Software Requirements Document for "Order and Delivery management system"

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0.1	09/13/07	SM	Initial Document

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1 Introduction

1.1 PURPOSE

The purpose of this document is to provide detailed requirement information about the "Order and Delivery management system". Our system is created for companies, which want to add online ordering feature.

1.2 SCOPE

This document will describe the use cases and features of the "Order and Delivery management system"

1.3 DEFINITIONS, ACRONYMNS, ABBREVIATIONS

Term	Description
Administrator	The owner of company, who can control everything and everyone in desktop app
Courier	Worker of company, who will deliver orders to users
Manager	Man, which is staff of company, and which can control orders through desktop app
Order	Order, which is made by user, through web site
System	Group of solutions, which consists of Database, Web application and Desktop application
User	Someone, who visits website and makes order

1.4 REFERENCES

[OMIT]

1.5 OVERVIEW

[OMIT]

2 Overall Description

The "order and delivery management system" is a whole system, which can implement in any café functions, which will allow customers to buy meals online. Also it will give abilities to managers to control orders from users, and will log all operations for administrator, who can check his staff for conscientiousness.

2.1 PRODUCT PERSPECTIVE

This system is similar to many systems, that exist in different companies, but our system is much convenient, than others, cause it will be flexible enough. This system can be installed in any company, it will not ask big requirements. It's uniqueness that it is universal and requirements are very low. Our target audience are cafes and restaurants, which do not currently have online ordering system.

2.1.1 Concept of Operations

"Order and delivery management system" will be based on multiple technologies. Our web site will be written on PHP, our desktop application will be written on Qt, and our optional mobile app will be written using android framework. All this components will be connected through one MySQL database, which will be hosted online.

2.1.2 Major User Interfaces

See Appendix A

2.1.2.1 Example Screenshot and description

See Appendix B

2.1.3 Hardware Interfaces

Web site requires no more than standard personal computer peripherals.

Desktop app also requires no more than standard personal computer peripherals, but it will be more comfortable to managers, if they will use monitors with touch screen.

Android app will require any working android devices, with internet connection.

Central MySQL database will require server with static IP address and with stable power, this paragraph will be provided by us.

2.1.4 Software Interfaces

// example: CGI-URL or function signatures etc (OMIT for now).

2.1.5 Communication Interfaces

// example: modem etc (OMIT for now)

2.1.6 Memory Constraints

// RAM, and other storage constraints (OMIT for now)

2.1.7 Operations
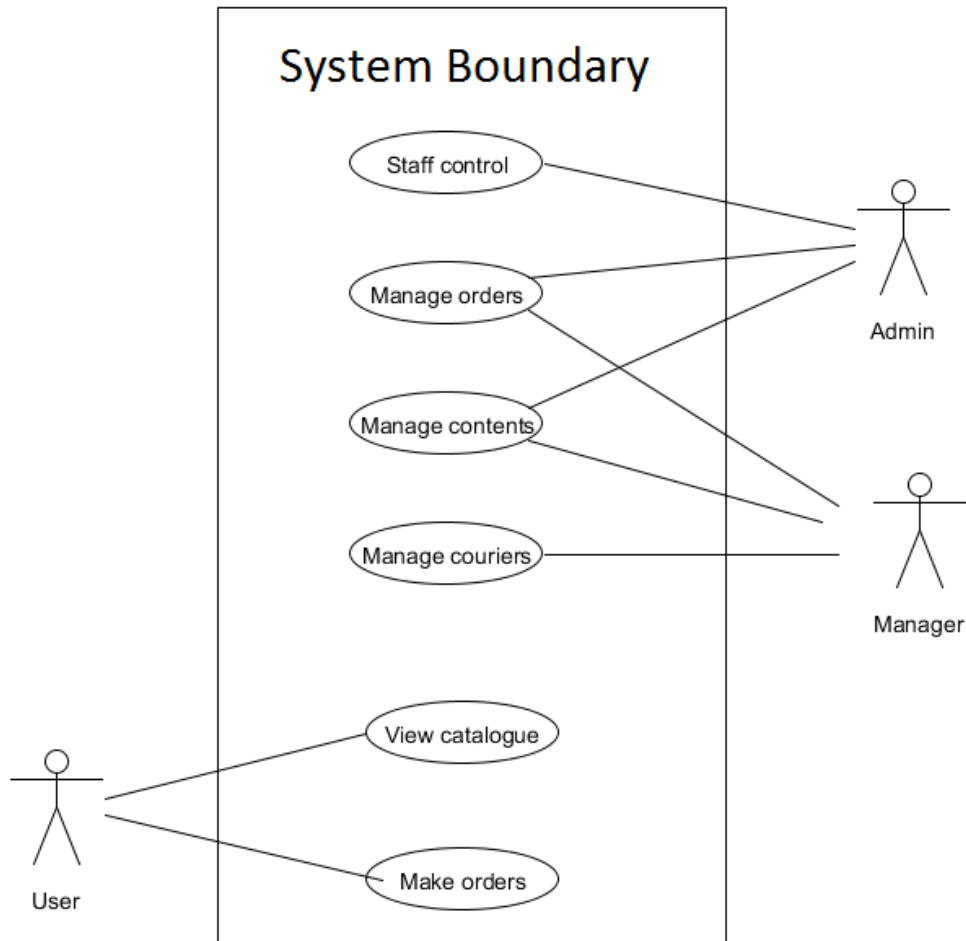
// special operations (if any) (OMIT for now)

2.1.8 Site Adaptation Requirements

//ex: Japanese language etc (OMIT for now)

This use cases diagram shows us all abilities of all users of our "Order and delivery management system". Users can view catalogues and make orders, managers can manage couriers, contents of site and orders, admin can manage contents of site, orders, and staff.

2.2.1 Viewing online catalogue

Pre-condition: Internet browser with active internet connection

This use case describes situation when someone wants to view available meals in company which has our system installed

Actor: User

2.2.1.1 User enters website, to view online catalogue

2.2.1.2 User selects category in which he is interested

2.2.1.3 Users selects product in which he is interested.

2.2.1.4 Small info about product and quantity selection screen appear

2.2.1.5 If user selects other product – current info and quantity selection screen will disappear, and new info and quantity selection screens will appear.

??? SYSTEMОшибка! Используйте вкладку "Главная" для применения Heading 1 к тексту, который должен здесь отображаться.

