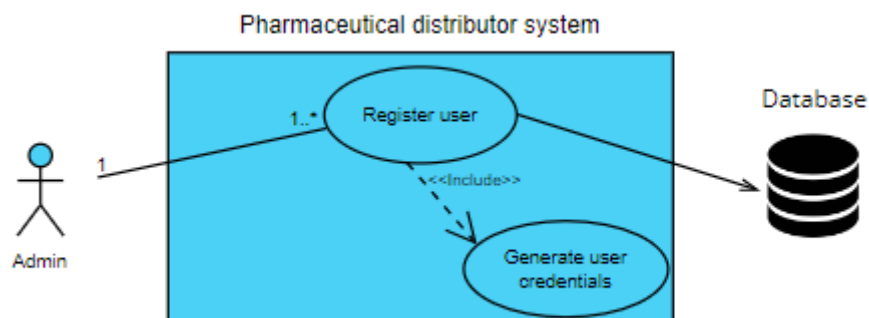
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Title	Login Authentication.
Short description	Users provide credentials to access the App.
Actors	Admin and customer.
Preconditions (input)	Users need an active account and login credentials (username and password).
Description of the process	<ul style="list-style-type: none">▪ User enters valid credentials (username and password) and presses the login button.▪ System verifies the credentials against the stored data.▪ Successful authentication redirects user to the respective GUIs.
Impact (output)	<ul style="list-style-type: none">▪ Authenticated users gain access to the App features, based on their roles.▪ GUI content, functionality and permissions are customized according to the user type (admin or customer).
Remarks	Password recovery available to customers after contacting the admin.

3.2.2 <Register user>

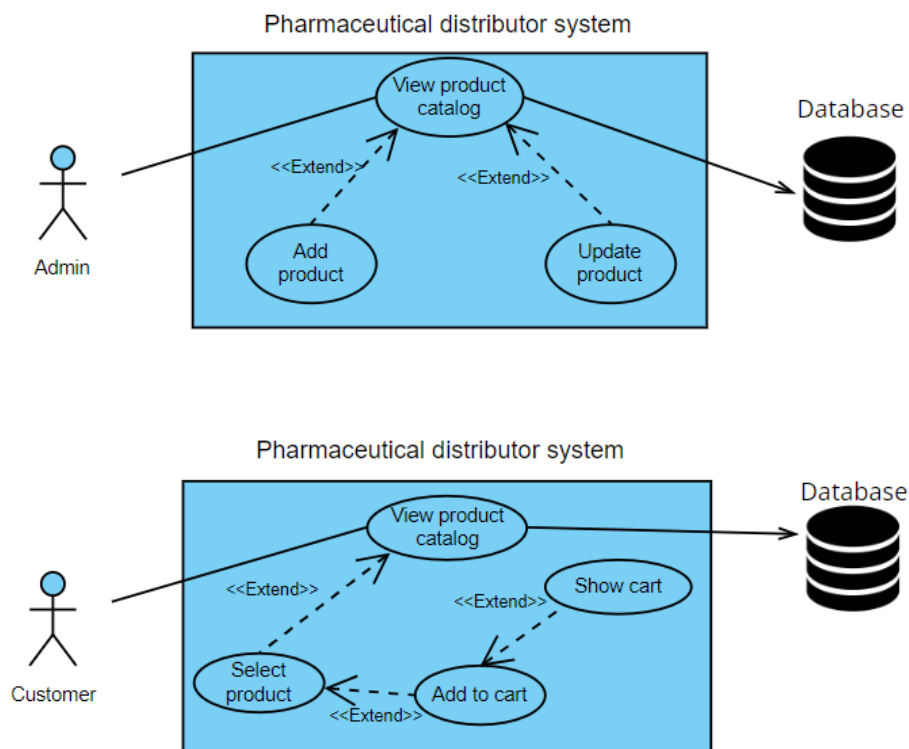
3.2.2.1 Business use case / mode of operation



Title	Register a new customer.
Short description	Admin creates a new user profile for customer that includes login credentials.
Actors	Admin.
Preconditions (input)	<ul style="list-style-type: none">Admin is logged into the application.The required customer details are known (e.g. signed contract).
Description of the process	<ul style="list-style-type: none">Admin accesses the user management panel.Admin inputs: delivery and billing addresses, telephone number and email of the contact person.The system generates unique login credentials (username and password) for the new customer.Admin saves the credentials in a PDF file.
Impact (output)	Customer gets a PDF file with the login details.
Remarks	The PDF file may include additional information, such as instructions or a welcome message.

3.2.3 <View product catalog>

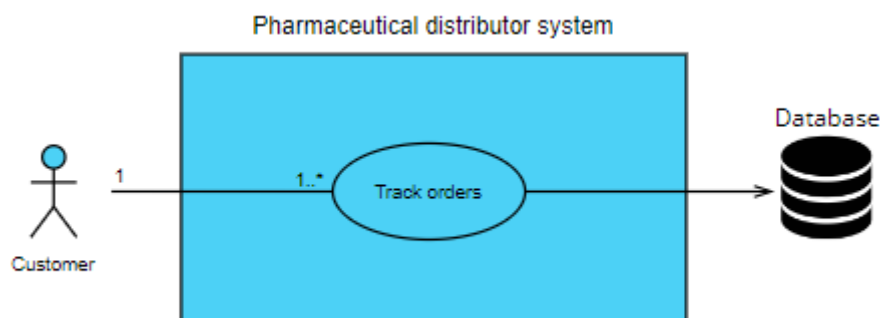
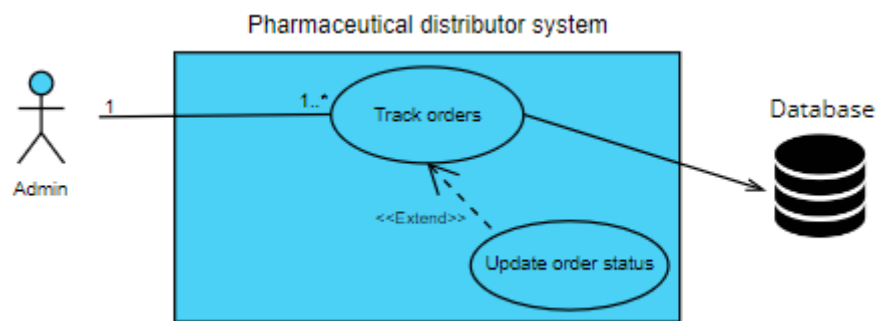
3.2.3.1 Business use case / mode of operation



Title	View product catalog.
Short description	Users browse the product catalog, and depending on the user role different options are available.
Actors	Admin and customer.
Preconditions (input)	Admin and customer are logged into the application.
Description of the process	<ul style="list-style-type: none">▪ User navigates to the product catalog and clicks on a product to view its details.▪ Admin may add a new product to the catalog or update a selected product.▪ Customer may add a selected product to the shopping cart and see the cart.
Impact (output)	The availability of products is dynamically updated based on the user interactions.
Remarks	Admin may additionally add a new product category.

3.2.4 <Track orders>

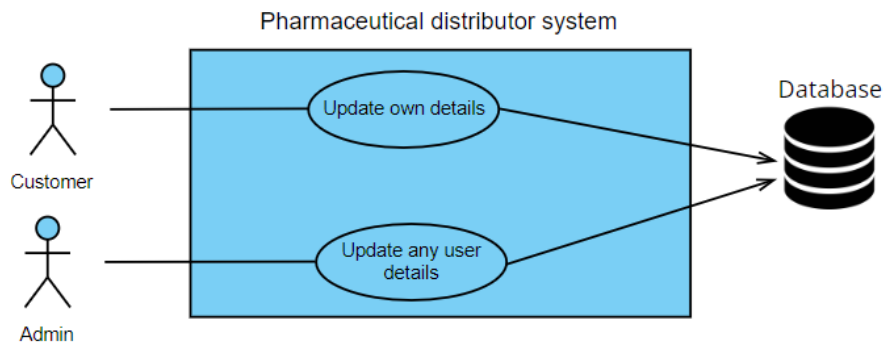
3.2.4.1 Business use case / mode of operation



Title	Track orders.
Short description	Admin and customers may track the orders, but admin has additional function to update order status.
Actors	Admin and customer.
Preconditions (input)	<ul style="list-style-type: none">▪ Users are logged into the application.▪ Admin receives a shipping list.
Description of the process	<ul style="list-style-type: none">▪ User navigates to the order tracking section.▪ Admin views the list of all orders and may additional update their current status, based on the report from the Forwarding Department.▪ Customer views the list of orders he placed and checks their order status.
Impact (output)	Order status updates are reflected in real-time for both admin and customer.
Remarks	Perhaps in the future the customer could be notified about changes to the order status.

3.2.5 <Update user details>

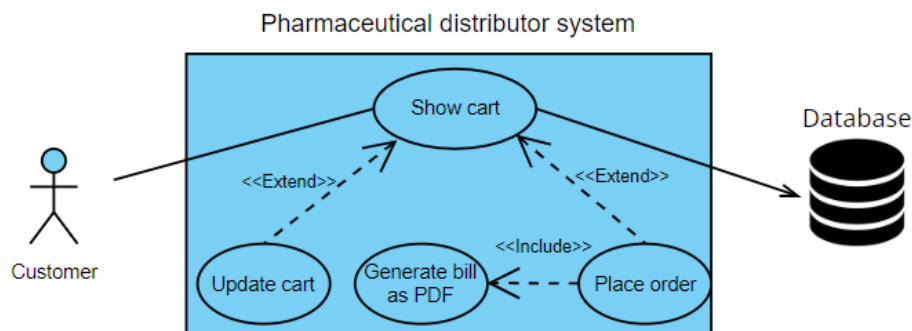
3.2.5.1 Business use case / mode of operation



Title	Update user details.
Short description	Customer and admin update personal details.
Actors	Customer and admin.
Preconditions (input)	Customer/admin is logged into the application.
Description of the process	<ul style="list-style-type: none">▪ Customer navigates to the profile management panel and modifies own data (e.g. address, contact number or other relevant information).▪ Admin navigates to the profile management panel and modifies any user data.
Impact (output)	Users account information is updated.
Remarks	-

3.2.6 <Show cart>

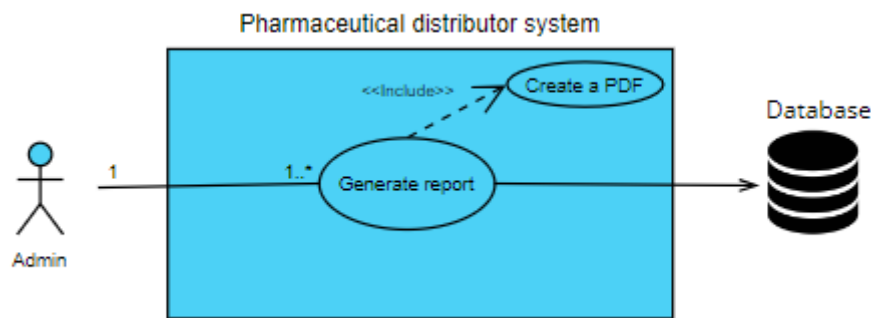
3.2.6.1 Business use case / mode of operation



Title	Show cart.
Short description	Customer views the contents of the shopping cart, update quantities or remove items, and proceed to place an order.
Actors	Customer.
Preconditions (input)	<ul style="list-style-type: none">Customer is logged into the application.
Description of the process	<ul style="list-style-type: none">Customer navigates to the shopping cart section.Customer sees a list of items in the cart along with their quantity and price.Customer adjusts the quantity or removes items from the cart.Customer proceeds to place an order by clicking the Order button.System generates an invoice in PDF format based on the order details.
Impact (output)	<ul style="list-style-type: none">Customer's cart is updated.Order is placed, and a bill is generated.
Remarks	The generated PDF invoice includes a summary of the order, pricing details, and other relevant information.

