

Criterion B: Design

Website Layout

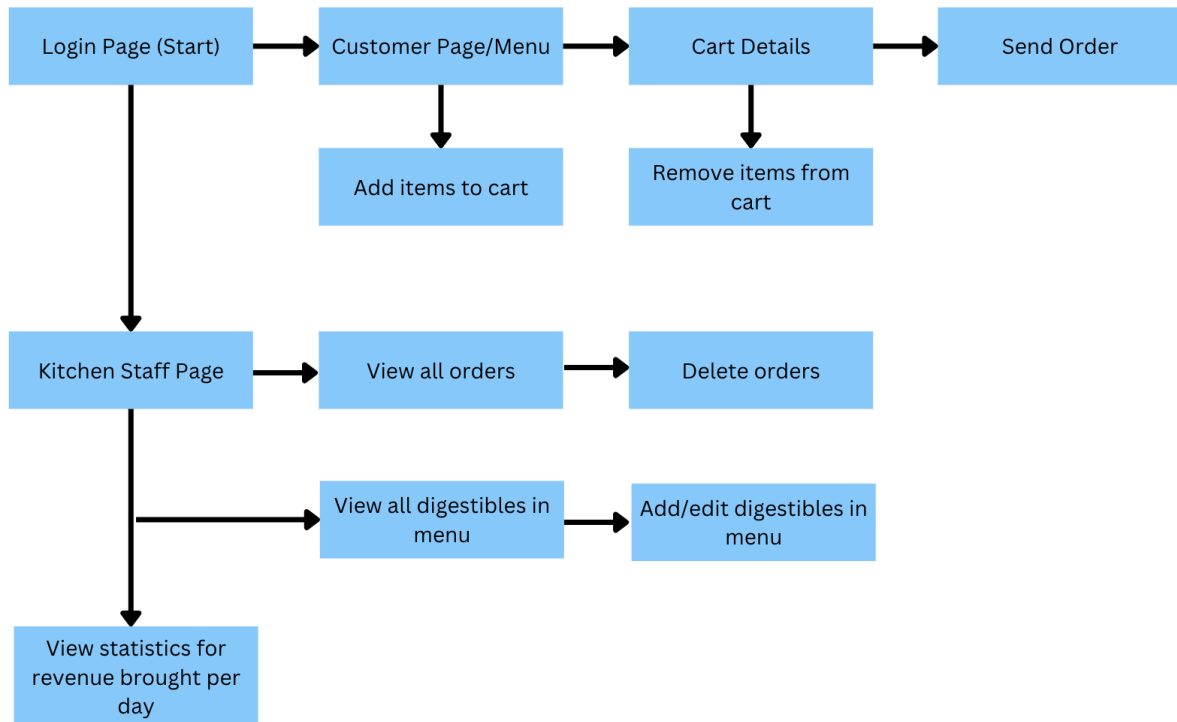


Figure 1 - The chart shows the layout of the website for both customer and admin/staff accounts.