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2.2.2 Making order

Pre-condition: Internet browser with active internet connection

This use case describes situation when someone wants to order online any of available meals from company which has our system installed
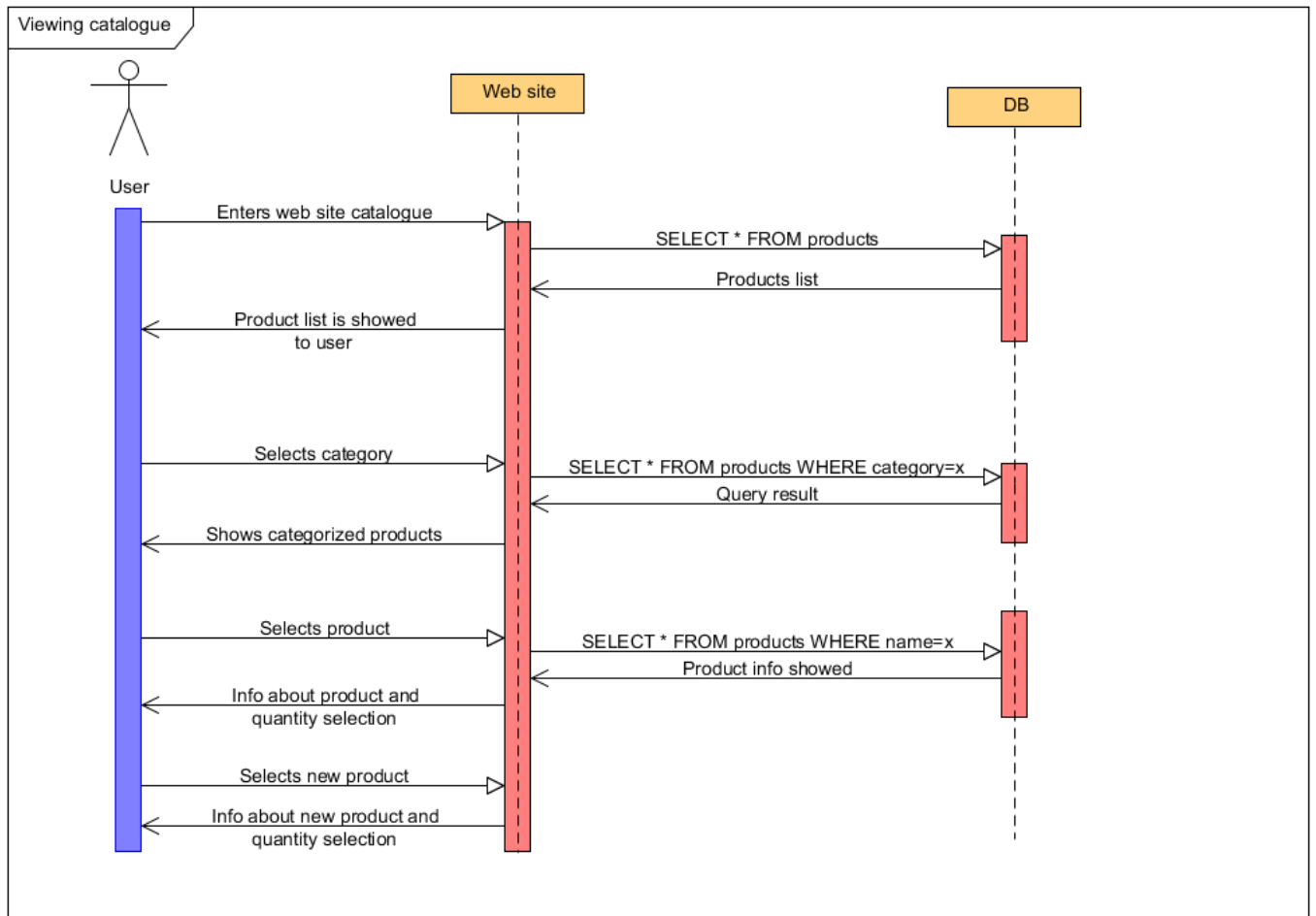
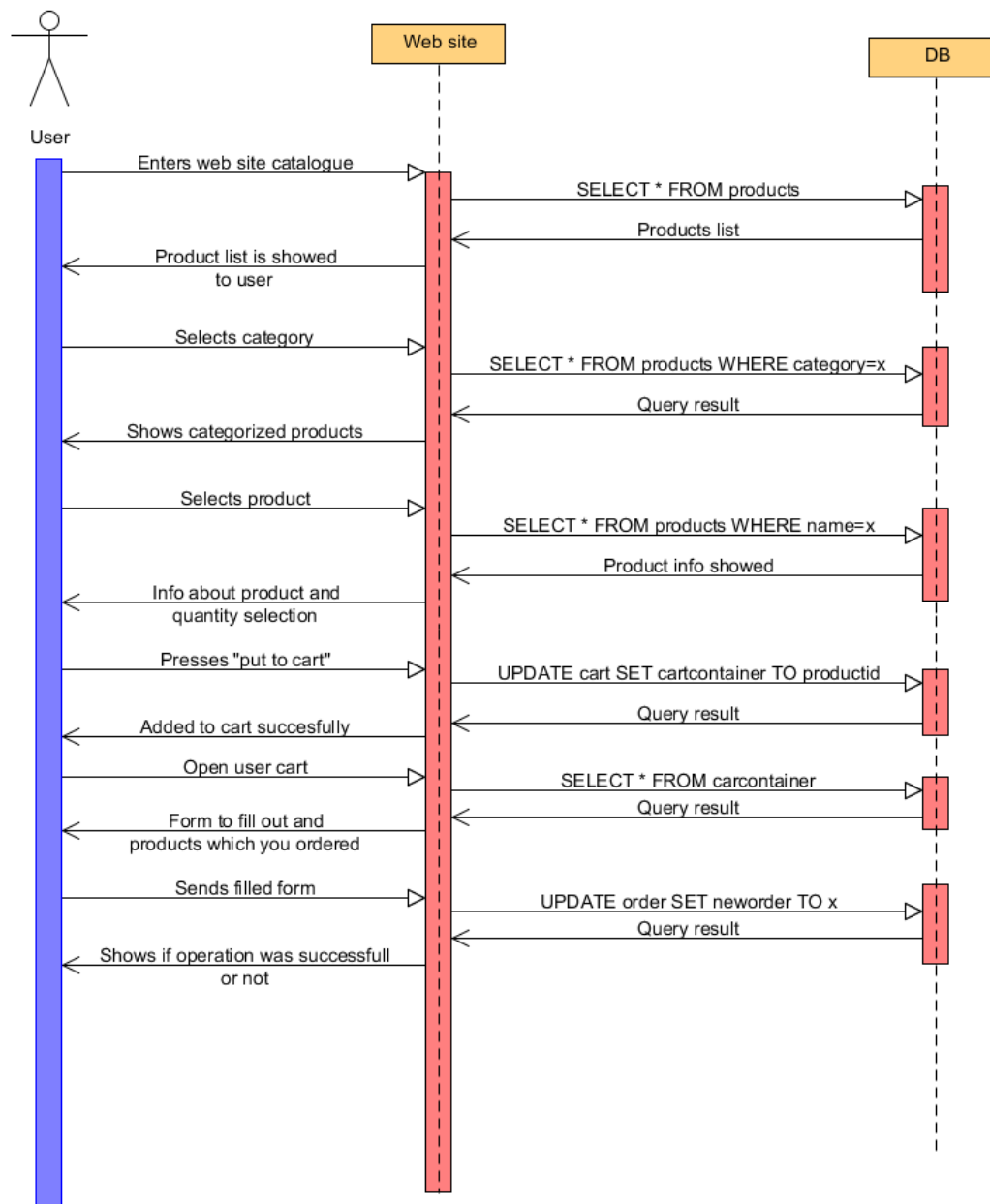**Actor: User**