3.2.7 <Generate report>

3.2.7.1 Business use case / mode of operation



Title	Generate report.
Short description	A process in which the admin creates a detailed report in PDF format summarizing sales, inventory, or other relevant details for a specified period.
Actors	Admin.
Preconditions (input)	Admin is logged into the application
Description of the process	<ul style="list-style-type: none">Admin navigates to the reporting section.Admin selects the type of report to generate (e.g. sales report, warehouse status).Admin specifies the time period for which the report is to be prepared (e.g. monthly, annual).The system processes the selected parameters and compiles a report as a PDF file.
Impact (output)	A comprehensive report is generated in PDF format, providing insights based on the specified criteria.
Remarks	The PDF report includes relevant metrics and data summaries. Perhaps this option could also be available to the customer.

3.3 Non-functional requirements

3.3.1 Hardware and software specifications

Hardware specifications:

The target system should be developed and capable of running efficiently in the following hardware environment:

- Processor: Intel Core i5 or equivalent.
- RAM: Minimum 8 GB.
- Memory: SSD drive with a minimum capacity of 256 GB.
- Display: Full HD resolution (1920 x 1080 pixels).
- Network: Stable internet connection.

Software Specifications:

The target system should be developed and compatible with the following software environment:

- Operating system: Windows 10 or newer.
- Java Development Kit (JDK): version 11 or later.
- Integrated development environment (IDE): Eclipse IDE for Java developers (version 2023-09 or later).
- JavaFX: release sdk-21.0.1.
- Database: Apache Derby (version 10.16.1.1).
- open-source PDF library itextpdf-5.5.13.3.

3.3.2 Performance

- The system should respond to user interactions within 2 seconds for optimal user experience
- The database should support medium level of traffic with a minimum of 20 simultaneous users.
- Critical functions such as order processing or inventory updates must exhibit real-time performance.

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3.3.3 Resources and hardware requirements

- Data Volumes: the system should be designed to handle an initial data volume of approximately 10 GB, with scalability considerations for future growth.
- CPU Requirements: a multi-core processor with a minimum clock speed of 2.5 GHz is recommended for optimal performance.
- CPU Utilization: The application should aim to maintain CPU utilization below 70% during peak usage to ensure responsiveness and efficient processing.
- Main Memory (RAM): a minimum of 8 GB of RAM is required to support concurrent user activities and data processing.
- Network Bandwidth: a minimum network bandwidth of 100 Mbps is recommended to facilitate seamless communication between system components.
- Backup and Recovery: daily backups with a retention period of 30 days are scheduled.

3.3.4 Security & Safety

- The system should prevent unauthorised access, ensuring that only authenticated and authorized users can interact with sensitive data.
- Regular and safe data backups should be performed to prevent data loss and ensure fast recovery in case of a system failure or unforeseen event.

3.3.5 Reliability

- The system should be reliable and constantly available to customers with 99% uptime.
- Acceptable downtime tolerance 1 hour/month.
- Mean Time Between Failures (MTBF) of 300 hours.
- Notify users 24 hours in advance of planned downtimes.

3.3.6 Maintenance

- The system should be simple and modular to ease improvements and modifications over time.
- Regular maintenance periods should be scheduled for updates and optimization, e.g. to introduce new features or improvements.
- Documentation should be kept up-to-date to reflect changes in software updates.
- Target Mean Time to Repair (MTTR): 4 hours.

3.3.7 Portability / Scalability / Reusability

- The system should be able to adapt to growth in the number of users and data without losing performance.
- The system should be designed to be ready for expansion, enabling the integration of new product lines, warehouses or functionalities without major system inspection.
- Emphasis should be placed on modularization of system components, ensuring that individual modules can be modified or replaced without disturbing the operation of the entire system.
- Detailed documentation of system architecture, components and workflows must be maintained to facilitate future development, updates and handover to other teams.

3.3.8 Usability

- GUI should be intuitive and simple to use.
- Workflows should be designed to optimize task efficiency, reducing the number of steps required for typical operations.
- A feedback mechanism is established to allow users reporting problems or suggesting improvements.

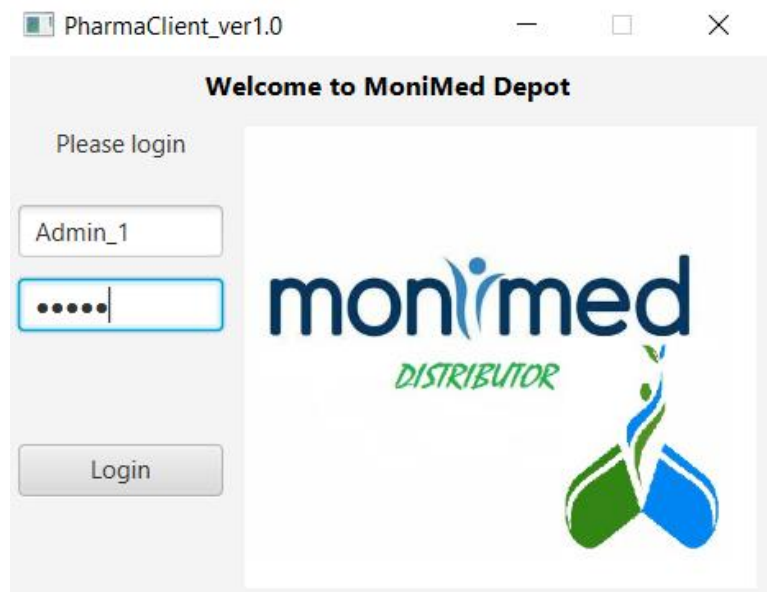
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3.4 Interfaces

Here all interfaces of the product being created are specified.

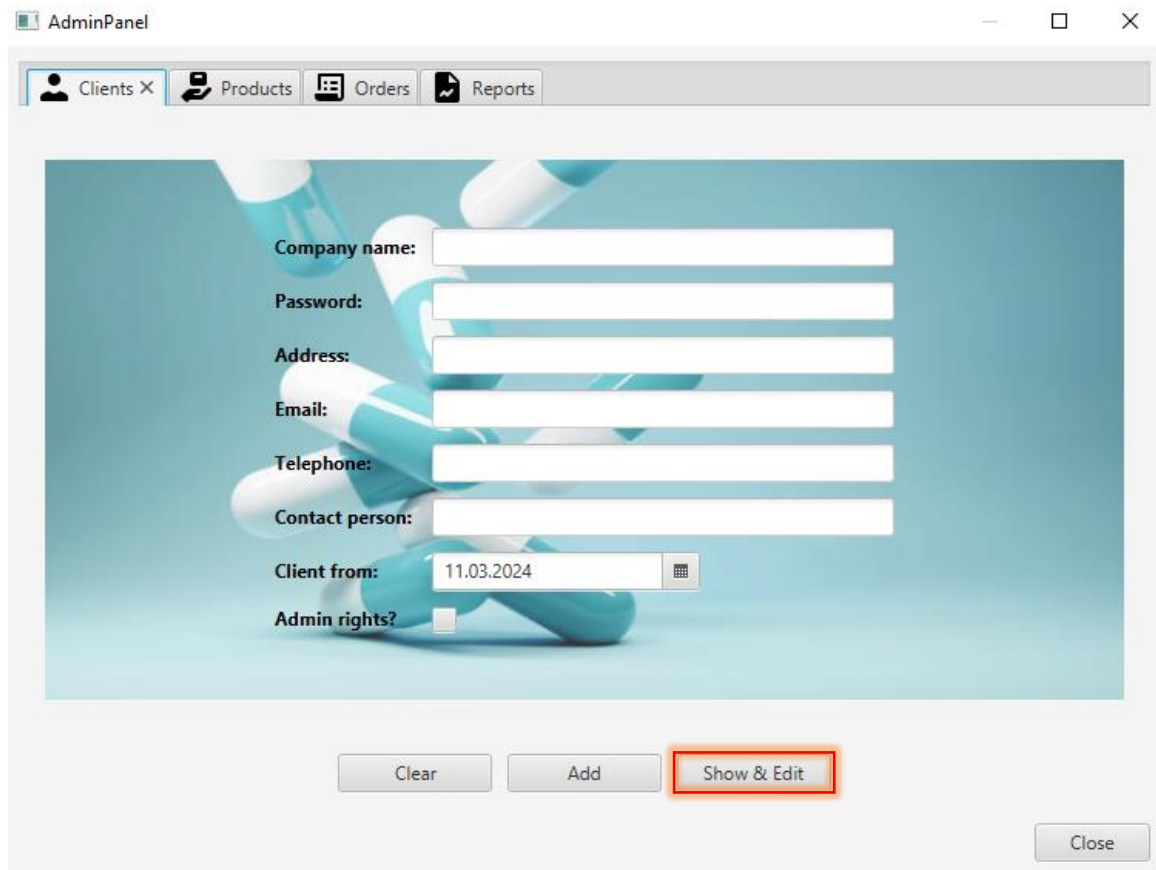
3.4.1 User interfaces (GUI)

3.4.1.1 The main GUI



3.4.1.2 The admin GUI

3.4.1.2.1 Client Tab



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After pressing the "Show & Edit" Button, the "The client list" appears.

[illegible]

3.4.1.2.2 Products Tab

AdminPanel

Clients

Products X

Orders

Reports

Name:

max. 200 characters

Description:

Price per item (in EUR):

0.00

Category:

New category

Total quantity:

Clear

Add

Show & Edit

Close

After pressing the "Show & Edit" Button, "List of the products" appears.

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Pharmaceutical distributor

List of the products

Name	Description	Price	Category ▲	Quantity	isActive
Sudocrem Multi-Expert Protective Cream, 60g	Versatile protection in a cream. Trusted for various skin needs, it soothes and shields for optimal skincare.	8.05	Baby and family	4630	<input checked="" type="checkbox"/>
Eucerin Hyaluron-filler day care for dry skin, 50ml	Provides the skin with the necessary moisture, helps fill deep wrinkles and tighten facial contours.	34.9	Beauty and care	340	<input checked="" type="checkbox"/>
Vichy Liftactiv Hyaluronic Anti-Wrinkle and Firming Cream Night Cream, 50ml	The anti-aging night cream provides intensive care and stimulates the skin's collagen production to visibly reduce signs of aging.	28.4	Beauty and care	9500	<input checked="" type="checkbox"/>
Aspirin +C, 40pcs	Aspirin+C effervescent tablets have a quick, effervescent effect against the first signs of colds such as sore throats and headaches - with the plus	13.45	Drugs	140	<input checked="" type="checkbox"/>

