

**<<BMOS>>**

**Bird Meal Order System**

– Hanoi, August 2022 –

Record of changeS

|  |  |  |  |
| --- | --- | --- | --- |
| Date | A\* M, D | In charge | Change Description |
| 13/Apr | A | KienNT | Thêm mô tả chức năng Setting Details (II.1.a) |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

\*A - Added M - Modified D - Deleted

PROCESS FEATURE:  
[Process Feature - BMOS - Google Trang tính](https://docs.google.com/spreadsheets/d/1DTs_g6HtSjsNskK-KXeCrVk-5Jq9lABQUq1GII-uTXw/edit?hl=vi#gid=0)

**Table of Contents**

[I. Overview 4](#_Toc110459974)

[1. Introduction 4](#_Toc110459975)

[2. System Functions 5](#_Toc110459976)

[3. Entity Relationship Diagram 6](#_Toc110459977)

[II. Functional Requirements 7](#_Toc110459978)

[1. <<Feature Name 1>> 7](#_Toc110459979)

[a. <<Function Name 1>> 7](#_Toc110459980)

[b. <<Function Name 2>> 7](#_Toc110459981)

[2. <<Feature Name 2>> 7](#_Toc110459982)

# I. Overview

## 1. Introduction

*[Content part 1: presents a high-level overview of the product and the environment in which it will be used, the users, and known constraints, assumptions, and dependencies]*

*[Content part 2: describes the product's context in the form of a context diagram in which you present the boundary and connections between the system you’re developing and everything else in the universe. This identifies external entities (or terminators – software, hardware, human components, and other systems) outside the system that interface to it in some way, as well as data, control, and material flows between the terminators and the system]*

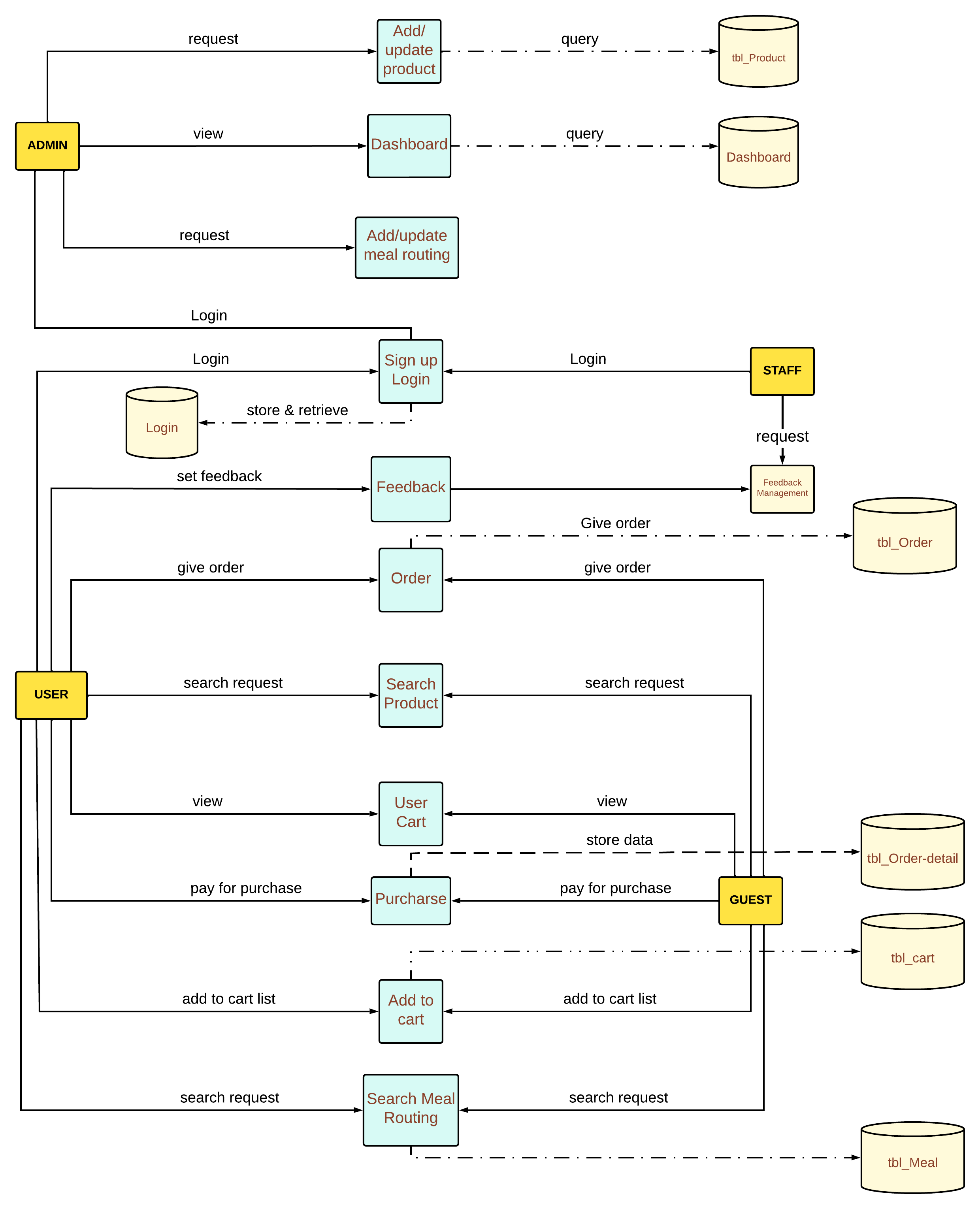
<<Sample: The Cafeteria Ordering System is a new software system that replaces the current manual and telephone processes for ordering and picking up meals in the Process Impact cafeteria. The system is expected to evolve over several releases, ultimately connecting to the Internet ordering services for several local restaurants and to credit and debit card authorization services.