2.2.2.1 User enters website

2.2.2.2 User selects wanted product from catalogue

2.2.2.3 Selected products go to shopping cart

2.2.2.4 User goes to his shopping cart and fills out all info about delivery

2.2.2.5 User gets message about order status and exits from site

2.2.2.6 If everything gone ok, user receives his meals and pays money to courier

Making order

User

Web site

DB

Enters web site catalogue

SELECT * FROM products

Products list

Product list is showed
to user

Selects category

SELECT * FROM products WHERE category=x

Query result

Shows categorized products

Selects product

SELECT * FROM products WHERE name=x

Product info showed

Info about product and
quantity selection

Presses "put to cart"

UPDATE cart SET cartcontainer TO productid

Query result

Added to cart succesfully

Open user cart

SELECT * FROM carcontainer

Query result

Form to fill out and
products which you ordered

Sends filled form

UPDATE order SET neworder TO x

Query result

Shows if operation was successfull
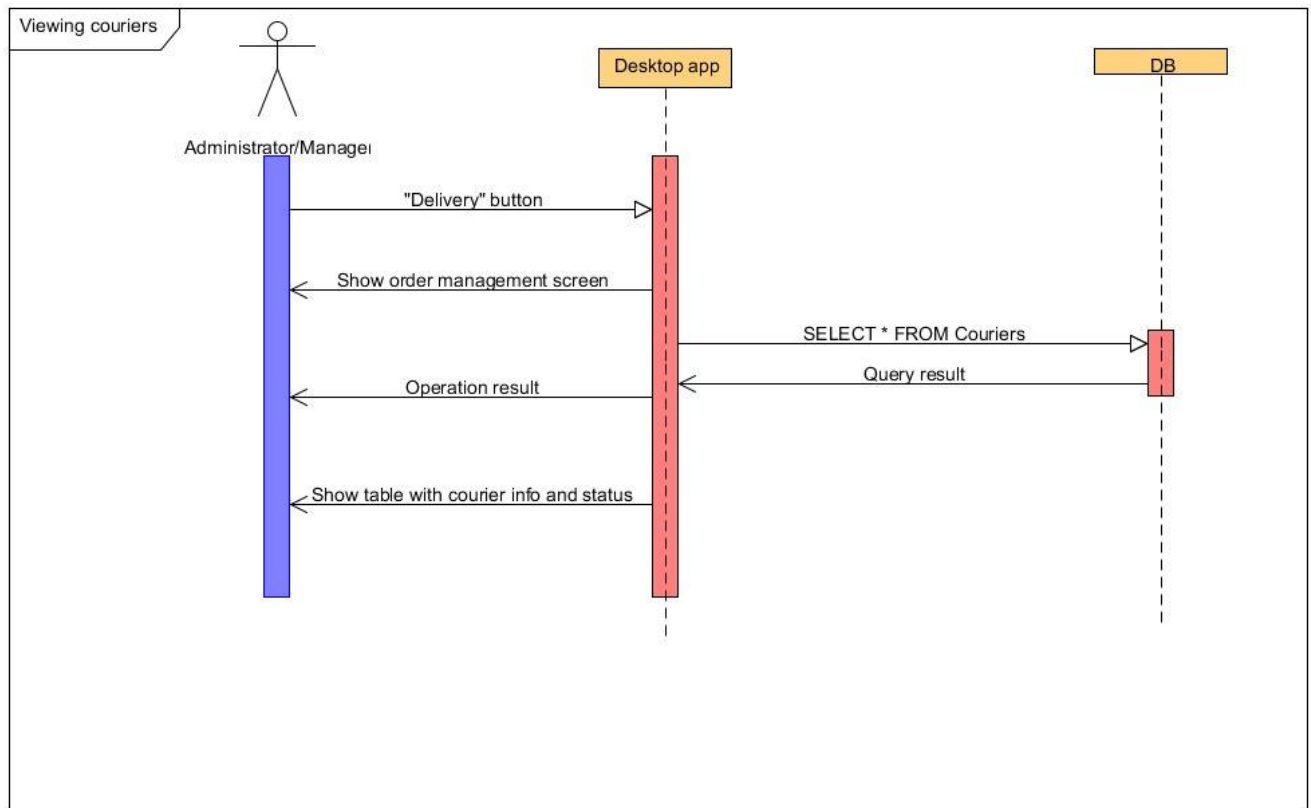or not

2.2.3 Viewing couriers

Pre-condition: Desktop application with active internet connection

This use case happens when manager or administrator wants to view all courier's statuses

Actors: Manager and Administrator

2.2.3.1 Actor navigates to order management window through "Delivery" button

2.2.3.2 Window with courier info and status appears

Viewing couriers

Administrator/Manager → Desktop app: "Delivery" button

Desktop app → Administrator/Manager: Show order management screen

Desktop app → DB: SELECT * FROM Couriers

DB → Desktop app: Query result

Desktop app → Administrator/Manager: Operation result

Desktop app → Administrator/Manager: Show table with courier info and status

2.2.4 Staff control

Pre-condition: Desktop application with active internet connection

This use case happens when administrator wants to add, edit, or remove staff of his company

Actor: Administrator

2.2.4.1 In application through "staff" button he navigates to screen, with all staff of the company and their info

2.2.4.2 He can delete or add staff or edit current staff's information

2.2.4.3 To delete staff administrator must press "delete" button, and selected staff will be deleted from database

2.2.4.4 To edit staff he must press button "edit" in lower right corner of that person, which he want to edit

2.2.4.5 In new opened window he should change info, which he needs to change and press "Save" to save, or "Cancel" to rollback actions