Close

3.4.1.2.3 Orders Tab

AdminPanel

ClientsProductsOrders XReports

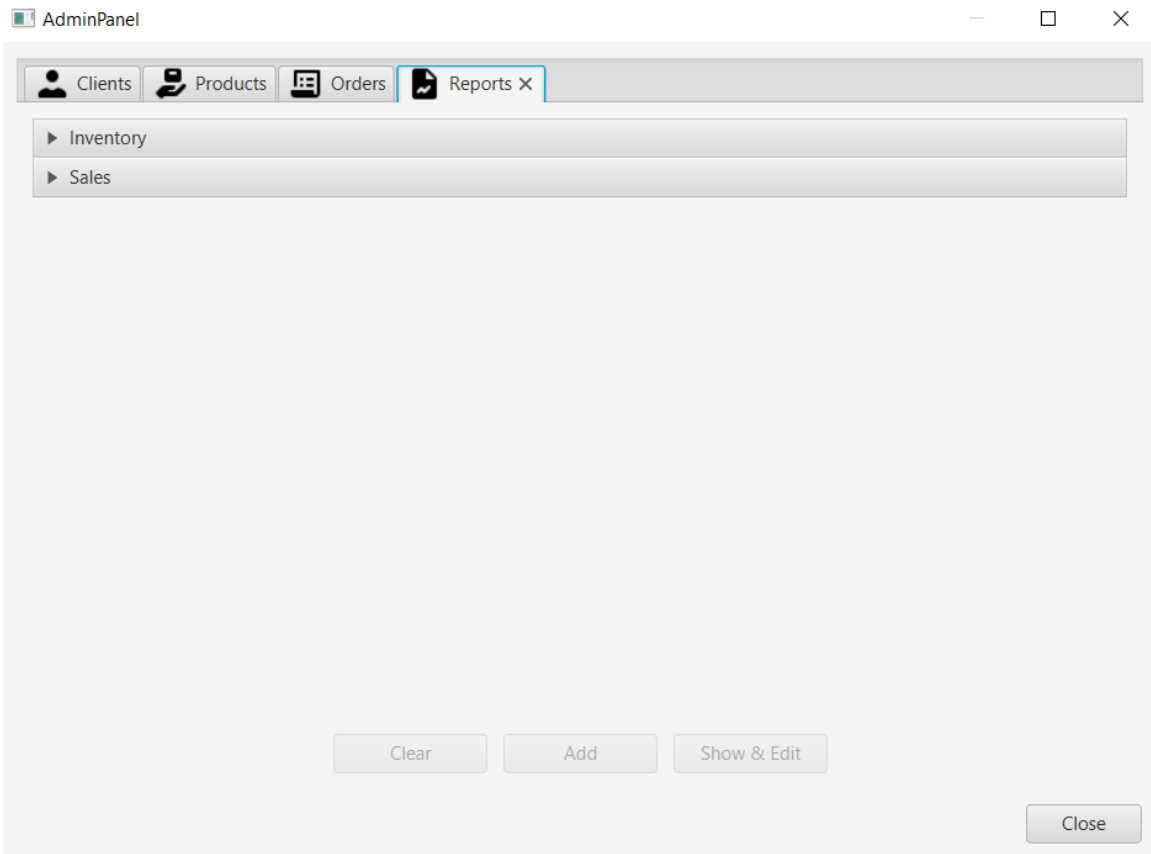
OrderId	ClientId	Date	Product	Category	Unit price	Quantity	isSent
193	Client_1	2024-03-04	Vichy Liftactiv Hyaluronic Anti-Wrinkle and Firming Cream Night Cream, 50ml	Beauty and care	28.4	40	<input type="checkbox"/>
194	Client_1	2024-03-04	Metavirulent, 100ml	Homeopathy and natural...	16.49	25	<input type="checkbox"/>
195	Client_5	2024-03-06	Sudocrem Multi-Expert Protective Cream, 60g	Baby and family	8.05	50	<input type="checkbox"/>
196	Client_5	2024-03-06	peeroton Slim Shake Vanille, 2x500g	Nutrition and losing wei...	42.34	60	<input type="checkbox"/>
197	Client_5	2024-03-06	Elastic bandage 50mm x 4.5m, 6rolls	Sanitary materials	9.1	75	<input type="checkbox"/>
198	Client_5	2024-03-06	Sterile Cotton Swabs 15cm x 5mm, 100pcs	Sanitary materials	16.5	30	<input type="checkbox"/>
199	Client_2	2024-03-06	Metavirulent, 100ml	Homeopathy and natural...	16.49	50	<input type="checkbox"/>
200	Client_2	2024-03-06	Dr. Boehm Omega 3, 30pcs	Sport and fitness	15.95	50	<input type="checkbox"/>
201	Client_4	2024-03-06	Redcare Pregnancy test	Tests	20.05	100	<input type="checkbox"/>
202	Client_4	2024-03-06	Sterile Cotton Swabs 15cm x 5mm, 100pcs	Sanitary materials	16.5	100	<input type="checkbox"/>
203	Client_4	2024-03-06	Elastic bandage 50mm x	Sanitary materials	9.1	100	<input type="checkbox"/>

ClearAddShow & Edit

Close

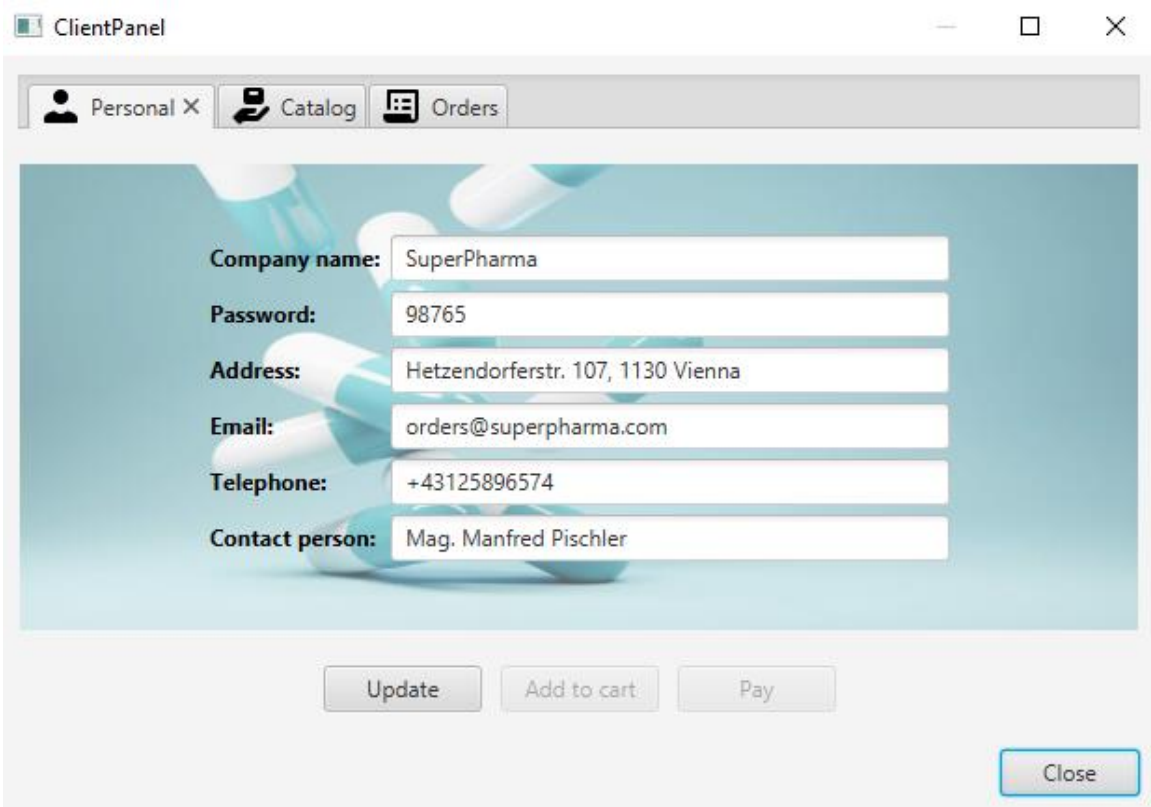
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3.4.1.2.4 Reports Tab



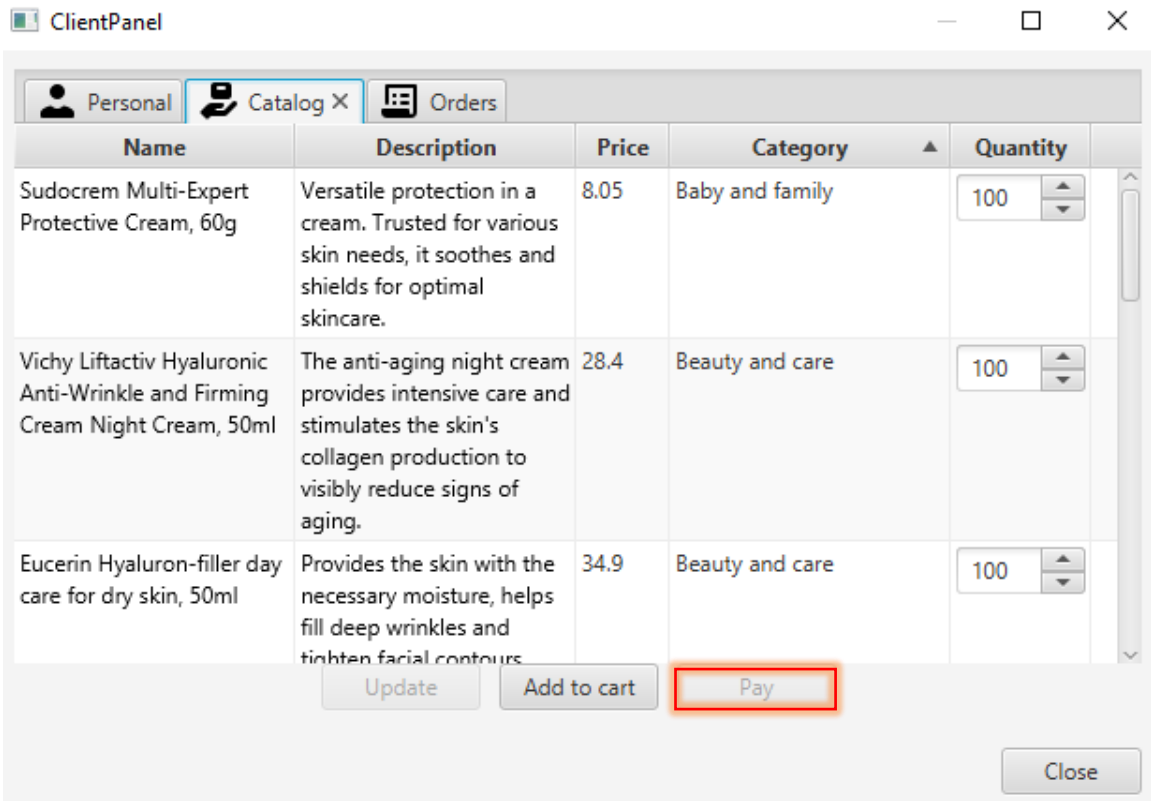
3.4.1.3 The customer GUI

3.4.1.3.1 Personal Tab

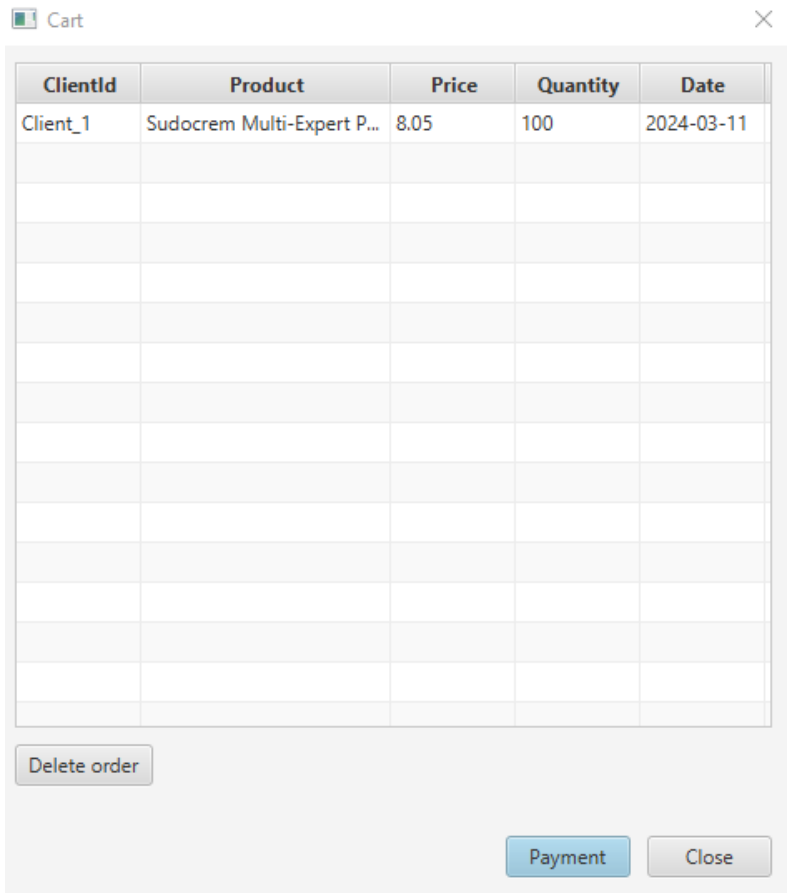


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3.4.1.3.2 Catalog Tab



After pressing the "Pay" Button, "Cart" appears.