>>

## 2. System Functions

#### a. Screen Flow

*[This part shows the system screens and the relationship among screens. You can draw the Screens Flow for the system in the form of diagram as below]*



#### b. Screen Details

*[Provide the descriptions for the screens in the Screens Flow above]*

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Feature** | **Screen** | **Description** |
| 1 | Order Meals | Create Order | <<Screen Brief description>> |
| 2 | Order Meals | Change Order |  |
| 3 | .. |  |  |

#### c. User Authorization

*[Provide the system roles authorization to the system features (down to screens, and event to the screen activities if applicable) in the table form as below – replace Role1, Role2,… with the specific system user role names]*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | **Role1** | **Role2** | **Role3** | **Role4** | **RoleX** |
| <<Screen Name1>> | X |  |  | X | X |
| <<Screen Activity>> |  |  |  | X | X |
| <<Screen Name2>> | X |  |  | X |  |
| Query All Data | X |  |  |  |  |
| Query Own Data |  |  |  | X |  |
| Query Managed Data |  |  |  | X |  |
| Add New Data |  |  |  | X | X |
| Update All Data |  |  |  |  | X |
| Update Own Data |  |  |  |  | X |
| Update Managed Data |  |  |  |  | X |
| Delete Data |  |  |  |  |  |
| … |  |  |  |  |  |

In which:

* Role1: <<role1 description>>
* Role2: <<role2 description>>
* …

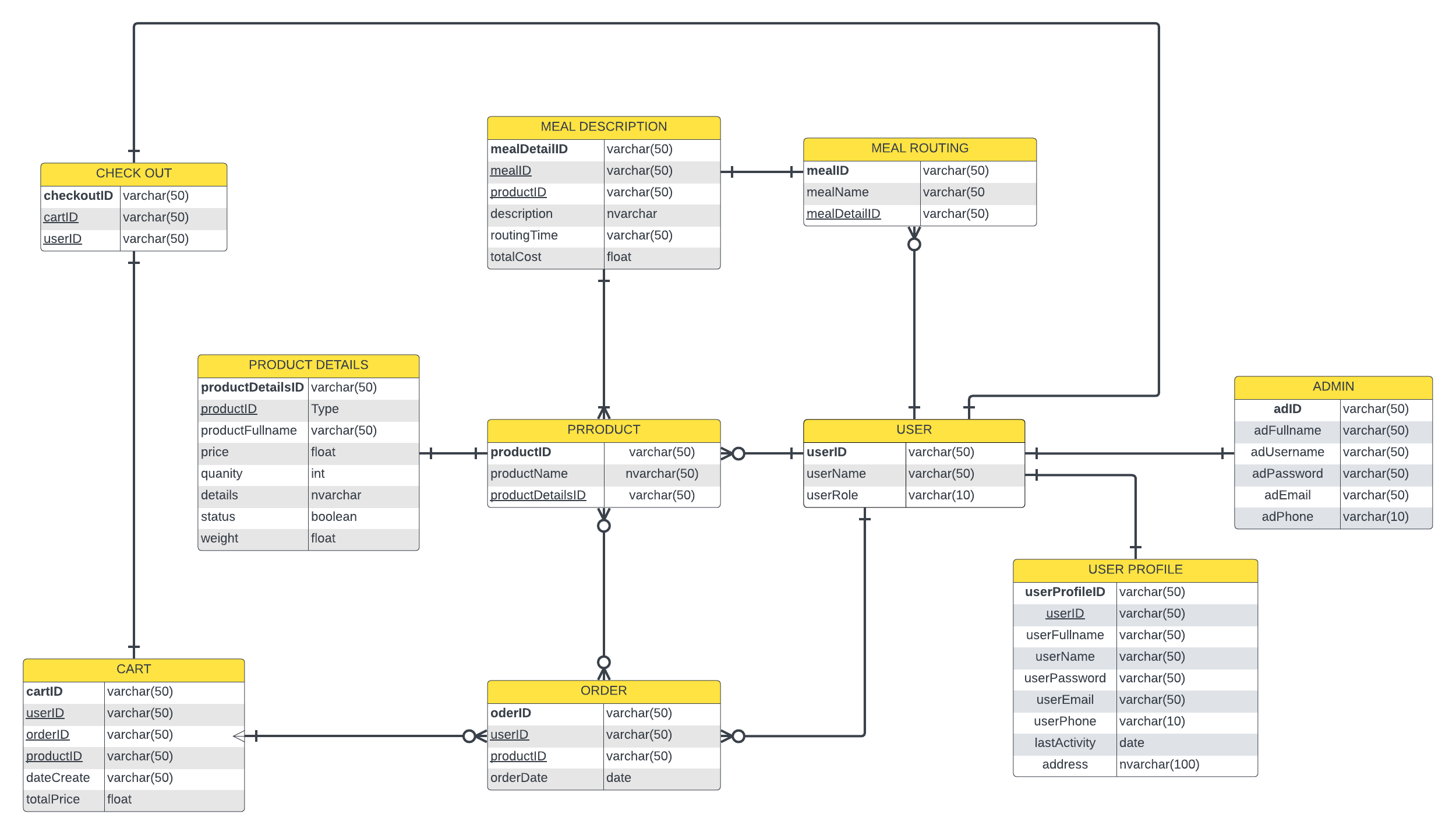
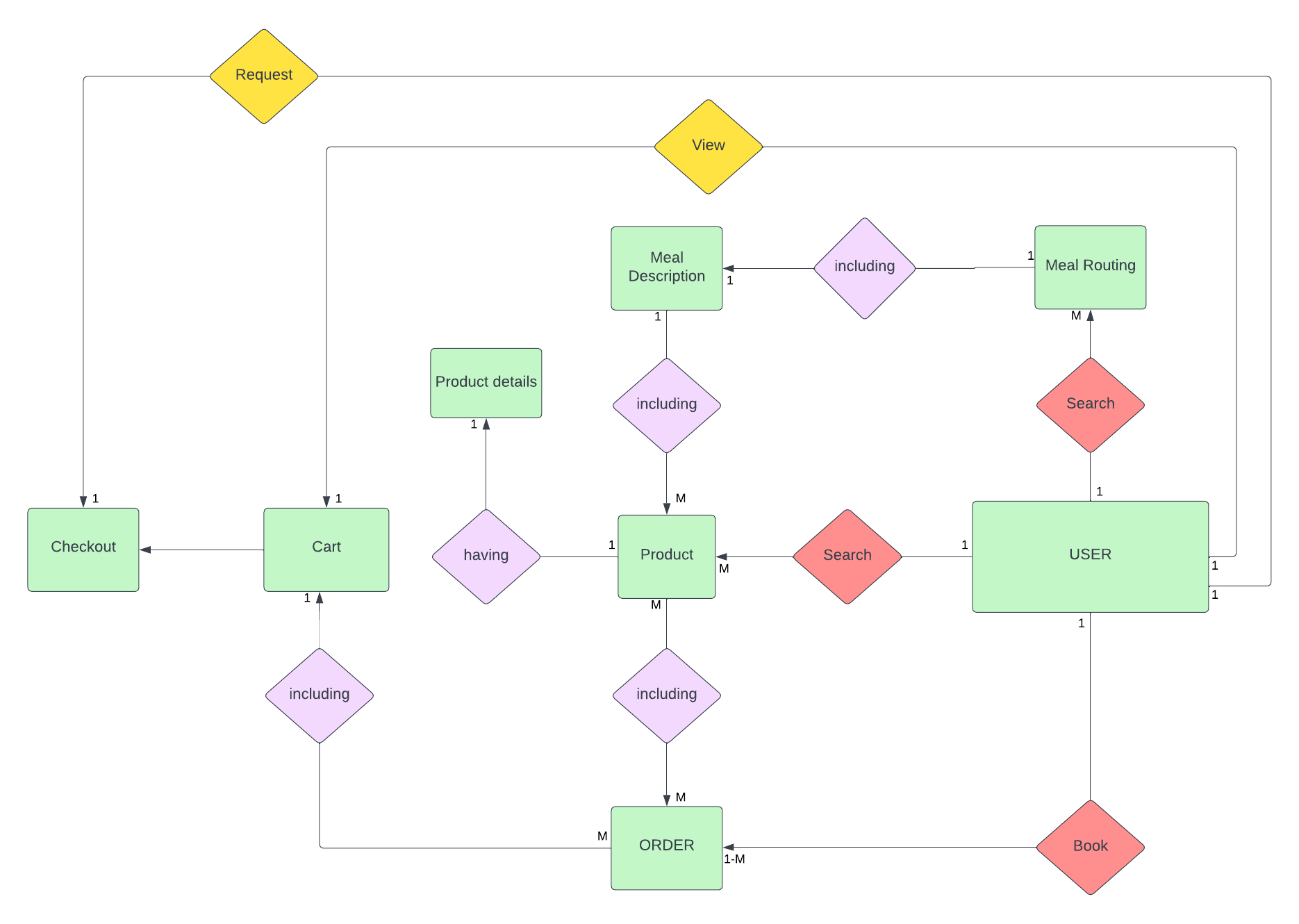
#### d. Non-Screen Functions