2.2.4.6 In order to add new staff he must press "add staff" button

2.2.4.7 In new opened window he must enter all needed info and press "save" button
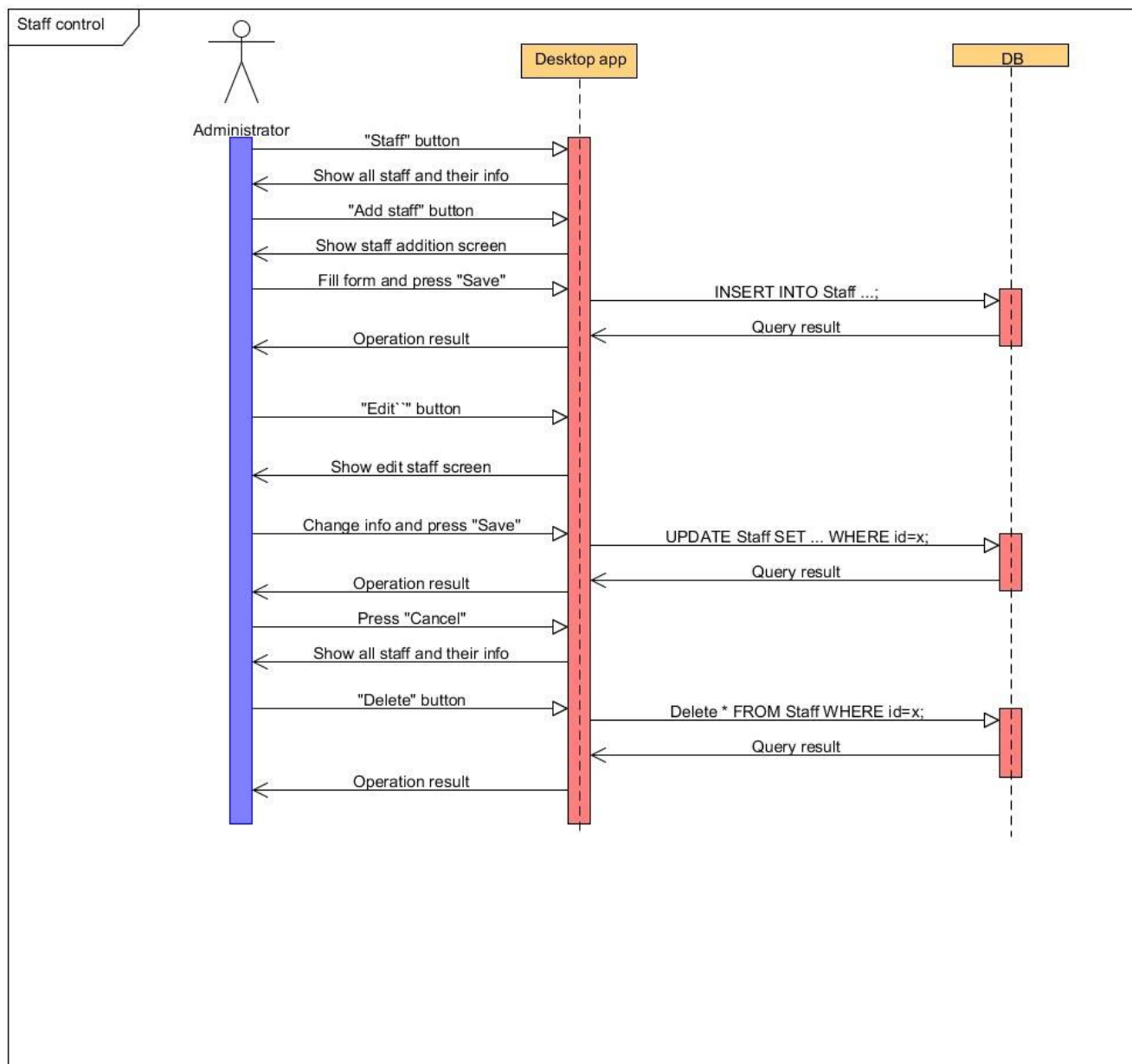
2.2.5   Administrator managing content

Pre-condition: Desktop application with active internet connection

This happens when administrator wants to add, edit, or remove products, which are showed in online catalogue

Actor: Administrator

2.2.5.1 Administrator presses "Manage content" button to navigate to content management screen in application

2.2.5.2 If administrator wants to add product, then he must press "Add product" button and navigates to product addition screen

2.2.5.3 Then administrator fills form and presses "Add" button to add product, or "Cancel" button to go back to content management screen

2.2.5.4 Administrator receives acknowledgement if operation completed successfully or not
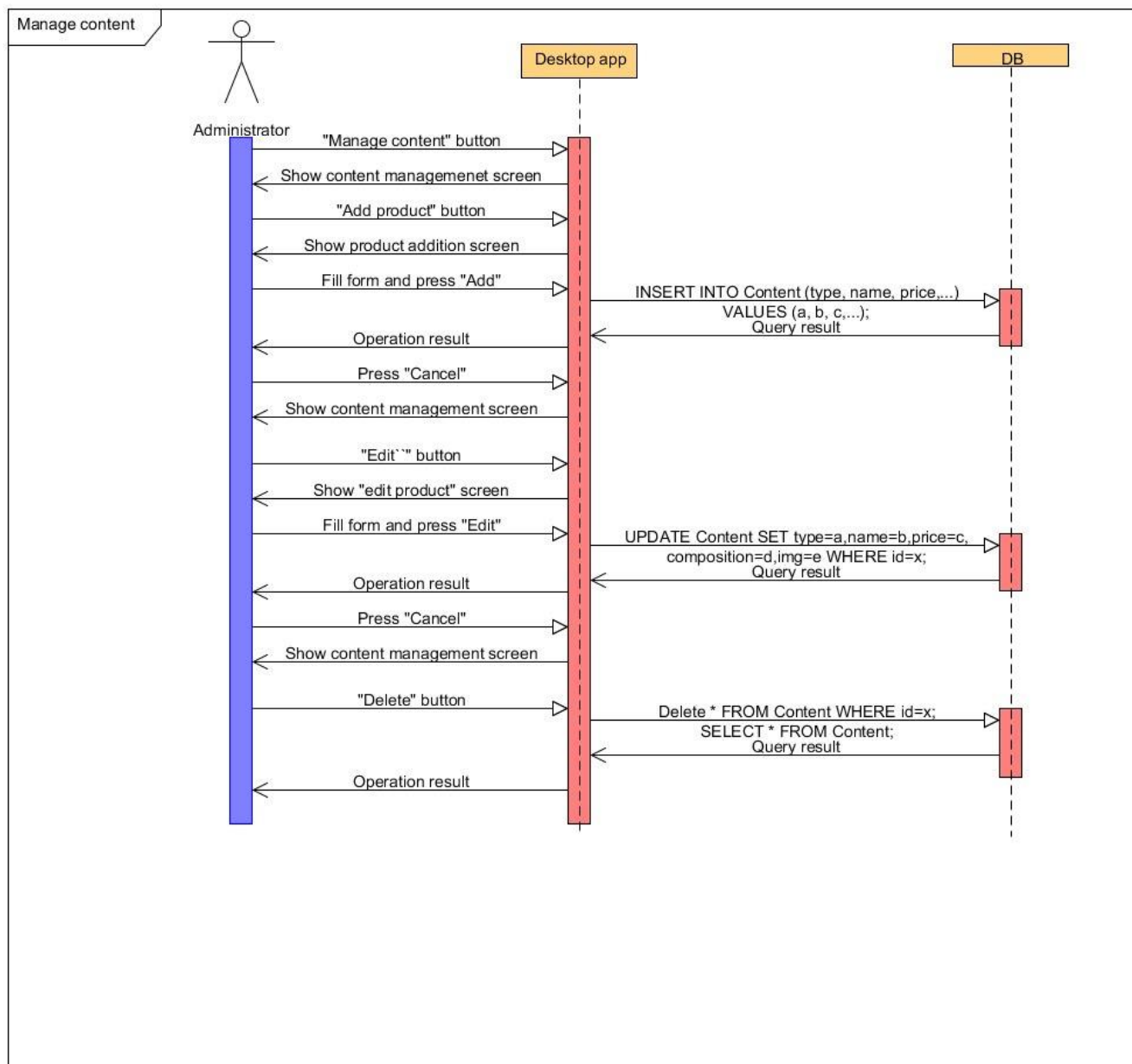
2.2.5.5 If administrator wants to edit content, then he must press "Edit" button and goes to screen which will allow product edition

2.2.5.6 Then administrator fills form and presses "Edit" button to apply changes, or "Cancel" button to go back to content management screen