3.4.1.3.3 Orders Tab

ClientPanel

Personal

Catalog

Orders X

ClientId	Date	Total price	
Client_1	11.03.2024	1730.5	
Client_1	07.03.2024	2510.35	
Client_1	04.03.2024	1548.25	
Client_1	01.03.2024	8594.8	
Client_1	28.02.2024	2560.0	

OrderId	Product	Category	Price	Quantity	isSent	
218	Redcare Pregnancy test	Tests	20.05	50	<input type="checkbox"/>	
219	Elastic bandage 50mm x ...	Sanitary materials	9.1	80	<input type="checkbox"/>	

Update

Add to cart

Pay

Close

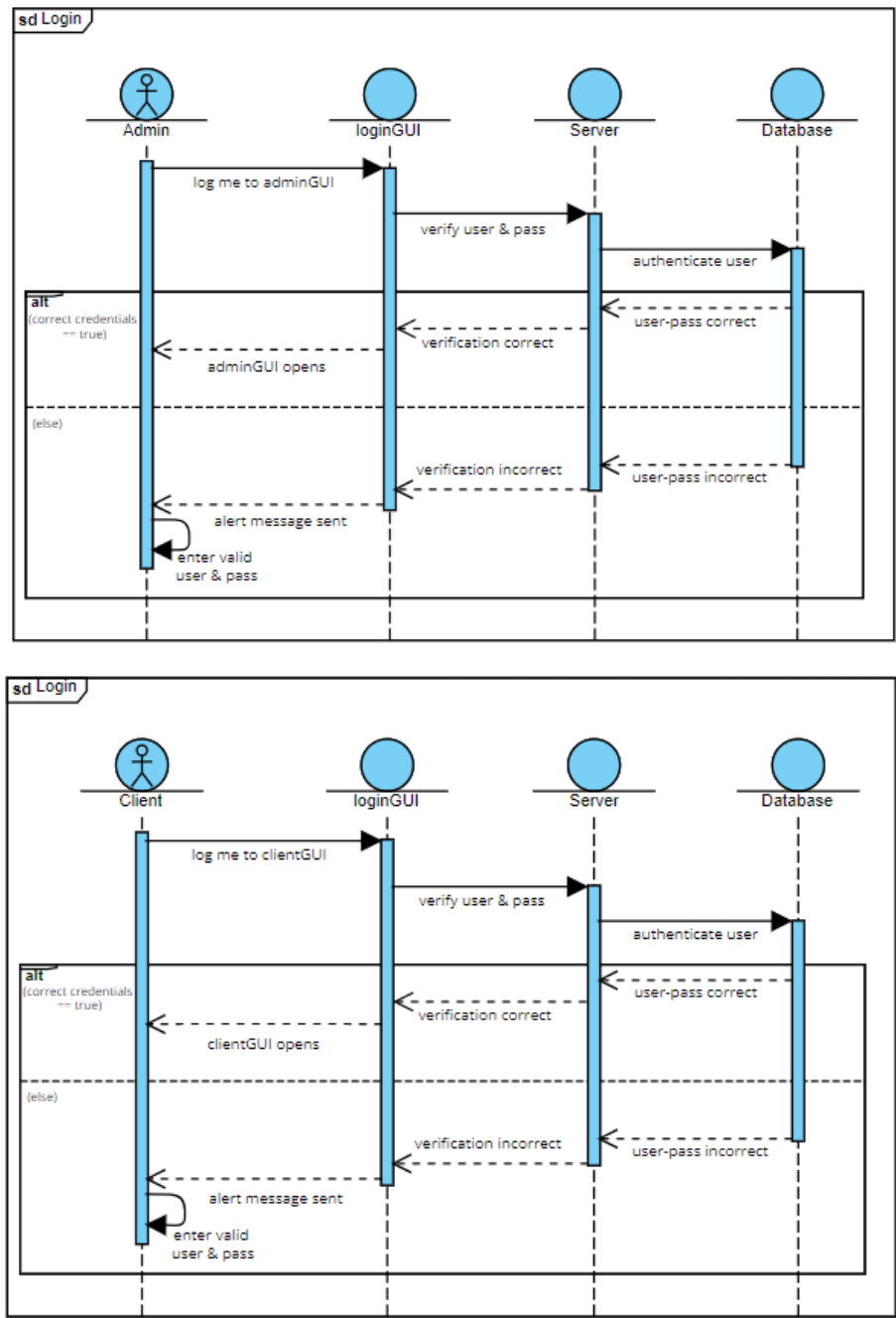
3.4.2 System interfaces

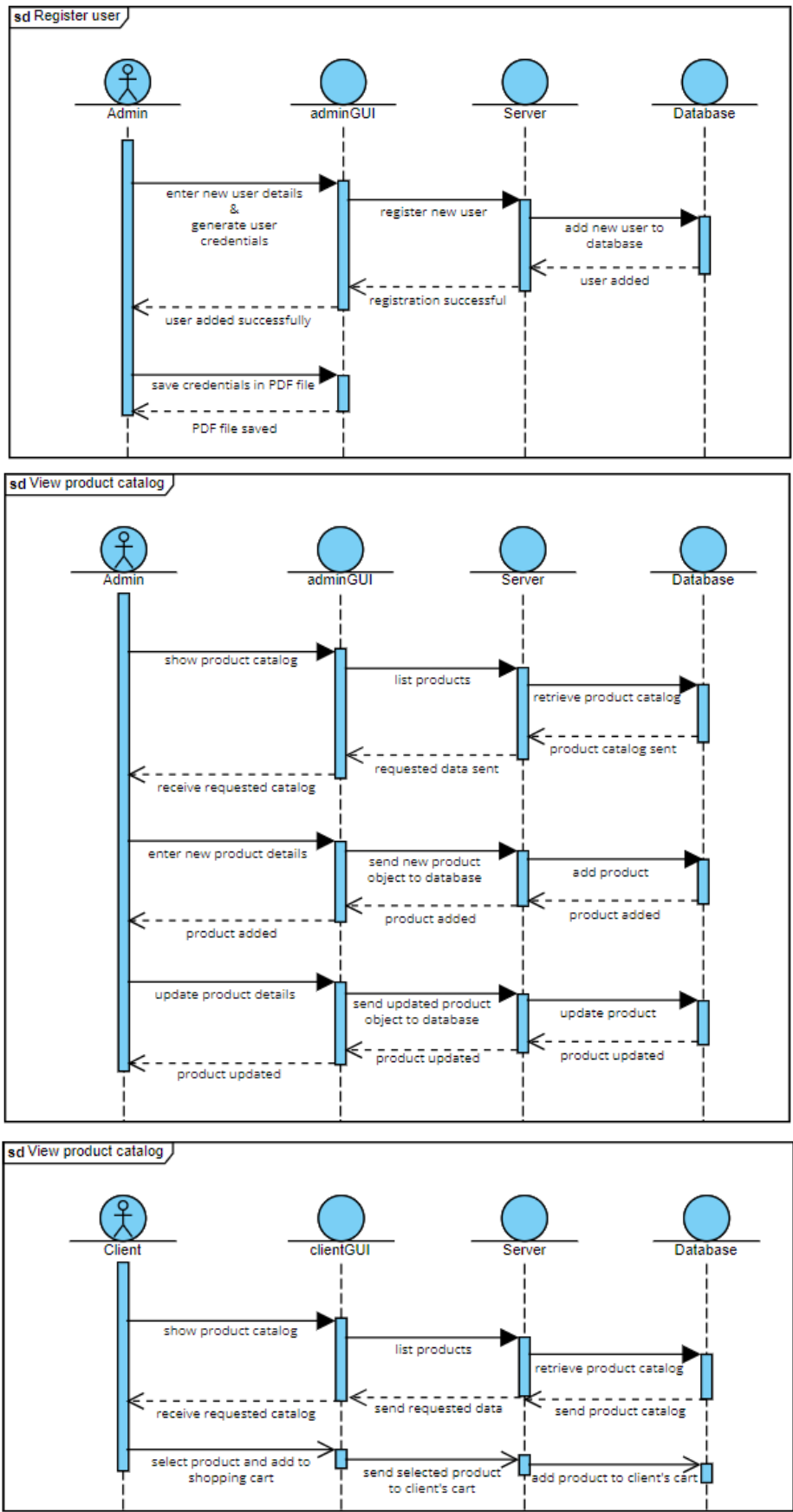
No connections with existing interfaces are planned.

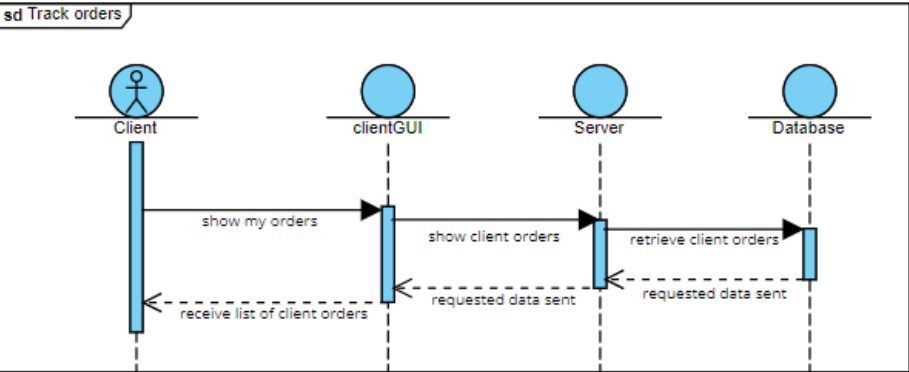
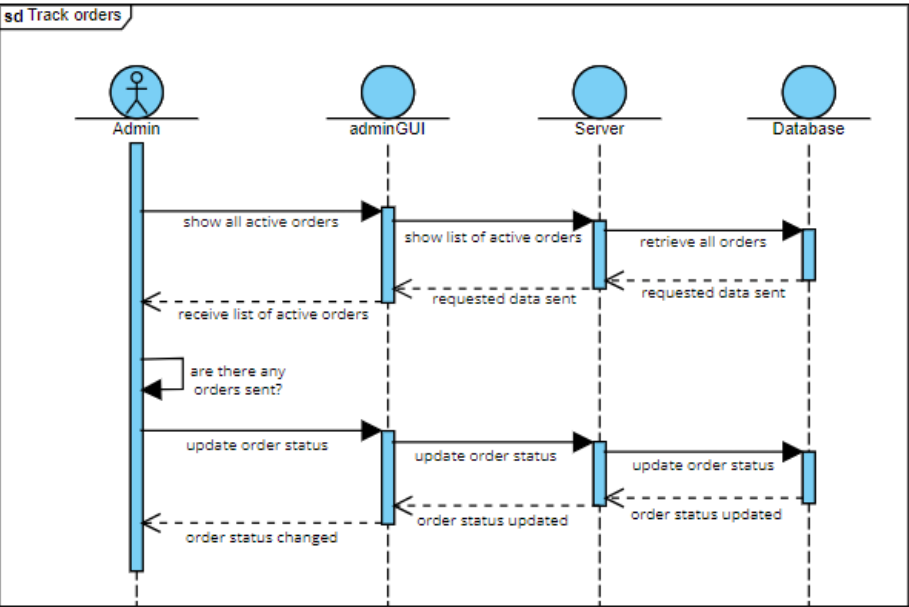
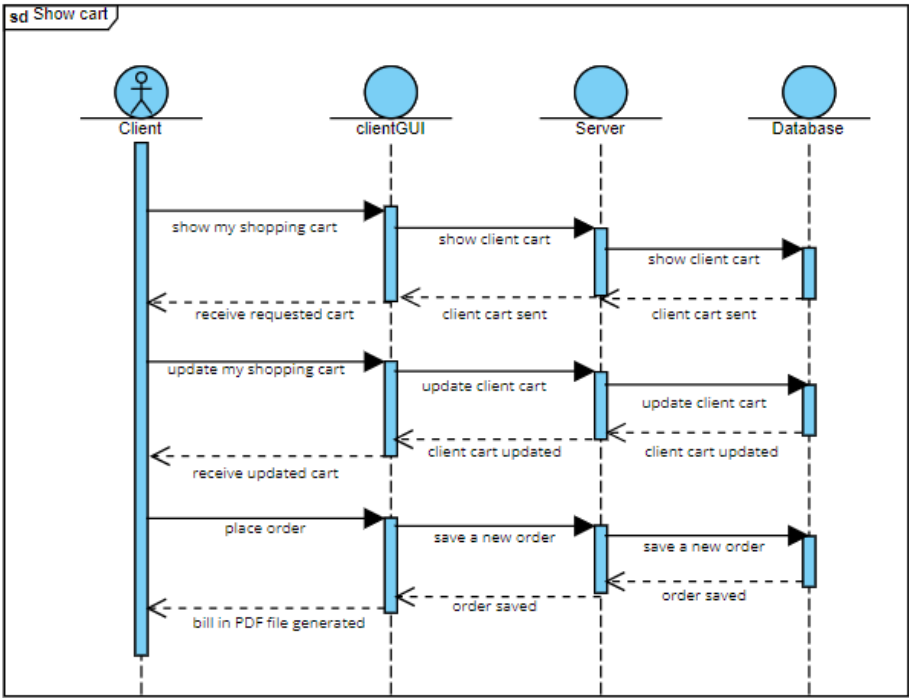
3.5 System delimitation, system architecture and data storage