*[Provide the descriptions for the non-screen system functions, i.e batch/cron job, service, API, etc.]*

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Feature** | **System Function** | **Description** |
| 1 | <<Feature Name>> | <<Function Name1>> | <<Function Name1 Description>> |
| 2 | … |  |  |

## 3. Entity Relationship Diagram

*[Provide the entity relationship diagram and the entity descriptions in the table format as below]*

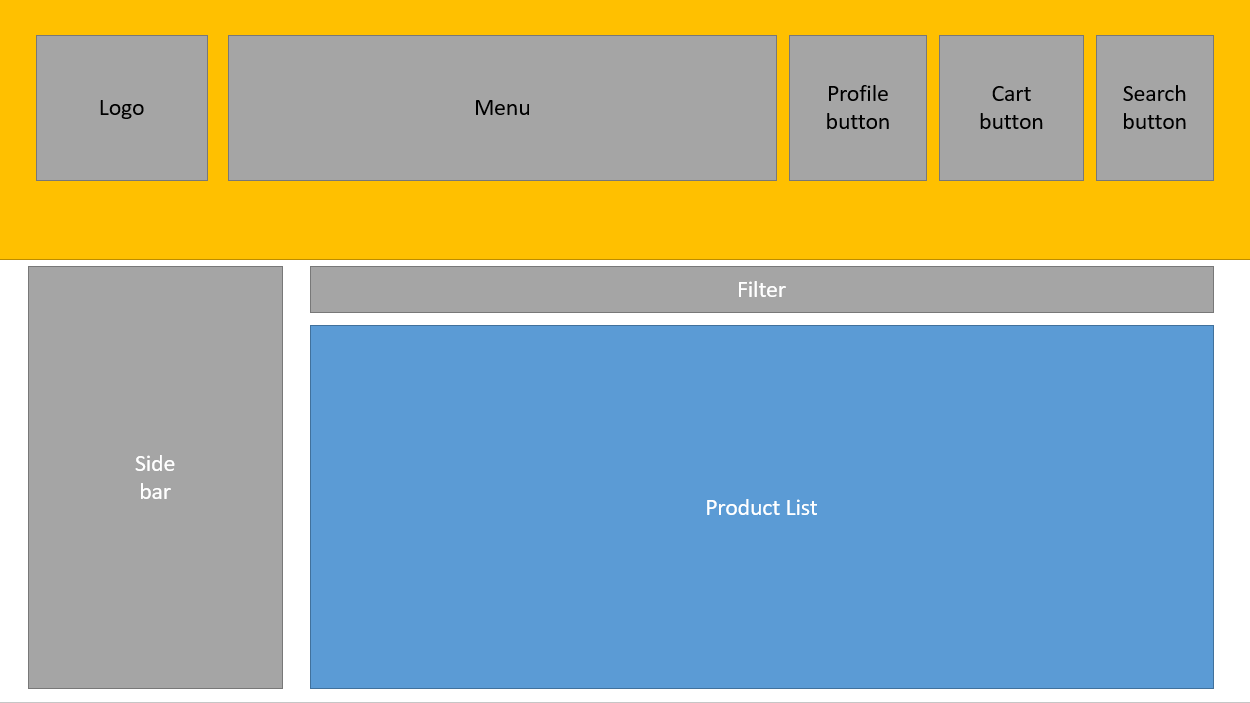


**Entities Description**

|  |  |  |
| --- | --- | --- |
| **#** | **Entity** | **Description** |
| 1 | User |  |
| 2 | Meal |  |
| 3 | Meal Subscription |  |
| 4 | … |  |

# II. Functional Requirements

## <<Feature: Search Product>>

- Screen layout: 

### a. <<Show list product at page home>>

- Function trigger: when user enter url of website: https://...... The page home will display and show product list in the content.