2.2.5.7 Administrator receives acknowledgement if operation completed successfully or not

2.2.5.8 If administrator wants to delete content, he should press "Delete" button

2.2.5.9 Administrator receives acknowledgement about status of operation

Manage content

Administrator — Desktop app — DB

"Manage content" button →
← Show content managemenet screen
"Add product" button →
← Show product addition screen
Fill form and press "Add" →
INSERT INTO Content (type, name, price,...) VALUES (a, b, c,...); →
← Query result
← Operation result
Press "Cancel" →
← Show content management screen
"Edit`" button →
← Show "edit product" screen
Fill form and press "Edit" →
UPDATE Content SET type=a,name=b,price=c, composition=d,img=e WHERE id=x; →
← Query result
← Operation result
Press "Cancel" →
← Show content management screen
"Delete" button →
Delete * FROM Content WHERE id=x; SELECT * FROM Content; →
← Query result
← Operation result

2.2.6 Manager managing content

Pre-condition: Desktop application with active internet connection

This use case usually happens when manager wants to add, edit or delete products from online catalogue

Actor: Manager

2.2.6.1 Manager presses "Manage content" button to navigate to content management screen in application

2.2.6.2 If manager wants to add product, then he must press "Add product" button and navigates to product addition screen

2.2.6.3 Then manager fills form and presses "Add" button to add product, or "Cancel" button to go back to content management screen

2.2.6.4 Manager receives acknowledgement if operation completed successfully or not
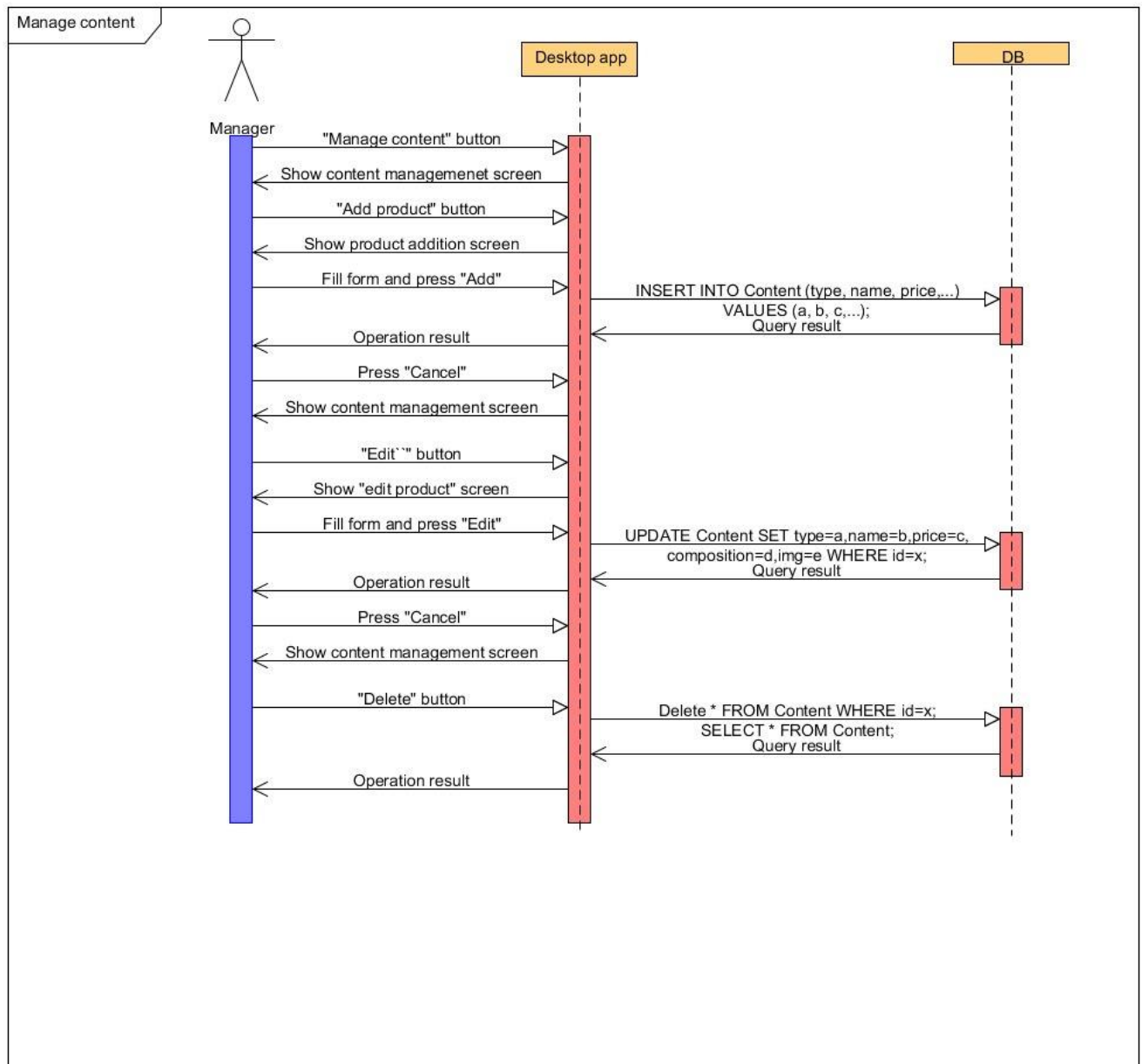
2.2.6.5 If manager wants to edit content, then he must press "Edit" button and goes to screen which will allow product edition

2.2.6.6 Then manager fills form and presses "Edit" button to apply changes, or "Cancel" button to go back to content management screen

2.2.6.7 Manager receives acknowledgement if operation completed successfully or not

2.2.6.8 If manager wants to delete content, he should press "Delete" button

2.2.6.9 Administrator receives acknowledgement about status of operation

Manage content

Manager

"Manage content" button
Show content managemenet screen
"Add product" button
Show product addition screen
Fill form and press "Add"

INSERT INTO Content (type, name, price,...)
VALUES (a, b, c,...);
Query result

Operation result
Press "Cancel"
Show content management screen
"Edit`" button
Show "edit product" screen
Fill form and press "Edit"

UPDATE Content SET type=a,name=b,price=c,
composition=d,img=e WHERE id=x;
Query result

Operation result
Press "Cancel"
Show content management screen
"Delete" button

Delete * FROM Content WHERE id=x;
SELECT * FROM Content;
Query result

Operation result

Desktop app

DB

2.2.7   Manage Orders(manager)

Pre-condition: Desktop application with active internet connection

This case usually happens when manager wants to manage orders (accept or decline)

