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Contents

[Functional requirements 3](#_Toc152795244)

[FR-01: Clients should be able to log in the system. 3](#_Toc152795245)

[FR-02: Clients should be able to register in the system. 3](#_Toc152795246)

[FR-03: Clients should be able to perform data retrieval and organization on users. 3](#_Toc152795247)

[FR-04: Clients should be able to perform data retrieval and organization on products. 3](#_Toc152795248)

[FR-05: Client should be able to see product details. 3](#_Toc152795249)

[FR-06: Clients should be able to add products to a shopping cart. 3](#_Toc152795250)

[FR-07: The shopping displays details about the current order. 3](#_Toc152795251)

[FR-08: Clients should be able to make an order. 3](#_Toc152795252)

[FR-09: Clients should be able to manage system users. 3](#_Toc152795253)

[FR-10: Clients should be able to manage system products. 3](#_Toc152795254)

[FR-11: Clients should be able to review their information. 3](#_Toc152795255)

[FR-12: Customers should be able to redeem products using NutriPoints. 3](#_Toc152795256)

[FR-13: Owners can see Customers products recommendations and add a product to them. 3](#_Toc152795257)

[FR-14: Clients should be able to see their orders history. 3](#_Toc152795258)

[MSCW table 4](#_Toc152795259)

[Use Cases 4](#_Toc152795260)

[UC-01: Clients should be able to log in the system. 4](#_Toc152795261)

[UC-02: Clients should be able to register in the system 4](#_Toc152795262)

[UC-03: Clients should be able to perform data retrieval and organization on users. 4](#_Toc152795263)

[UC-04: Clients should be able to perform data retrieval and organization on products. 5](#_Toc152795264)

[UC-05: Products details page 5](#_Toc152795265)

[UC-06: Clients should be able to add products to a shopping cart. 5](#_Toc152795266)

[UC-07: The shopping cart displays details about the current order. 5](#_Toc152795267)

[UC-08: Clients should be able to make an order. 5](#_Toc152795268)

[UC-09: Create User 5](#_Toc152795269)

[Use Case UC-10: Update User 5](#_Toc152795270)

[Use Case UC-11: Delete User 5](#_Toc152795271)

[Use Case UC-12: Reading User Details 5](#_Toc152795272)

[Use Case UC-13: Create Product 5](#_Toc152795273)

[Use Case UC-14: Update Product 5](#_Toc152795274)

[Use Case UC-15: Delete Product 5](#_Toc152795275)

[Use Case UC-16: Reading Product Details 5](#_Toc152795276)

[Use Case UC-17: View Customer Information 5](#_Toc152795277)

[Use Case UC-18: Redeeming Product with NutriPoints 5](#_Toc152795278)

[Use Case UC-19: Owners can see Customers products recommendations and add a product to them. 5](#_Toc152795279)

[UC-20: Clients should be able to see their orders history. 5](#_Toc152795280)

# Functional requirements

## FR-01: Clients should be able to log in the system.

(Both on Desktop and Web applications)

*They can login if their data is in the database.*

## FR-02: Clients should be able to register in the system.

(Only on Web application)

## FR-03: Clients should be able to perform data retrieval and organization on users.

(Both on Desktop and Web applications)

*They can search by their first and last name.*

*They can filter by role.*

*They can sort products by name.*

## FR-04: Clients should be able to perform data retrieval and organization on products.

(Both on Desktop and Web applications)

*They can search by their name and description.*

*They can filter by category.*

*They can sort products by name, price and date added.*

## FR-05: Client should be able to see product details.

(Both on Desktop and Web applications)

*Shows product details.*

## FR-06: Clients should be able to add products to a shopping cart.

(Only on Desktop application)

## FR-07: The shopping displays details about the current order.

(Only on Web application)

*Displays products, quantity, total price and NutriPoints that are gathered.*

## FR-08: Clients should be able to make an order.

(Only on Web application)

*Possible only for users with the role of Customer.*

## FR-09: Clients should be able to manage system users.

(Only on Desktop application)