- Function description: Guest or customers were login, show product list function will display list of highlight product at home page, so that client can see and chose product for their bird.

- Function details: when have request to url we call show list product function by the way we select their id client to User tracing.

### b. <<Filter product>>

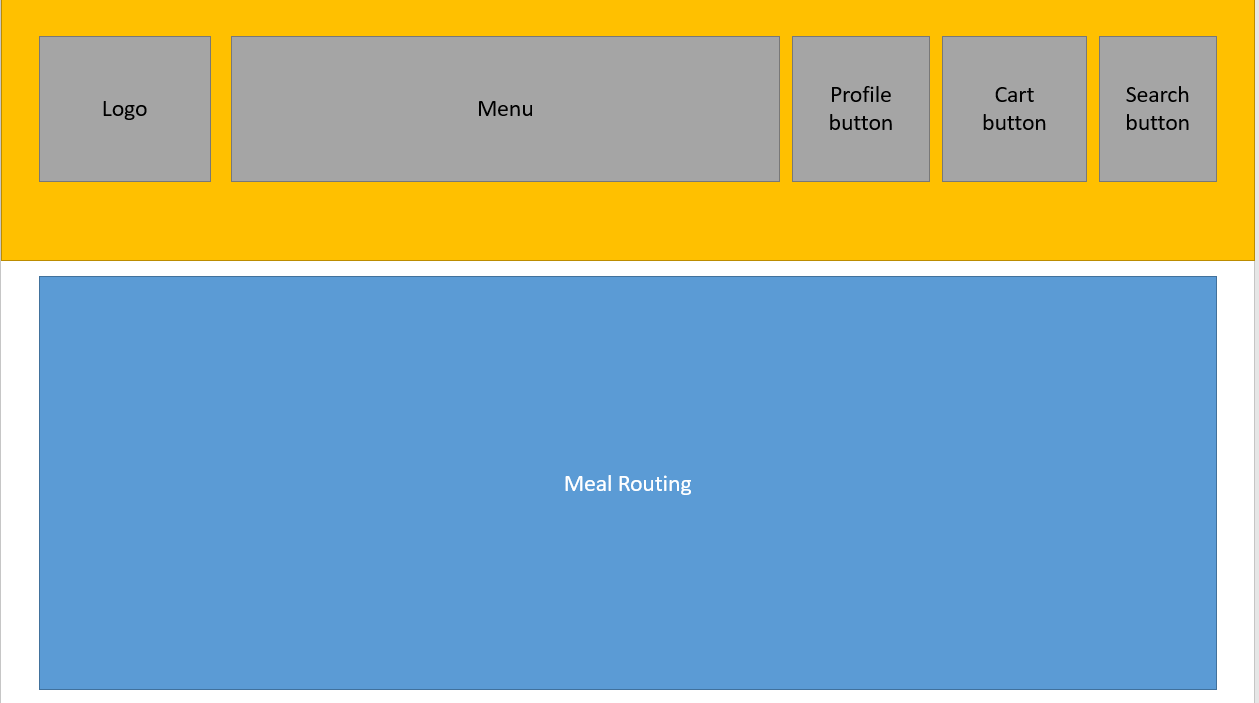
- Function trigger: when user click choose option in filter form: such as: price 100 – 200k, food for small bird,... when they click filter button we will call filter function.

- Function description: When form filter submit we will trigger that data and show suitable product for their requirements.

-Function details: filter function will receive a from data have parameters which user choose and we will filter by those params in DB and return product details following parameters.

## 2. <<Feature: Meal Routing >>

- Screen layout:



### a. <<Search for each bird breed>>

- Function trigger: When user type bird breed in search box and search. The search meal will execute.

- Function description: The function allow user can see meal routing suitable for their bird, and recommend for them some meals is improve others aspect such as: their health, their color...

- function details: when have request to search meal we call show list product function by the way we select and store their id client to User tracing.