Website Flowcharts

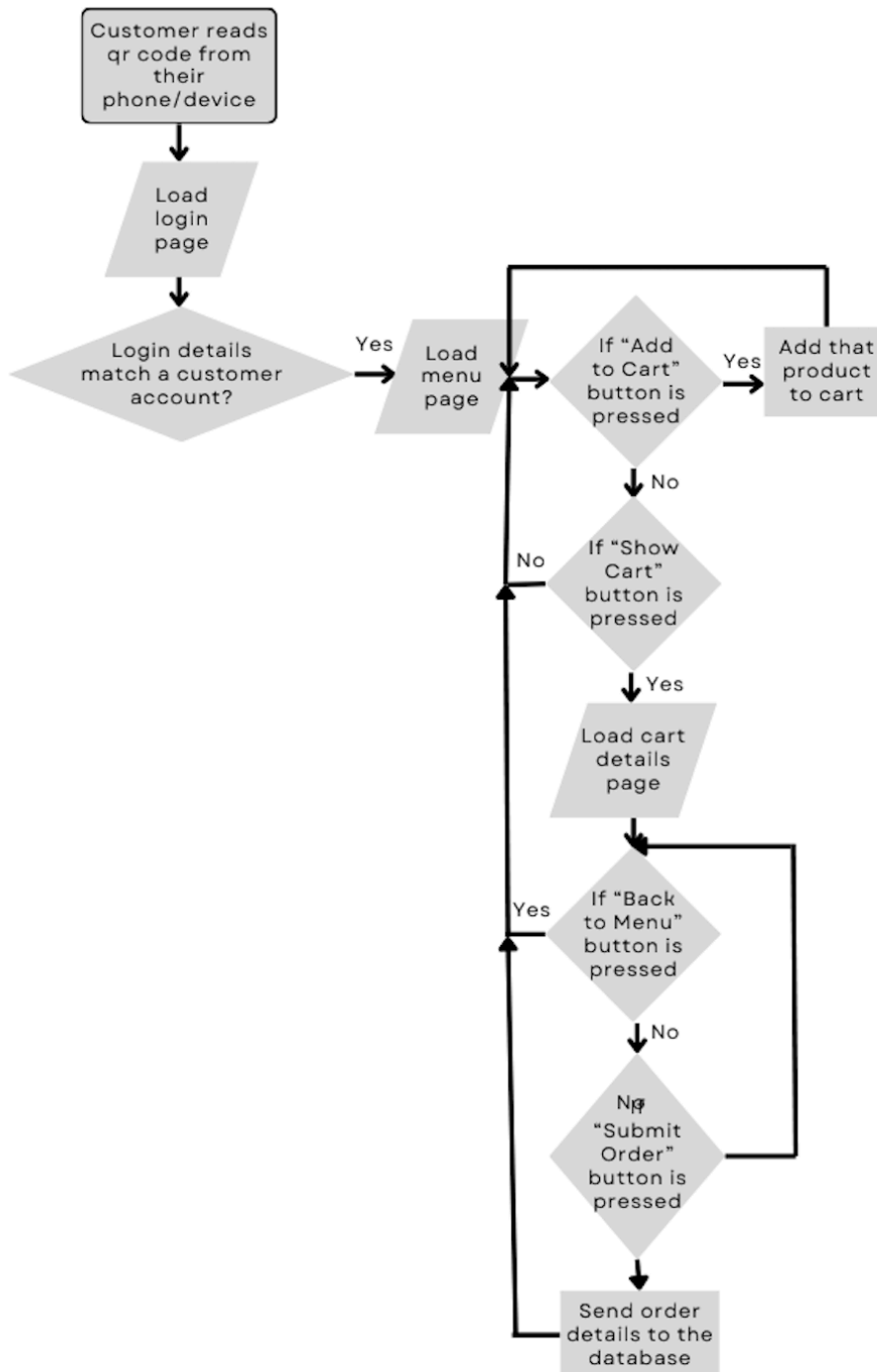


Figure 2 - This flowchart shows the algorithm which allows customers to manage their cart and make an order.