Actor: Manager

2.2.7.1 Manager will press "Orders" button and will be navigated to manage orders menu in application.

2.2.7.2 There he will see table of orders, accept and decline buttons, logout button, back button.
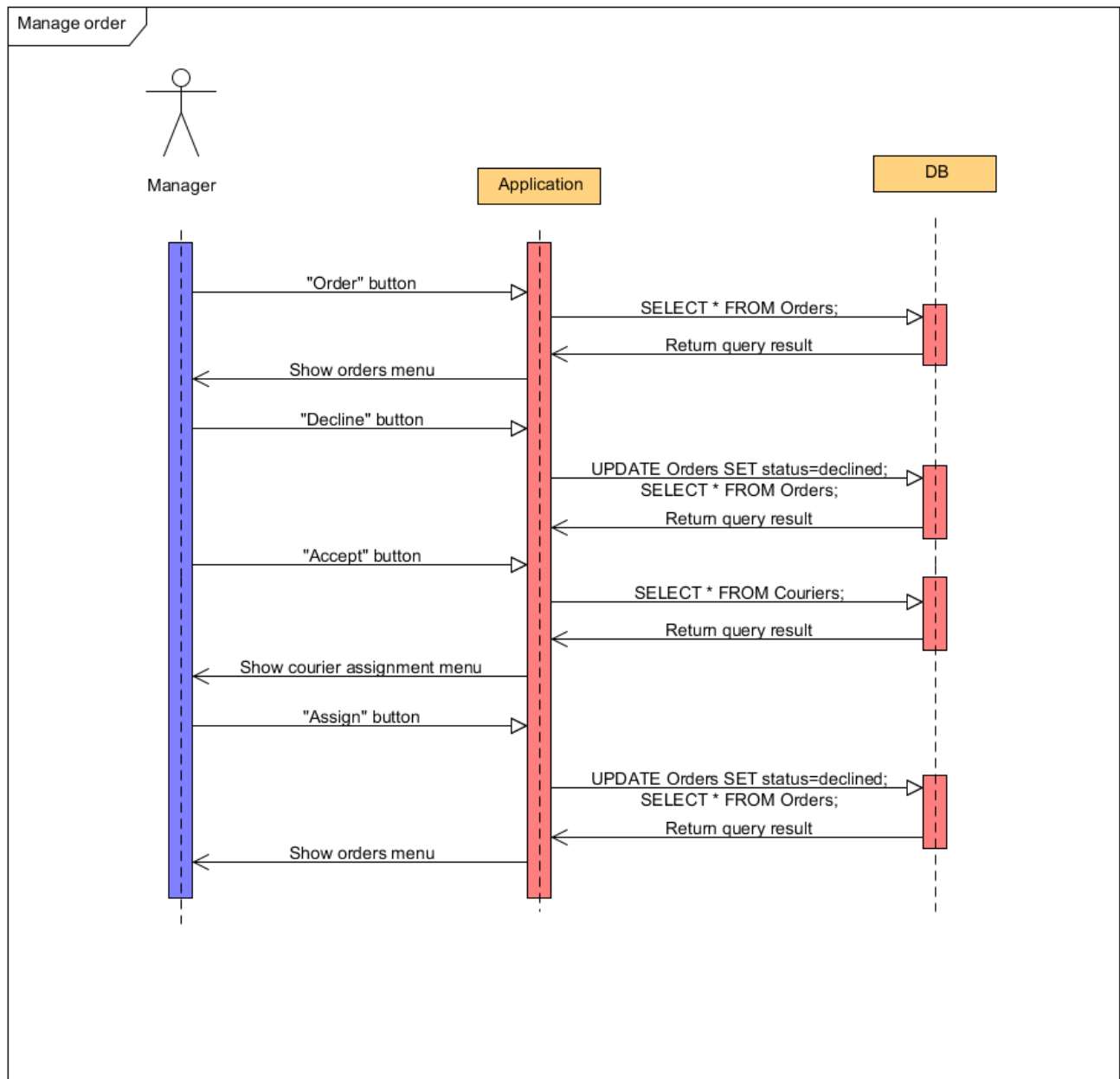
2.2.7.3 For going back to main menu he will press back button.

2.2.7.4 If manager want to decline the order he will press "Decline" button then order will be declined.

2.2.7.5 If manager want to accept the order he will press "Accept" button then he will be navigated to courier assignment window.

2.2.7.6 In courier assignment window manager will see table and accept button.

2.2.7.7 He will choose courier and press "Assign" button.

Manage order

Manager — Application — DB

- "Order" button → Application
- SELECT * FROM Orders; → DB
- Return query result → Application
- Show orders menu → Manager
- "Decline" button → Application
- UPDATE Orders SET status=declined; SELECT * FROM Orders; → DB
- Return query result → Application
- "Accept" button → Application
- SELECT * FROM Couriers; → DB
- Return query result → Application
- Show courier assignment menu → Manager
- "Assign" button → Application
- UPDATE Orders SET status=declined; SELECT * FROM Orders; → DB
- Return query result → Application
- Show orders menu → Manager

2.2.8   Orders (administrator)

Pre-condition: Desktop application with active internet connection

This use case happens when administrator wants to view history of orders

Actor: administrator

2.2.8.1 Administrator will press "Orders" button and will be navigated to orders menu in application.

2.2.8.2 There he will see table of orders, statuses of orders, logout button, and back button.

2.2.8.3 Here he can see which orders been declined, accepted or been unanswered.
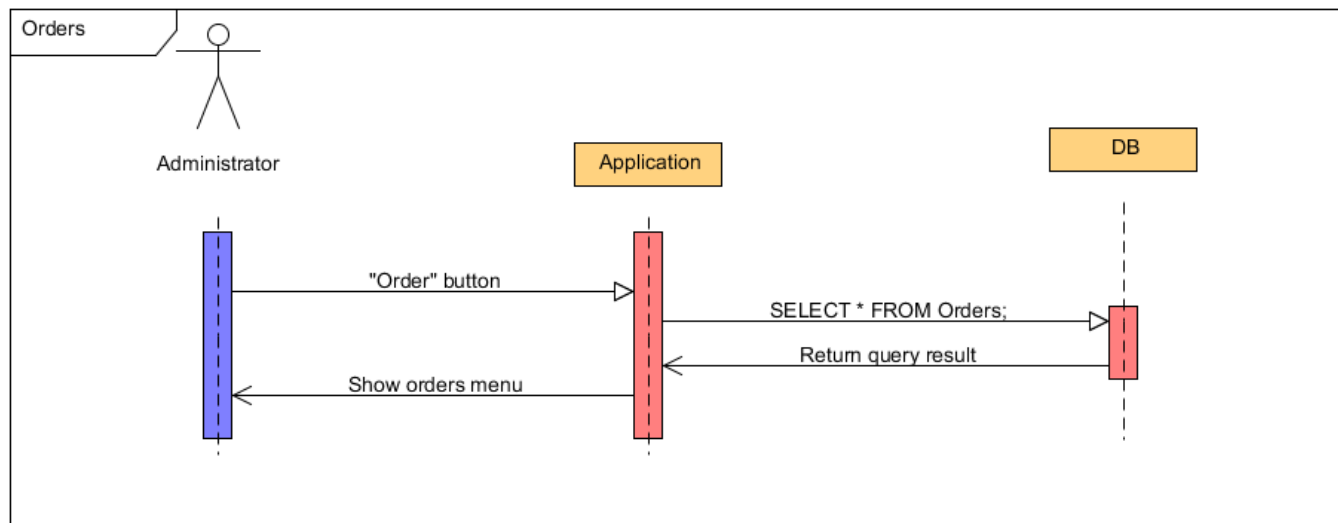
Types	Characteristics	Frequency of usage
User	Has ability to see catalogue and order meals	High
Manager	Has ability to change content of site, manage orders, manage content of site and manage couriers	High
Administrator	Has ability to see history of orders, manage content of site and manage staff	Med

2.3 USER CHARACTERISTICS

2.4 CONSTRAINTS

1. Our web site is used by various users, so it has to be very minimalistic and easy to use and understand.
2. On customer side has to be installed our application for managing site and orders.