### b. <<Show meal detail>>

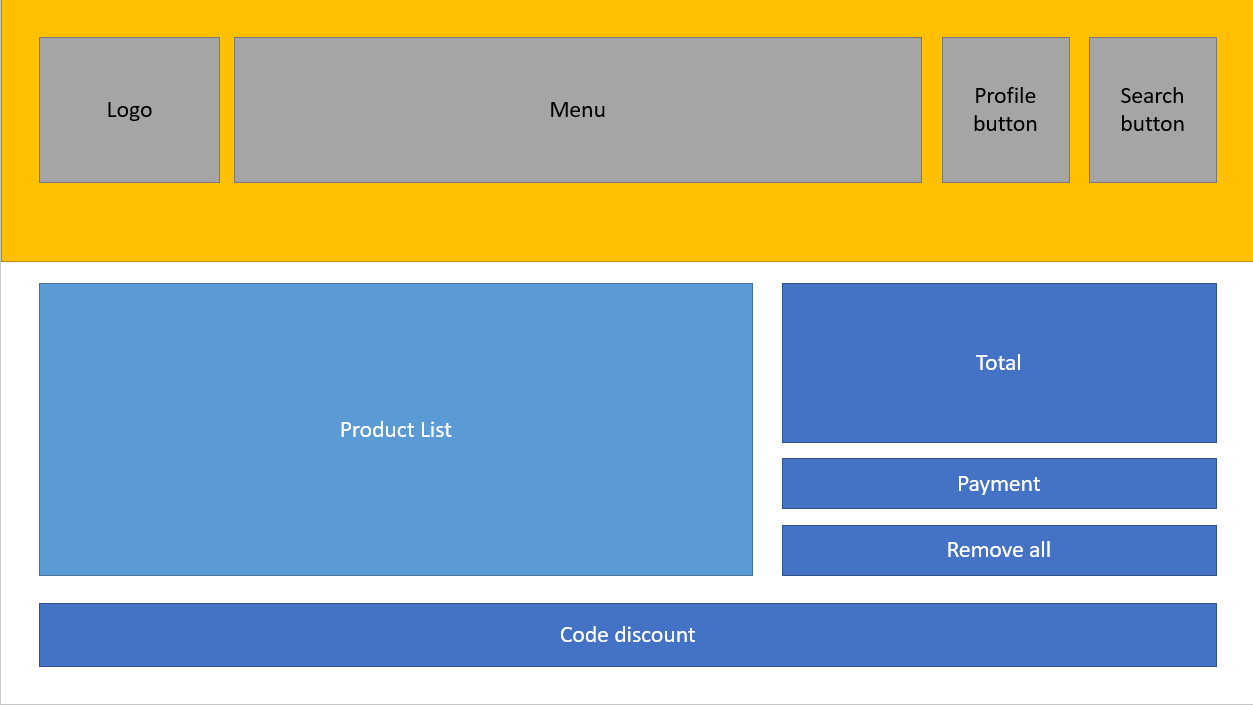
- function trigger: When we show meals for bird, and user click to one meal routing. The show meal details will execute.

- Function description: The function allow user can see meal routing suitable for their bird, and show details of meal: which food, times feed in one day, which time is good to feed their bird and cost of that meal routing.

- function details: when receive the id of meal routing, we will looking that id in DB and select meal routing details column and return it to DTO list and display it in screen.

## 3. <<Feature: Cart>>

- Screen layout:



### a. << Shown list product added to cart >>

-function trigger: when the user clicks on the cart icon.

-function description: When access to the cart, the screen will show all the products that the user has selected.

-function details: when have request to cart, we return list product which user choose.

### b. << Add-remove product >>

-function trigger: when user want change quantity product.

-function description: Quantity will change when user click button plus or minus.

-function details: when call the params plus and minus, quantity product will increase or decrease.