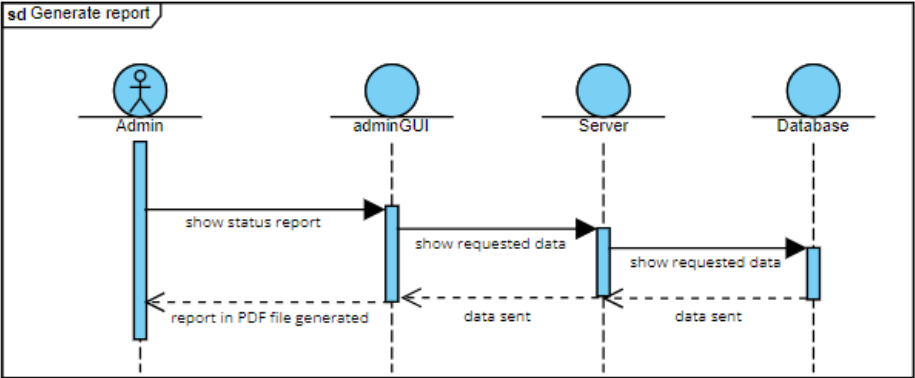
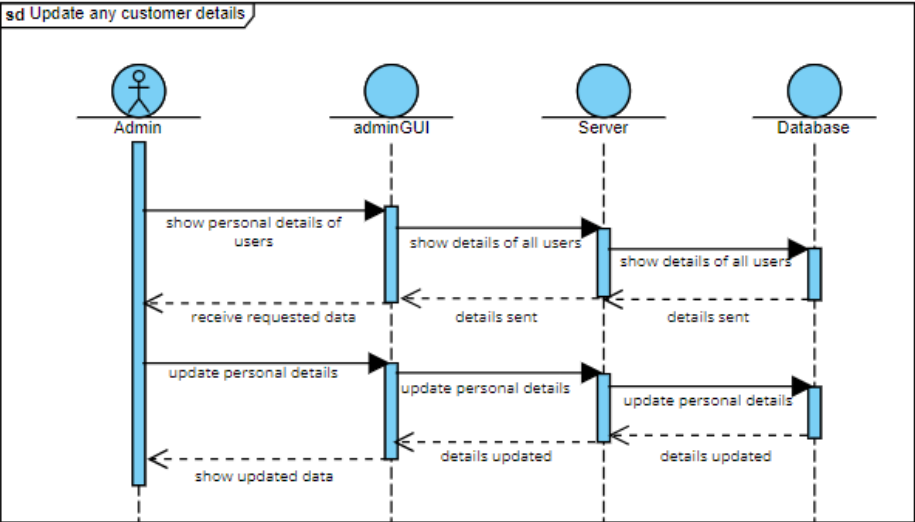
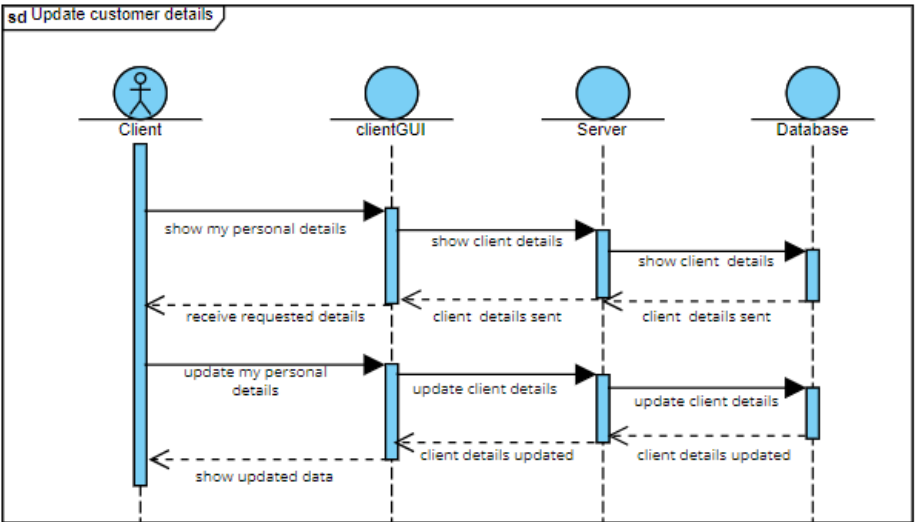
This chapter contains all system-relevant architectural descriptions.