2.5 ASSUMPTIONS AND DEPENDENCIES

1. Desktop application must be installed on customer side. So managing everything depended on desktop application.

3   Specific Requirements

3.1   EXTERNAL INTERFACE REQUIREMENTS

3.1.1   User Interfaces

3.1.2   Hardware Interfaces

None

3.1.3   Software Interfaces

None

3.1.4   Communications Interfaces

3.2 FEATURES

3.2.1 **Login (see screen 1)**

3.2.5.1 Login page

3.2.1.1.1(M)The application shall display fields where to enter user's data(login, password)

3.2.1.1.2(M)The application shall allow to users to press the "Forget Password" button

> **3.2.1.1.2.1** (M)If "Forget Password" button pressed the window "Forget Password" will appear with "E-mail" text field.

> **3.2.1.1.2.2** (M)The window "Forget Password" shall allow users to cancel action via "Cancel" button.

> **3.2.1.1.2.3** (M)The window "Forget Password" shall allow users to confirm action via "Accept" button.

>> **3.2.1.1.2.3.1** (M)The system should generate new password and send it to e-mail which was provided in "Forget Password" window field, if "Accept" button was pressed.

3.2.1.1.3(M)The application shall allow user to press the "Accept" button.

> 3.2.1.1.3.1 (M)The application shall redirect to main menu window.

3.2.1a Error Handling for Login

> **3.2.1.1a** (M)The Application shall print out the error message if incorrect login was entered.

> **3.2.1.1b** (M)The Application shall print out the error message if incorrect password was entered.

> **3.2.1.1c** (M)The Application shall print out the error message if incorrect e-mail was entered in "Forget Password" menu.

3.2.1b Inverse Requirement for Login

> **3.2.1.1b** (M)The application shall not give permission to enter the main menu and use function that are inside the application for user who typed wrong data (password or login).

3.2.2 Cart (see screens 1,6,7)
3.2.2.1 The cart icon

3.2.2.1.1 (M)The web site shall always display cart in all pages except cart page.

3.2.2.1.2 (M)The web site shall always display cart icon and the sum of all ordered products.

3.2.2.1.3 (M)The web site shall always display cart on the right corner of site.

3.2.2.1.4 (M)The web site shall allow user to press on cart to redirect to "Cart" page.(Which requirements are shown in **3.2.2.2**)

3.2.2.1a Inverse Requirement for cart icon

3.2.2.1.1a (M)The cart sum of orders shall not show wrong sum of all ordered products.

3.2.2.1.2a (M)The cart shall not animate (jump, flip, etc.).

3.2.2.1.3a (M)The cart shall not hide when user move on page.

3.2.2.1.4a (M)The cart shall not fade or change colors whatever user do.

3.2.2.1.5a (M)The cart shall not be shown on cart page.

3.2.2.2 The cart page

3.2.2.2.1 (M)The "Cart" page shall show navigation panel of web site "Menu", "About Company", "Promotions" , "Contacts" buttons. Every button shall redirect to corresponding pages.

3.2.2.2.2 (M)The "Cart" page shall show products that been ordered, their prices, count and total price.

3.2.2.2.3 (M)The "Cart" page shall show terms of delivery.

3.2.2.2.4 (M)The "Cart" page shall allow the user to type in the required text field "Name" for ordering.

3.2.2.2.5 (M)The "Cart" page shall allow the user to type in the required text field "Surname" for ordering.

3.2.2.2.6 (M)The "Cart" page shall allow the user to type in the required text field "Address" for ordering

3.2.2.2.7 (M)The "Cart" page shall allow the user to type in the required text field "Phone" for ordering.

3.2.2.2.8 (M)The "Cart" page shall allow the user to type in the required text field "E-mail" for ordering.

3.2.2.2.9 (M)The "Cart" page shall allow the user to type in the text field "From which amount needed change" for ordering.

3.2.2.2.10 (M)The "Cart" page shall allow the user to type in the text area "Extra information for delivery" for ordering.

3.2.2.2.11 (M)The "Cart" page shall allow user to decrease or increase amount of items.

3.2.2.2.12 (M)The "Cart" page shall allow user to delete order via "Delete" icon.

3.2.2.2.13 (M)The "Cart" page shall allow user to order via "Order" button.

3.2.2.2.14 (M)The "Cart" page shall show order acceptance text.

3.2.2.2a **Error Handling for cart page**

    3.2.2.2.1a (M)The "Cart" page shall print out the error message if incorrect values where entered in required text fields.

3.2.2.2b **Inverse Requirements for cart page**

    3.2.2.2.1b (M)The "Cart" page shall not give permission to order if not all required text fields are filled correctly.

3.2.3 Add Product(screen 5)
3.2.3.1 Adding new product
3.2.3.1.1 (M)The Application shall provide "Products management" button in main menu.

3.2.3.1.1.1 (M)If "Products management" button pressed application shall route to product management window.

3.2.3.1.1.1.1 (M)The application shall provide "Add product" button.

3.2.3.1.1.1.1.1 (M)If "Add product" button pressed application shall route to add product window.

3.2.3.1.1.1.1.2 (M)The Application shall allow to users to press the "Back" button.(See x.x.x.x)

3.2.3.1.1.1.1.3 (M)The Application shall allow to users to press the "Logout" button.(See x.x.x.x)

3.2.3.1.1.1.1.4 (M)The Application shall allow the user to type in the required text field "Type".

3.2.3.1.1.1.1.5 (M)The Application shall allow the user to type in the required text field "Name of Product".

3.2.3.1.1.1.1.6 (M)The Application shall allow the user to type in the required text field "Price".

3.2.3.1.1.1.1.7 (M)The Application shall allow the user to type in the required text area "Ingredients".

3.2.3.1.1.1.1.8 (M)The Application shall allow the user to choose photo in the "Photo" field.

3.2.3.1.1.1.7.1 (M)The OS shall provide photo selector.

3.2.3.1.1.1.1.9 (M)The Application shall allow to users to press the "Add" button.

3.2.3.1.1.1.8.1 (M)The Application shall show "Success" window.

3.2.3.1.1.1.8.2 (M)The Application shall allow user to press "OK" button to exit window.

3.2.3.1.1.1.1.10 (M)The Application shall allow to users to press the "Cancel" button to go back to previous window.

3.2.3.1a Error Handling for adding new product

3.2.3.1.1a (M)The Application shall print out error message if incorrect values where entered in required text fields.

3.2.3.1b Inverse Requirements for adding new product

3.2.3.1.1b (M)The Application shall not give permission to add new product if not all text fields are filled correctly.

3.2.4   Delete product(Screen 4)

3.2.4.1 Product removal

3.2.4.1.1 (M)The Application shall provide "Products management" button in main menu.