### c. << calculator-show total price.>>

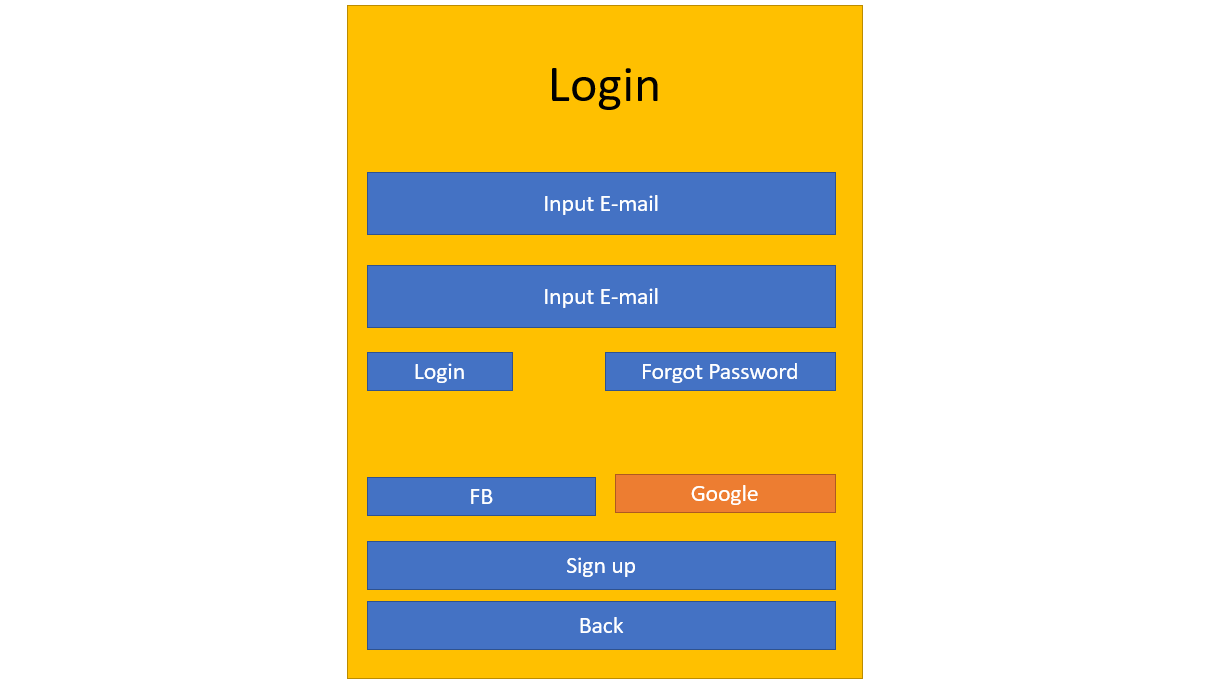
-function trigger: when the user clicks on the cart icon.

-function description: When the user accesses the shopping cart, the screen will display the total price of all the products the user has selected.

-function details: we will return the value of each product and the total value of the all product.

## 4. <<Feature: Authentication>>

- Screen layout:



### a. <<Login >>

- Function trigger: when user click the button with name login

- Function description: This function allows users with an activated account or an administrator to log in to the system. When filling in the login information completely and correctly, the system will verify and redirect the page to the homepage if it is a customer account or to the admin page if it is an admin account.

- Function Details: The login function starts when the user has an account but has not logged into the system. Here users can login using the login form by filling in the username and password information on the displayed form, then pressing the login button. The system will check the login information, if it is wrong, the system will display the login page and error message again, if successful, the system will save the login data to the session and redirect to the homepage if logged in with the user account or admin page if the user fills in the login information as an admin account.

Users can also choose to log in with a social network account like Google if they click on the login icon with a social network account. The system will then redirect to the authentication page corresponding to that social network. If the authentication is successful, the system will get user information to compare with the database, if the user has not registered with that account, the system will automatically register, save data to the database and session, then transfer Navigate to the homepage and end the login function

### b. <<Logout >>

- Function trigger: when user clicks the button with name log out

- Function description: The function allows users to log out of the system and return to the home page

- Function Details: The logout function starts when the user is logged in in the system and wants to log out the account from the system. On the homepage the user will press the logout button, the system will display the user message "Do you want to exit?" with "Yes" and "No" buttons. Here if the user selects "Yes", the system will cancel the session, exit the login screen and reload the homepage. If the user selects "No", the system will not perform the logout and return to the current screen.