3.5.1 Sequence diagrams

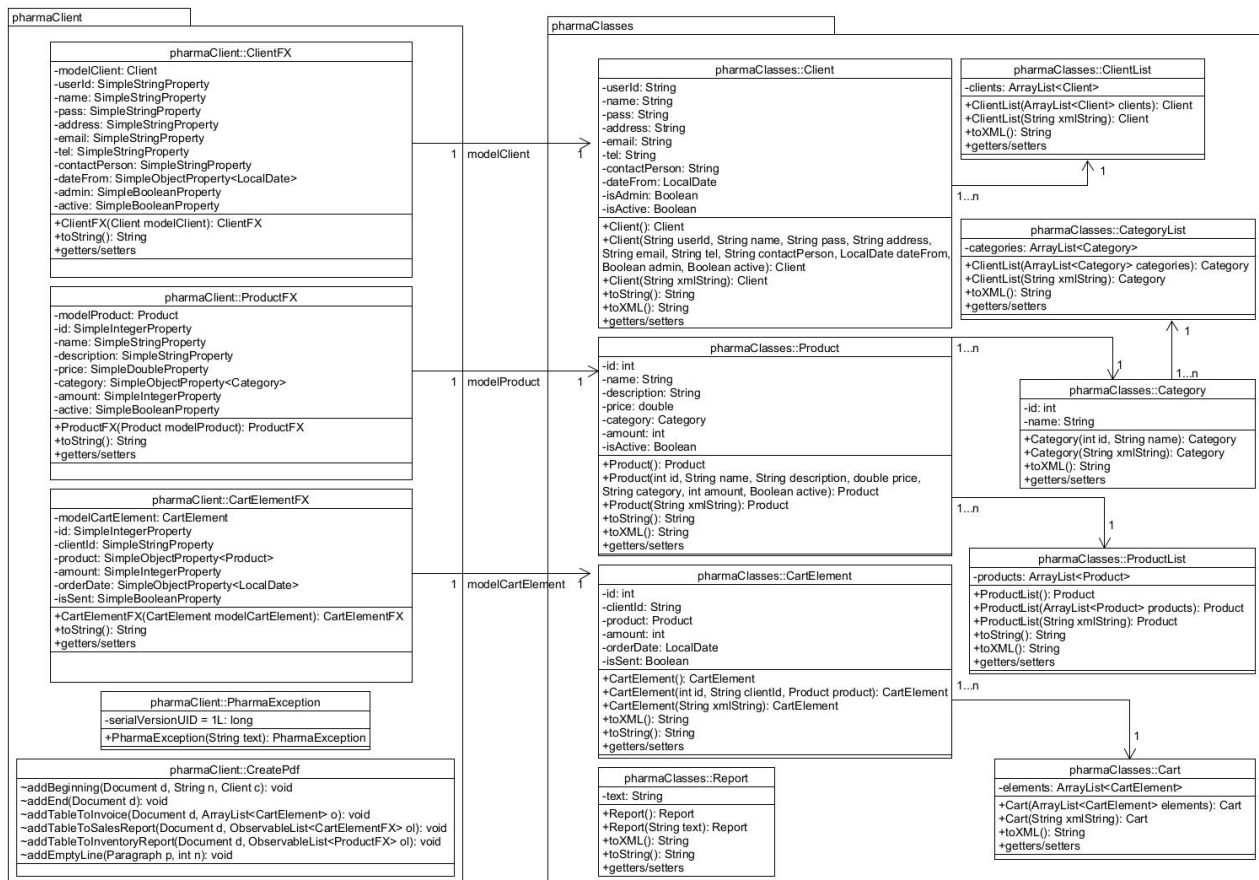




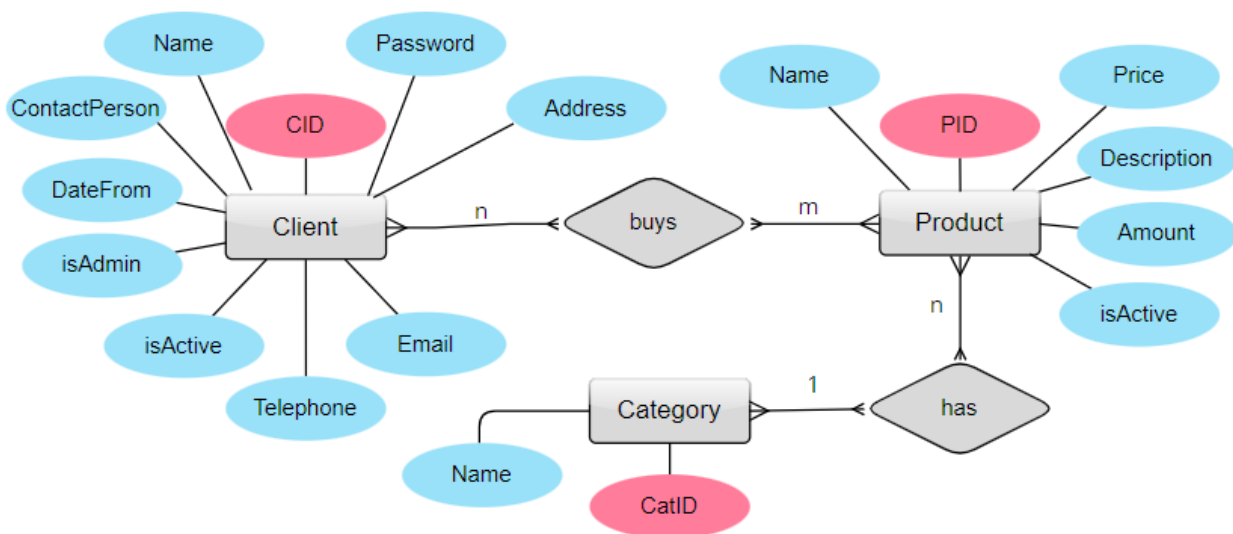


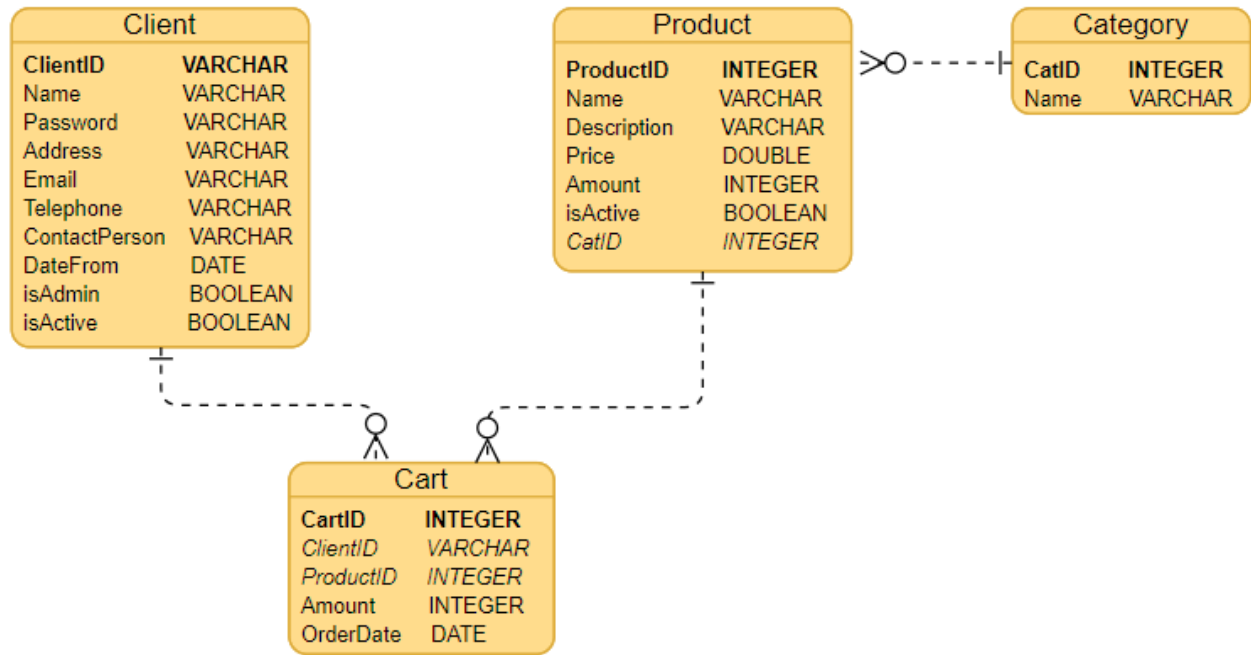


3.5.2 The class diagrams



3.5.3 The database architecture and extended relational model





3.6 Framework conditions

In the project, both a RESTful server and client were employed alongside XML handler for efficient data communication and processing.

4 Definitions and abbreviations

RDBMS	Relational Database Management System
GUI	Graphical User Interface
REST	Representational State Transfer

5 User Guide

5.1 Admin role

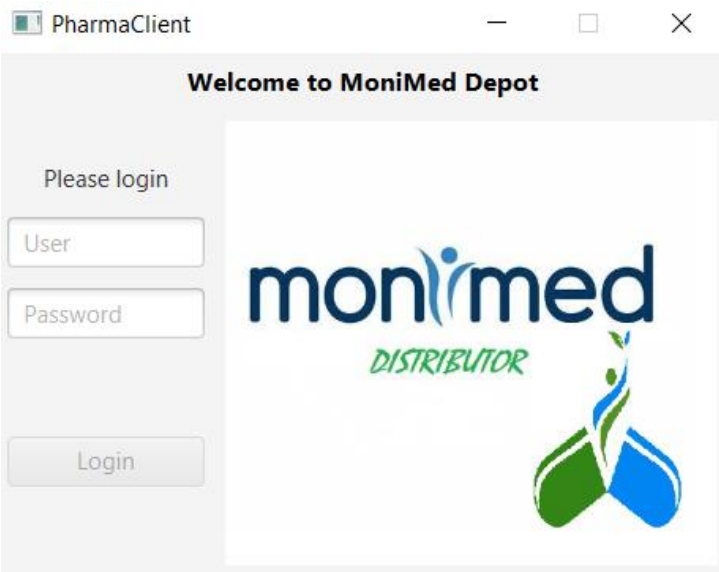
5.1.1 Login process

- Accessible when an admin user logs in.
- Initiates the admin panel for admin-specific functionalities.
- Displays an error dialog for invalid credentials.

To log in to the PharmaClient GUI:

1. Enter your username in the "User" field.
1. Enter your password in the "Password" field.
2. The "Login" button will be enabled when both fields are filled.
3. Click the "Login" button or press Enter to proceed.

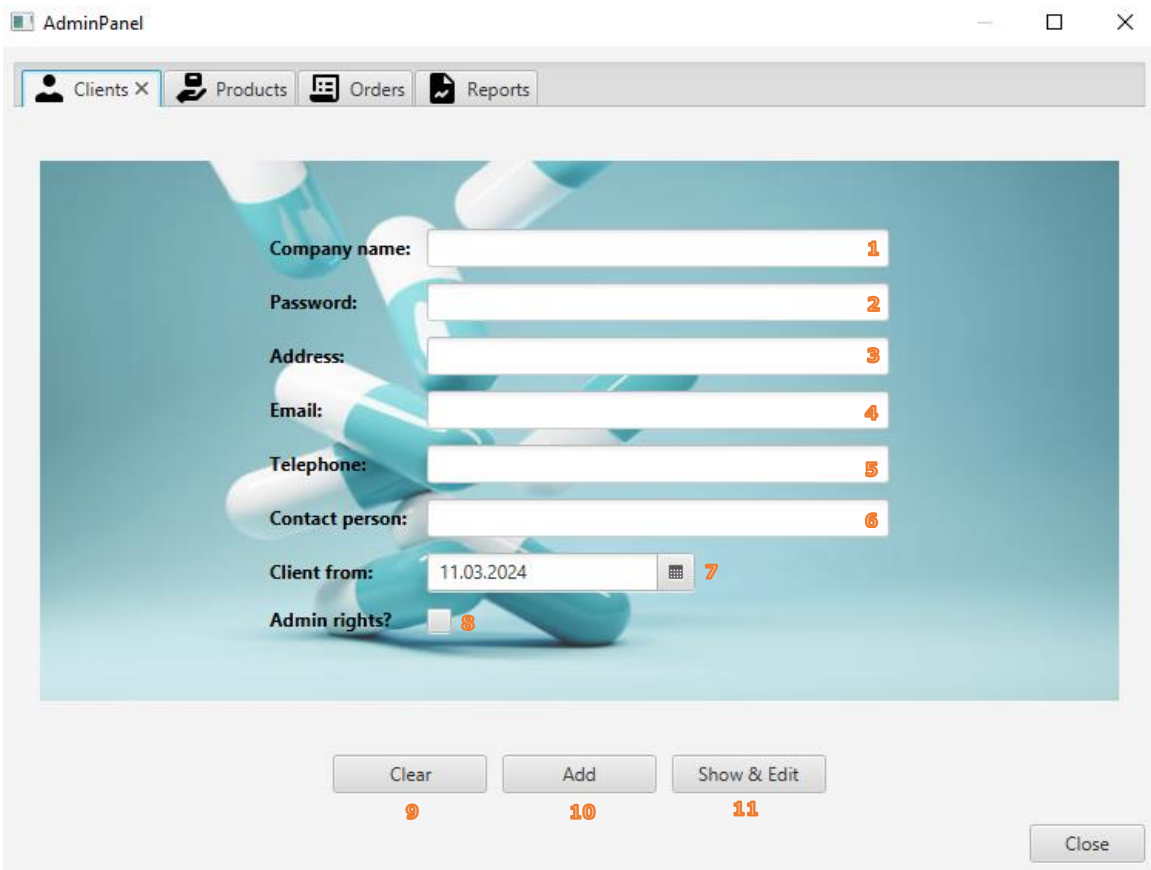
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The main “PharmaClient” GUI

5.1.2 Admin-specific functionalities

5.1.2.1 Client management



The “AdminPanel” GUI, Clients Tab.

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5.1.2.2 Product management

The screenshot shows the 'AdminPanel' window with the 'Products' tab selected. The form contains the following elements:

- Name:** A text input field (1) with a maximum length of 200 characters.
- Description:** A text input field (2) with a maximum length of 200 characters.
- Price per item (in EUR):** A numeric input field (3) with a value of 0.00.
- Category:** A dropdown menu (4) with a 'New category' button (6) next to it.
- Total quantity:** A numeric input field (5).
- Buttons:** 'Clear' (7), 'Add' (8), 'Show & Edit' (9), and 'Close'.

The "AdminPanel" GUI, Products Tab.

Adding a new product:

1. Enter a product name (1).
2. Input a description of the product (2). Max. of 200 characters is possible.
3. Provide a unit price (3).
4. Choose a product category from the list (4).
5. Enter a total number of the product (5).
6. Press the **Add** button to complete the process (8). A confirmation dialog will appear to finalize the addition of the new product, or an error dialog if any issue occurs during the process.

Adding a new product category:

1. Click on the **New category** button (6).
2. A new field will emerge with the prompt text "type and press Enter".
3. Enter the name for the new category in the field.
4. Press the Enter key.
5. The new category will appear in the category list (4).

Clearing entered data:

- To clear the entered data, press the **Clear** button (7). The fields 1-5 will be cleared.

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Displaying and editing clients:

1. Press the **Show & Edit** button (9) to access the product list.
2. This action opens a new window titled, "The product list" (10).
3. Double-click on the field you wish to edit, make the necessary changes, and confirm by pressing Enter.
4. For **isActive** column, check or uncheck the box to indicate the current availability of the product (active or inactive).