3.2.4.1.1.1   (M)If "Products management" button pressed application shall route to product management window.

3.2.4.1.1.1.1 (M)The Application shall allow to users to press the "Back" button.(See x.x.x.x)

3.2.4.1.1.1.2 (M)The Application shall allow to users to press the "Logout" button.(See x.x.x.x)

3.2.4.1.1.1.3 (M)The Application shall display the 6 most recent products with ability to scroll down to see other not visible elements.

3.2.4.1.1.1.4 (M)The Application shall allow to users to press the "Delete" button.

3.2.4.1.1.1.4.1   (M)If "Delete" button pressed the delete confirmation window must appear.

3.2.4.1.1.1.4.2   (M)The Application shall allow users to press "Confirm" button to confirm deletion of product.

3.2.4.1.1.1.4.3   (M)The Application shall allow users to press "Cancel" button to decline deletion of product and go back to previous window.

3.2.4.1a   Inverse Requirements for product removal

3.2.3.1.2b (M)The Application shall not delete product without confirm dialog.

3.2.5 Add personal (Screen 9)

3.2.5.1 Person addition

3.2.5.1.1 (M)The application shall provide "Staff" button in main menu

3.2.5.1.1.1(M) "Staff" button shall route user to staff management

3.2.5.1.1 .2(M)Staff management – it is new window, which will give ability to user to add staff

3.2.5.1.2 (M)The application shall show window with info about all staff

3.2.5.1.2.1 (M) Application shall provide two static buttons at the top of window

3.2.5.1.2.1.1 (M) "Back" button will route you to main menu

3.2.5.1.2.1.2 (M) "Log out" button will log user out

3.2.5.1.2.2 (M)Staff info must be grouped – one square panel for each person.

3.2.5.1.2.3 (M)Each square panel shall contain: photo of person, name and surname, and two buttons: edit and delete

3.2.5.1.3 (M)The application shall provide "Add staff" button

3.2.5.1.3.1 (M)The application shall provide new window after pressing "add staff" button

3.2.5.1.3.2 (M)The application shall provide 2 text fields for name and surname, for e-mail

3.2.5.1.3.3 (M)The application shall provide 1 drop down list, which will provide available position types for new person

3.2.5.1.3.4 (M)The application shall provide 1 field, after pressing which photo selection window screen must be showed

3.2.5.1.3.5 (M)Photo selection screen must be provided by Operating System of end user

3.2.5.1.3.6 (M)The application shall provide two buttons

3.2.5.1.3.6.1(M)The "save" button shall allow user to save new persons info to database

3.2.5.1.3.6.2(M)The "cancel" button shall allow user to rollback all actions

3.2.5.1a Error handling for person addition

3.2.5.1.1a (M)The system shall paint to red colors those fields, which are not filled

3.2.5.1.2a (M)The system shall show error if addition of person is not completed successfully

3.2.5.1.3a (M)The system shall check if e-mail was entered correctly

3.2.6 Delete staff (Screen 8)

3.2.6.1Personal removal

3.2.6.1.1(M)The application shall provide "Staff" button in main menu

3.2.6.1.1.1 (M) "Staff" button shall route user to staff management

3.2.6.1.1.2 (M)Staff management – it is new window, which will give ability to user to remove staff

3.2.6.1.2 (M)The application shall show window with info about all staff

3.2.6.1.2.1 (M) Application shall provide two static buttons at the top of window

3.2.6.1.2.1.1 (M) "Back" button will route you to main menu

3.2.6.1.2.1.2 (M) "Log out" button will log user out

3.2.6.1.2.2 (M)Staff info must be grouped – one square panel for each person.

3.2.6.1.2.3 (M)Each square panel shall contain: photo of person, name and surname, and two buttons: edit and delete

3.2.6.1.2.4 (M) "Delete" button shall provide new window

3.2.6.1.2.4.1 (M)New window shall provide two buttons

3.2.6.1.2.4.2 (M)The "I am sure" button shall delete selected person from database

3.2.6.1.2.4.3 (M)The "cancel" button shall rollback all actions

3.2.6.1a Inverse requirement for person removal

3.2.6.1.1a(M)The system shall not delete person without confirm dialog

3.2.7 Accept order (Screen 3)

3.2.7.1 Order accepting

3.2.7.1.1 (M)The system shall provide "Order" button in main menu

3.2.7.1.2 (M) "Order" button shall navigate user to "orders" window

3.2.7.1.3 (M)The system shall provide one table on new window

3.2.7.1.3.1 (M) Application shall provide two static buttons at the top of window

3.2.7.1.3.1.1 (M) "Back" button will route you to main menu

3.2.7.1.3.1.2 (M) "Log out" button will log user out

3.2.7.1.3.2 (M)The table shall show only newest 20 orders, others will be hidden

3.2.7.1.3.3 (M)At the right side, opposite to each line of table there shall be provided buttons

3.2.7.1.3.3.1 (M) "Accept" order shall open new window

3.2.7.1.3.3.1.1 (M)New window must provide list of free courier

3.2.7.1.3.3.1.2 (M)Selection of any free courier shall change status of order to "accepted"

3.2.7.1.3.3.2 (M) "Decline" button must decline order

3.2.7.1.3.4 (M)The system shall change colors of buttons

3.2.7.1.3.4.1 (M)Button must be painted in red color if corresponding order was rejected

3.2.7.1.3.4.2 (M)Button must be painted in green color if corresponding order was accepted

3.2.7.1.3.4.3 (M)Buttons must be gray if corresponding order was not considered

3.2.8 Archive log(screen 12)

3.2.8.1 Watching log (by Admin)

3.2.8.1.1 (M)The system shall provide "Order" button in main menu

3.2.8.1.2 (M)"Order" button shall navigate to "orders" window

3.2.8.1.3 (M)The system shall provide one table

3.2.8.1.3.1 (M) Application shall provide two static buttons at the top of window

3.2.8.1.3.1.1 (M) "Back" button will route you to main menu

3.2.8.1.3.1.2 (M) "Log out" button will log user out

3.2.8.1.3.2 (M)The table shall show all orders from time of whole system installation

3.2.8.1.3.3 (M)At the right side, opposite to each line of table there shall be provided colored words

3.2.8.1.3.3.1 (M)Green "accept" will show that corresponding order was accepted

3.2.8.1.3.3.2 (M)Red "Declined" will show that corresponding order was declined

3.2.8.1.3.3.3 (M)Gray "Not assigned" will show that corresponding order was not viewed

3.3   PERFORMANCE REQUIREMENTS

1) Usable on weak computers (at least 2.0 ghz processor, 512MB RAM). All of operations must be completed within 15 seconds

3.4   DESIGN CONSTRAINTS

Java, Qt, PHP, JavaScript, MySQL, CSS

3.5   SOFTWARE SYSTEM ATTRIBUTES

3.5.1   Reliability

3.5.2   Availability

Our system is only available on those companies, which bought this product from us

3.5.3   Security

3.5.4   Maintainability

3.5.5   Portability

This software is extremely not portable

3.6   OTHER REQUIREMENTS

None

// ADD Appendices (if any)

// Regenerate Table of Contents