### b. <<Sign up >>

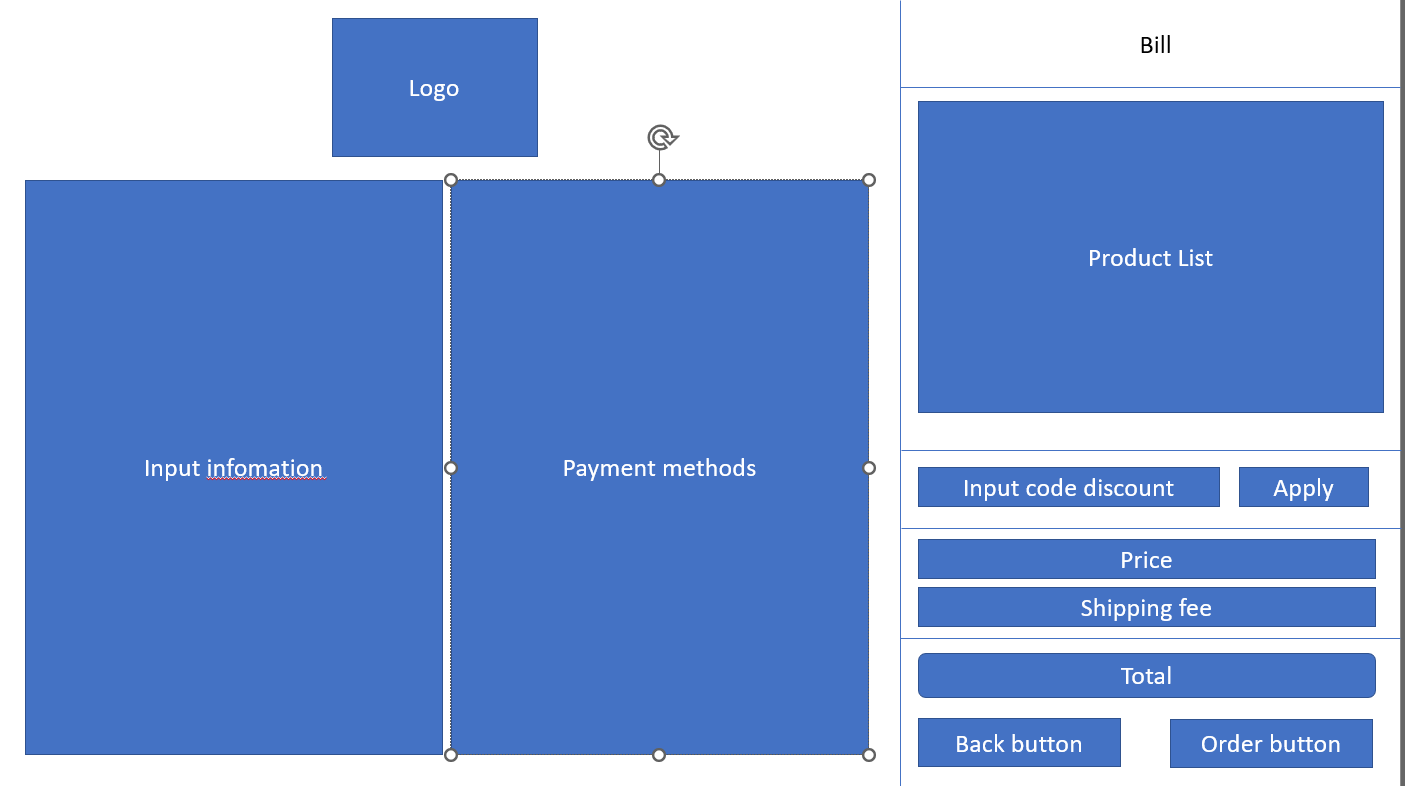
- Function trigger: When user click in Sign up button. The registration form will occur for user to fill out required information.

- Function description: When user need to create an account for shopping and gain discount points for next time. After registration, account will be update to database, provide security, notification, authentication...

- function details: the function will receive the information of user, such as their username, email address, password and some personal information by input. System shall validate the user's input on the registration form to ensure all required fields are filled out and that the email address is in a valid format. The system shall require users to authenticate themselves with their email address and password when logging into their account. The system shall ensure that user passwords are stored securely using encryption or other industry-standard security measures. The system shall create a user profile for the user upon successful account creation, which may include personal information, preferences, or other optional details. The system shall ensure that the registration form and login functionality are accessible to users with disabilities and comply with relevant accessibility standards.

## 5. <<Feature: Payment>>

- Screen layout:



### a. <<COD Payment>>

- Function trigger: When user click in Thanh Toan confirm button. The payment will execute.

- Function description:

When user select their food or meal routing for their bird, we will write this selection in cart page. And when user choose thanh toán we will show the bill for them to see total cost and quantity of each items they choose in checkout page.

In checkout page: will have form to the sign in such as: location, phone, address details.

### - function details: the function will get the user's information such as their location and phone by logging in. And note that the confirmed user will get the money back and back in the DB so we can check the status of the product.

## 6. <<Feature: Contact>>

- Screen layout:

### a. <<Chatting and phone >>

-Function trigger: When the user clicks on the button named send the message.

-Function Description: Help users communicate with store staff by text message via website messenger

-Function details: The function starts when the user clicks on the login button, the system will open the store's messenger website so that the user can communicate.