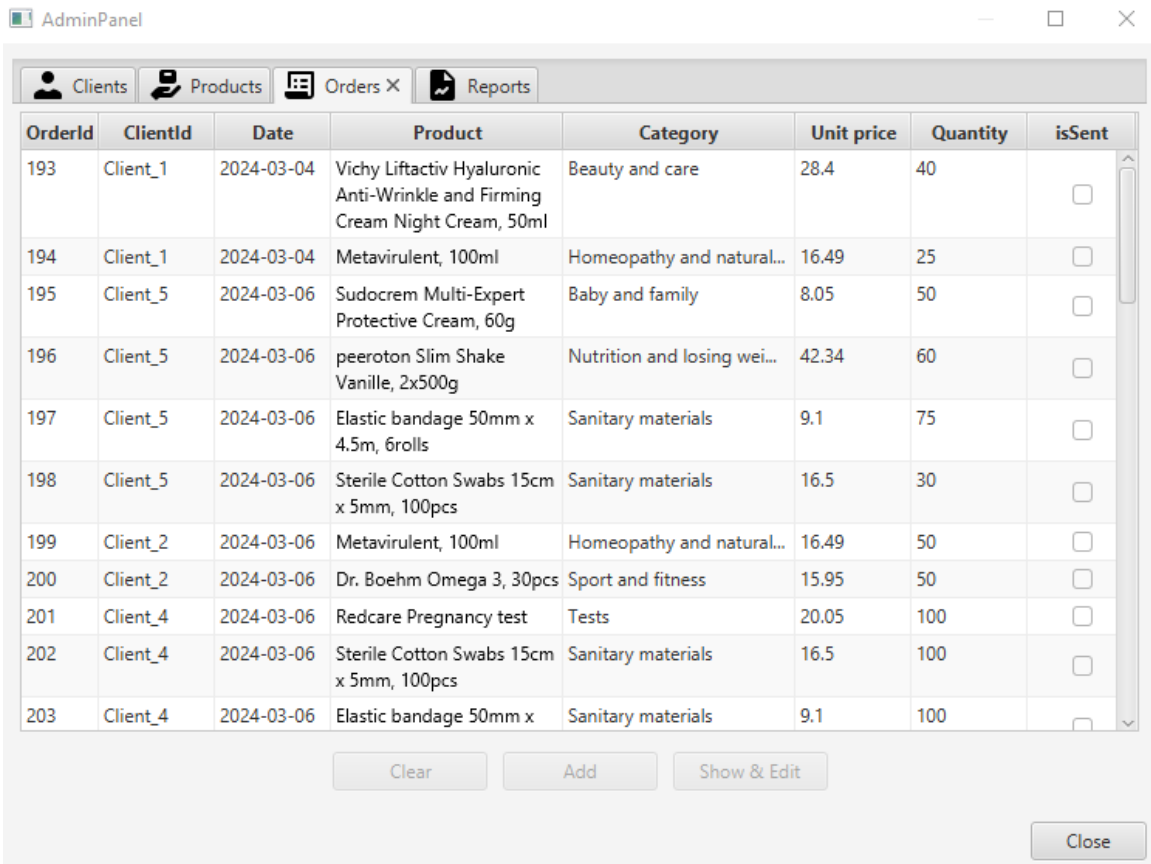
The product list 10

Name	Description	Price	Category ▲	Quantity	isActive
Sudocrem Multi-Expert Protective Cream, 60g	Versatile protection in a cream. Trusted for various skin needs, it soothes and shields for optimal skincare.	8.05	Baby and family	4630	<input checked="" type="checkbox"/>
Eucerin Hyaluron-filler day care for dry skin, 50ml	Provides the skin with the necessary moisture, helps fill deep wrinkles and tighten facial contours.	34.9	Beauty and care	340	<input checked="" type="checkbox"/>
Vichy Liftactiv Hyaluronic Anti-Wrinkle and Firming Cream Night Cream, 50ml	The anti-aging night cream provides intensive care and stimulates the skin's collagen production to visibly reduce signs of aging.	28.4	Beauty and care	9500	<input checked="" type="checkbox"/>
Aspirin +C, 40pcs	Aspirin+C effervescent tablets have a quick, effervescent effect against the first signs of colds such as sore throats and headaches - with the plus	13.45	Drugs	140	<input checked="" type="checkbox"/>

Close

"The product list" window.

5.1.2.3 Order management

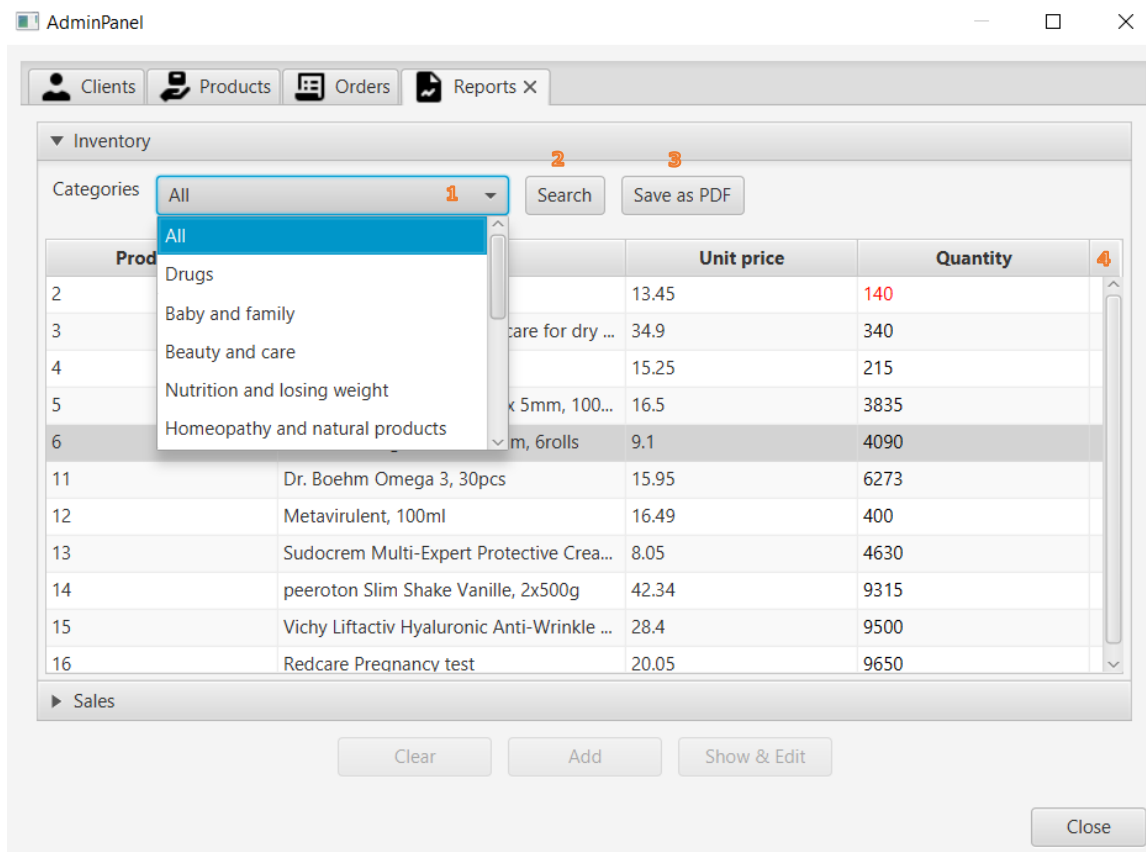


The "AdminPanel" GUI, Orders Tab.

Editing dispatched orders:

- This screen only displays orders that have an unsent status. To change the status, tick the **isSent** box.

5.1.2.4 Report management for inventory purposes



The "AdminPanel" GUI, Reports Tab for Inventory.

Generating and saving an Inventory Report:

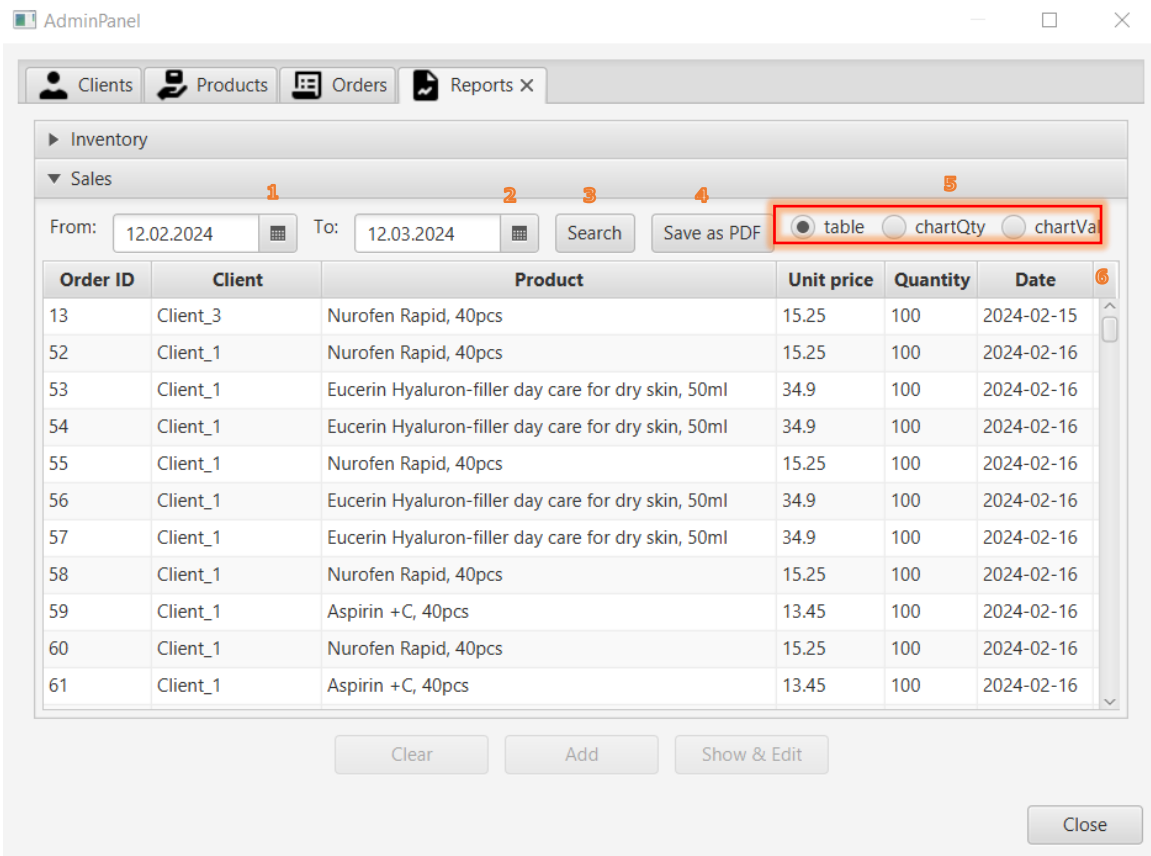
1. Click on the list (1) and select the desired product category.
2. Press the **Search** button (2) to list the details of all the products from the chosen category in the Table View (4).
3. Save the report as PDF file by clicking on the **Save as PDF** button (3). The file will be stored under the path `"/../Reports/"` with the name `"inventory_Today'sDate.pdf"`.
4. Products with quantities below 150 are highlighted in red font for quick identification.

5.1.2.5 Report management for sales purposes

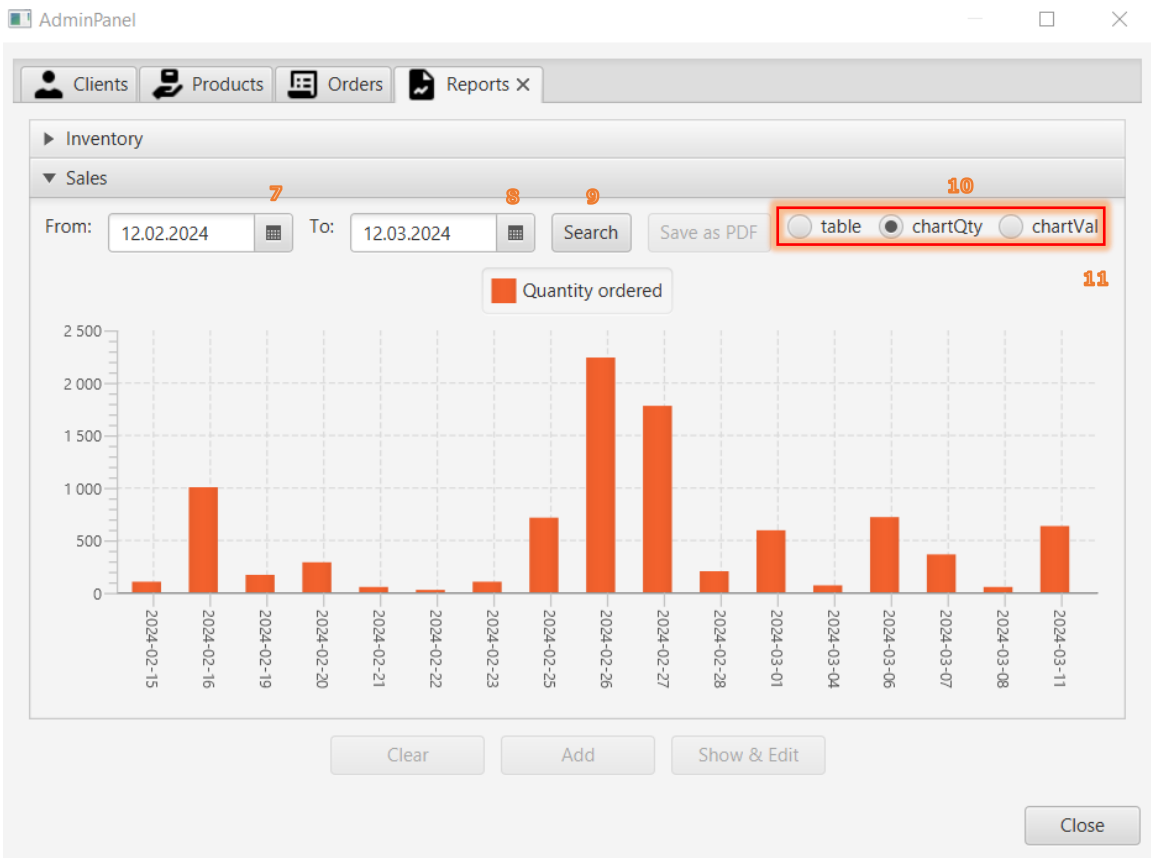
Generating and saving a Sales Report:

1. Choose a time period by selecting the **From** (1) and **To** dates (2).
2. Press the **Search** button (3) to list the details of all the sales on the chosen time period in the Table View (6).
3. Save the report as PDF file by clicking on the **Save as PDF** button (4). The file will be stored under the path `"/../Reports/"` with the name `"sales_Today'sDate.pdf"`.
4. The Table View is displayed by selecting the **table** in (5) and is the default setting.