*This is only valid for users with the role of Owner or Staff.*

## FR-10: Clients should be able to manage system products.

(Only on Desktop application)

*This is only valid for users with the role of Owner or Staff.*

## FR-11: Clients should be able to review their information.

(Both on Desktop and Web applications)

*Displays on the user profile page.*

## FR-12: Customers should be able to redeem products using NutriPoints.

(Only on Web application)

*Part of the algorithmic part.*

## FR-13: Owners can see Customers products recommendations and add a product to them.

(Only on Web application)

*Part of the algorithmic part.*

## FR-14: Clients should be able to see their orders history.

(Only on Web application)

*Users with the role of Customer should be able to see their orders history.*

# MSCW table

A screenshot of a computer

Description automatically generated

# Use Cases

## UC-01: Clients should be able to log in the system.

Actor: Owner, Staff and Customer

Main Success Scenario:

1. Actor goes to Login page
2. Actor fills in his login credentials
3. System authenticates the actor

Extensions:

2a: Wrong credentials

* System doesn’t authenticate the user

2b: Actor is logged

* System automatically redirects the user to the user profile page.

## UC-02: Clients should be able to register in the system

Actor: Customer

Main Success Scenario:

1. Actor goes to Register page
2. Actor fills in details about his profile
3. System validates provided data
4. System creates a new actor
5. System redirects user to Login page

Extensions:

2a: Wrong data

* System doesn’t validate the user

2a: Actor already exists

* System doesn’t create the actor.
* System doesn’t validate the actor.

## UC-03: Clients should be able to perform data retrieval and organization on users.

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the users page
2. Actor might fill out the search bar
3. Actor might sort by one of the properties
4. Actor clicks on the search button
5. The system provides products based on the search

Extensions:

4a: User doesn’t exist

* The system shows an empty page

## UC-04: Clients should be able to perform data retrieval and organization on products.

Actor: Owner, Staff and Customer

Main Success Scenario:

1. Actor navigates to the products page
2. Actor might fill out the search bar
3. Actor might sort by one of the properties
4. Actor clicks on the search button
5. The system provides products based on the search

Extensions:

4a: Products doesn’t exist

* The system shows an empty page

## UC-05: Products details page

Actor: Owner, Staff and Customer

Main Success Scenario:

1. Actor navigates to the products page
2. Actor clicks on the product component
3. The system opens a new page with the product details

Extensions:

1a: The actor hasn’t been logged in

* The system redirects him to the Login page

## UC-06: Clients should be able to add products to a shopping cart.

Actor: Customer

Main Success Scenario:

1. Actor navigates to the product page
2. Actor clicks “Add to Cart” button on Product component
3. The system checks availability
4. The system adds the product to the cart

Extensions:

3a: Product isn’t available

* The system would disable the button, which would cause it to be unusable.

## UC-07: The shopping cart displays details about the current order.

Actor: Customer

Main Success Scenario:

1. Actor adds a product to the shopping cart
2. Actor navigates to the shopping cart page
3. The system displays ordered product, quantity, total price and NutriPoints

Extensions:

3a: The shopping cart is empty

* The system would show a message that the shopping cart is empty

## UC-08: Clients should be able to make an order.

Actor: Customer

Main Success Scenario:

1. Actor adds a product to the shopping cart
2. Actor navigates to the shopping cart page
3. Actor clicks on the “Order” button page.
4. The system checks product availability and users NutriPoints
5. The system decreases the product from the storage database
6. The system creates a record of the current order
7. The system displays a message with order result

Extensions:

4a: Product unavailable

* The system displays a message that the product is unavailable
* The system doesn’t allow the actor to proceed with his order

4b: Customer doesn’t have enough NutriPoints

* The system displays a message that the NutriPoints aren’t available
* The system doesn’t allow the actor to proceed with his order

7a: Order was successful

* The system displays a message that the order was successful

## UC-09: Create User

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to “Users” page
2. Actor clicks on the “Create” button
3. The system opens a new form
4. The actor enters new users’ data
5. The actor clicks on the “Submit” button
6. The system validates the user
7. The system adds the user to the database

Extensions:

5a: Actor has entered invalid data

* The system doesn’t allow the creation of the new user as it doesn’t proceed to submit the form

## Use Case UC-10: Update User

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Users" page.
2. Actor selects the user whose details need to be updated.
3. Actor clicks on the "Update" button next to the selected user.
4. The system opens a form pre-populated with the user's existing data.
5. The actor modifies the user's data as needed.
6. Actor clicks on the "Submit" or "Update" button.
7. The system validates the updated user data.
8. The system updates the user's details in the database.

Extensions:

5a: Actor has entered invalid data.

* The system prevents the update of the user's data and displays an error message.

## Use Case UC-11: Delete User

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Users" page.
2. Actor selects the user to be deleted.
3. Actor clicks on the "Delete" button next to the selected user.
4. The system removes the user's data from the database.

Extensions:

## Use Case UC-12: Reading User Details

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Users" page.
2. Actor selects the user whose details they want to read.
3. The system displays the selected user's details, including but not limited to username, email, and role.

Extensions:

## Use Case UC-13: Create Product

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Products" page.
2. Actor clicks on the "Create" button.
3. The system opens a new form.
4. The actor enters new product data.
5. The actor clicks on the "Submit" button.
6. The system validates the product information.
7. The system adds the product to the database.

Extensions:

5a: Actor has entered invalid data.

* The system doesn’t allow the creation of the new product and displays an error message.

## Use Case UC-14: Update Product

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Products" page.
2. Actor selects the product to be updated.
3. Actor clicks on the "Update" button next to the selected product.
4. The system opens a form pre-populated with the product's existing data.
5. The actor modifies the product's data as needed.
6. Actor clicks on the "Submit" or "Update" button.
7. The system validates the updated product data.
8. The system updates the product details in the database.

Extensions:

5a: Actor has entered invalid data.

* The system prevents the update of the product and displays an error message.

## Use Case UC-15: Delete Product

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Products" page.
2. Actor selects the product to be deleted.
3. Actor clicks on the "Delete" button next to the selected product.
4. The system removes the product's data from the database.

Extensions:

## Use Case UC-16: Reading Product Details

Actor: Owner and Staff

Main Success Scenario:

1. Actor navigates to the "Products" page.
2. Actor selects the product whose details they want to read.
3. The system displays the selected product's details, including but not limited to name, description, and price.

Extensions:

## Use Case UC-17: View Customer Information

Actor: Customer

Main Success Scenario:

1. Customer navigates to the "Account" or "Profile" page.

2. Customer views their personal information, including but not limited to name, contact details, and address.

Extensions:

## Use Case UC-18: Redeeming Product with NutriPoints

Actor: Customer

Main Success Scenario:

1. Actor navigates to the "Products" page.
2. Actor selects a product with the category of “Redeem”
3. Actor adds it to the shopping cart
4. Actor makes the order
5. System checks the order validity
6. System makes the order with the redeemed product

Extensions:

5a: Actor doesn’t have enough NutriPoints.

* The system displays an error message indicating that the requested product needs more NutriPoints.

## Use Case UC-19: Owners can see Customers products recommendations and add a product to them.

Actor: Owner

Main Success Scenario:

1. Actor navigates to the "Customers" page.
2. Actor selects a customer
3. Actor clicks on the “Get Recommendations” button
4. System loads a page with the recommended products for the current user, based on his purchases.

Extensions:

3a: Customer doesn’t have purchases.

* The system shows a message saying that the Customer doesn’t have any purchases.

## UC-20: Clients should be able to see their orders history.

Actor: Customer

Main Success Scenario:

1. Actor makes a successful order
2. Actor navigates to the “User profile” page
3. Actor selects the “Orders history” button
4. The system shows him a table with his orders data

Extensions:

3a: Actor has no orders

* The system displays a text saying “User has no orders”