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The "AdminPanel" GUI, Reports Tab for Sales -Table View.



The "AdminPanel" GUI, Reports Tab for Sales - Chart View.

Generating a Chart View:

1. Choose between the **chartQty** or **chartVal** (10), based on whether you want to display the total number or the total value of the sold products, respectively.
2. Define the time period by selecting the **From** (7) and **To** dates (8).
3. Press the **Search** button (9) to display the chart representing the sales data within the selected time frame in the chart panel (11).

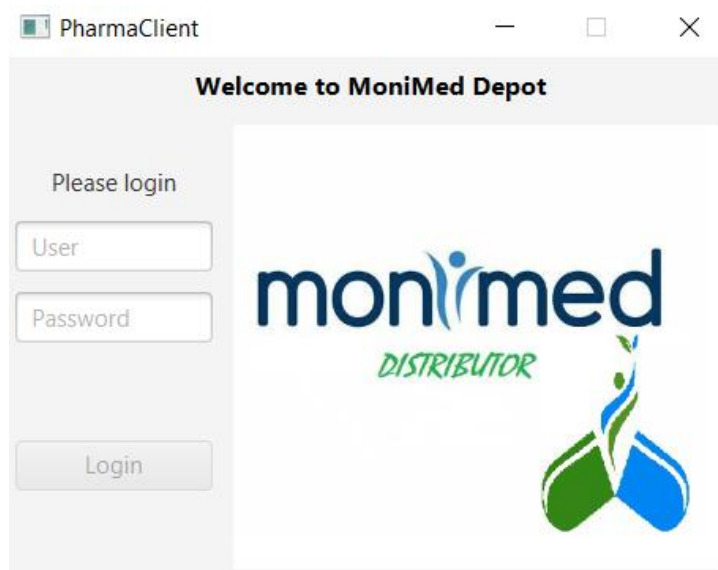
5.2 Client role

5.2.1 Login process

- Accessible when a client user logs in.
- Initiates the client panel for client-specific functionalities.
- Displays an error dialog for invalid credentials.

To log in to the PharmaClient GUI:

1. Enter your username in the "User" field.
2. Enter your password in the "Password" field.
3. The "Login" button will be enabled when both fields are filled.
4. Click the "Login" button or press Enter to proceed.



The main "PharmaClient" GUI

5.2.2 Client-specific functionalities

5.2.2.1 Personal data management

Updating personal data:

1. Make essential changes in the fields 1-6 to update personal information.
2. Press **Update** button (7) to save the modifications in the database.
3. A confirmation dialog will be displayed to confirm the updates, or an error dialog if any issue occurs during the process.

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ClientPanel

Personal X Catalog Orders

Company name: SuperPharma 1

Password: 98765 2

Address: Hetzendorferstr. 107, 1130 Vienna 3

Email: orders@superpharma.com 4

Telephone: +43125896574 5

Contact person: Mag. Manfred Pischler 6

Update 7 Add to cart Pay Close

The "ClientPanel" GUI, Personal Tab.

5.2.2.2 Browsing the Catalog and placing orders

ClientPanel

Personal X Catalog X Orders

Name	Description	Price	Category 1 ▲	Quantity 2
Sudocrem Multi-Expert Protective Cream, 60g	Versatile protection in a cream. Trusted for various skin needs, it soothes and shields for optimal skincare.	8.05	Baby and family	100 3
Vichy Liftactiv Hyaluronic Anti-Wrinkle and Firming Cream Night Cream, 50ml	The anti-aging night cream provides intensive care and stimulates the skin's collagen production to visibly reduce signs of aging.	28.4	Beauty and care	100
Eucerin Hyaluron-filler day care for dry skin, 50ml	Provides the skin with the necessary moisture, helps fill deep wrinkles and	34.9	Beauty and care	100

Update 4 Add to cart 5 Pay Close

The "ClientPanel" GUI, Catalog Tab.

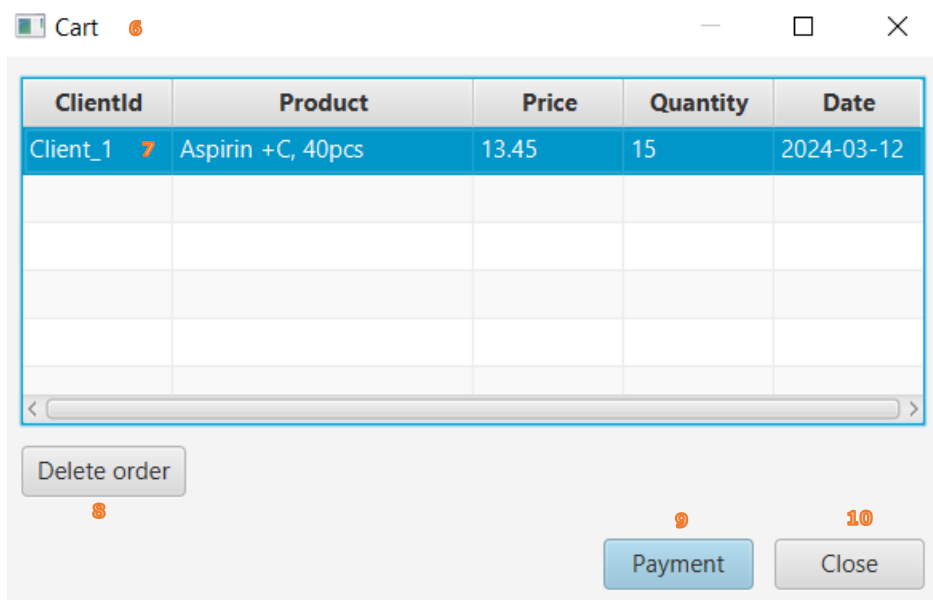
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Browsing the catalog:

1. By default, the view is sorted alphabetically by **Category**.
2. To customize the view, click on the panel with e.g. **Name** or **Price** to sort the products according to your preferences.
3. Upon clicking, an up or down arrow (▲▼, 1) will appear, signifying whether the arrangement is in ascending or descending order within the selected category.
4. The default quantity in the Quantity column is set to 100 products (2); during the ordering process, this number can be adjusted from 1 to the maximum quantity available for a specific product.
5. Use the scroll bar (3) to navigate and view products beyond the currently visible items.

Placing orders:

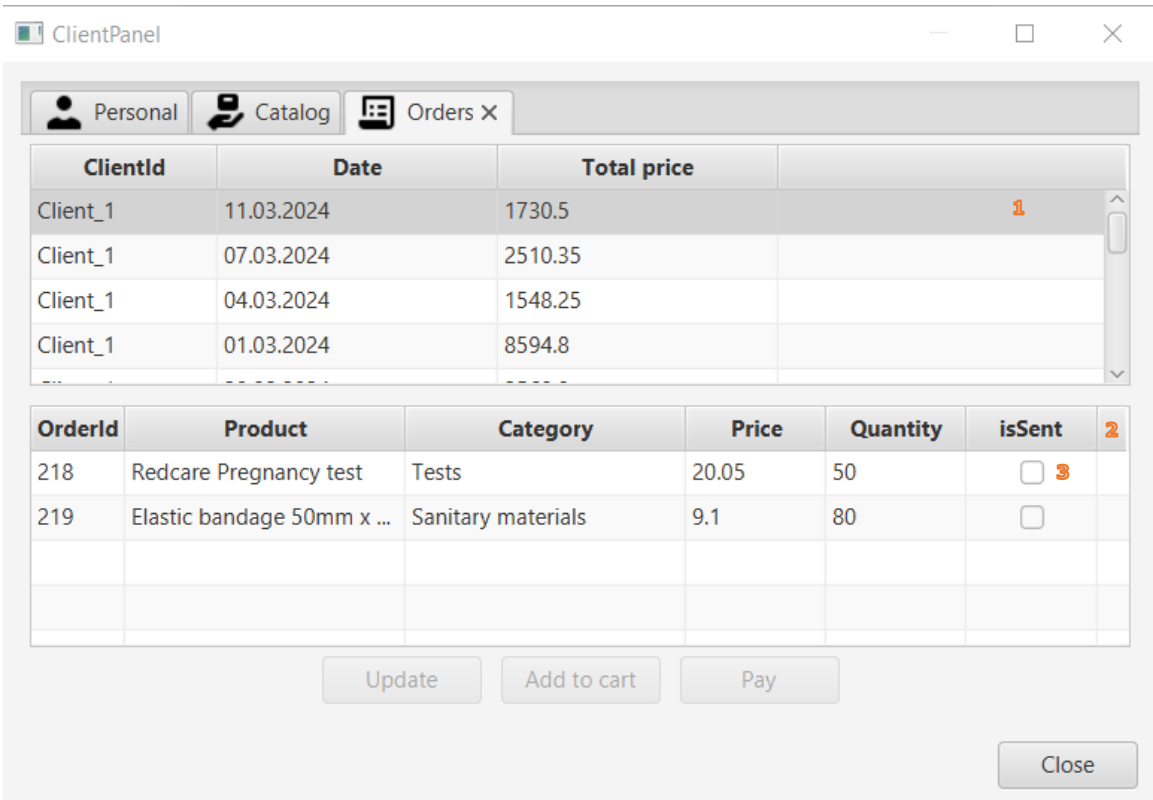
1. Specify the desired quantity of products by entering the number in the **Quantity** (2) column for the respective item, then press Enter. Alternatively, you can effortlessly adjust the quantity by interacting with the Spinner. Each step defaults to a change of 50 units.
2. Click the **Add to cart** button (4).
3. Once the first product is added to the Cart, the **Pay** button (5) becomes accessible.
4. Upon clicking the **Pay** button, you will be directed to the Cart (6) for order review.
5. In the Cart, you can delete an order by selecting it (7) and then clicking **Delete order** button (8).
6. After clicking the **Payment** button (9), the transaction will be completed and the payment invoice will be generated and saved in the folder "../Invoices/" with the name "invoice_ClientID_OrderID.pdf".
7. Clients can continue shopping by leaving the Cart without making a payment, by clicking the **Close** button (10).



The "Cart" window.

5.2.2.3 Viewing the orders

In the Orders Tab, the clients can view their orders without the ability to make alterations. The upper table presents the customer's orders grouped by the order date, accompanied by the total amount paid. Upon selecting a particular order day (1), the lower table will display the detailed orders from that specific day (2). The **isSent** column (3), when checked, indicates that the order has been successfully dispatched.



The "ClientPanel" GUI, Orders Tab.