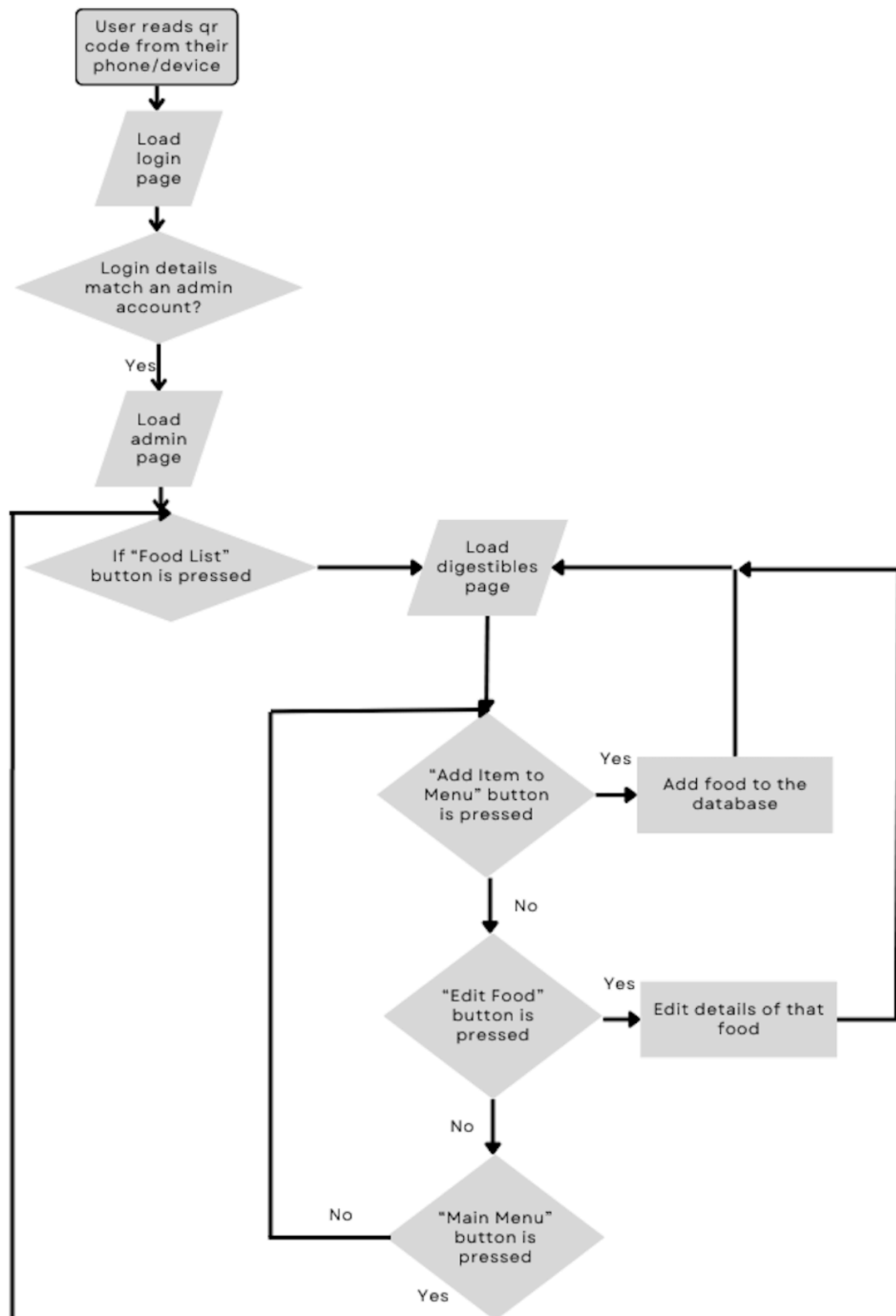


Figure 3 - Flowchart of the algorithm which allows staff to edit the products which can be ordered

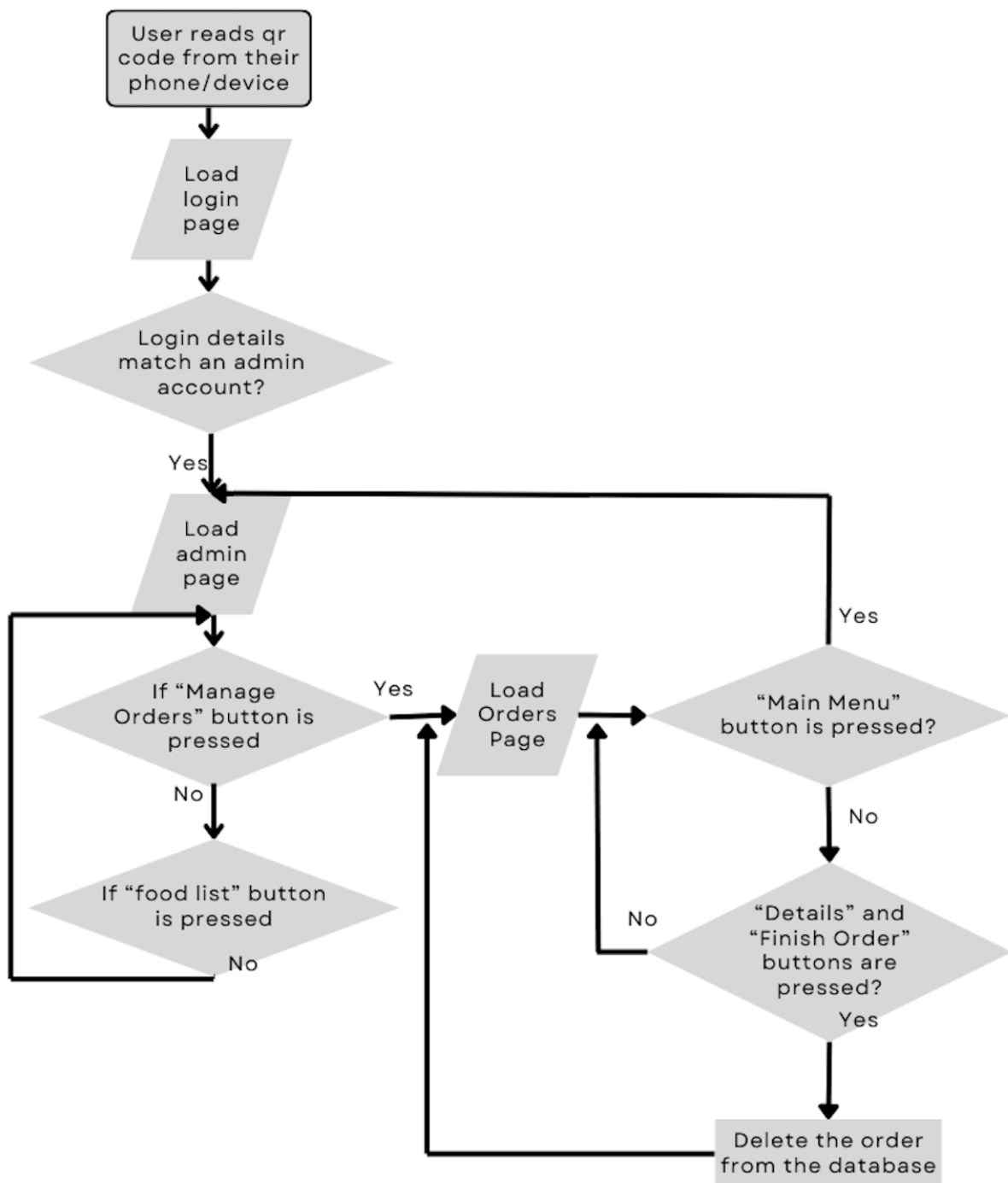


Figure 4 - Flowchart of the algorithm which allows staff to view and delete pending orders from the database

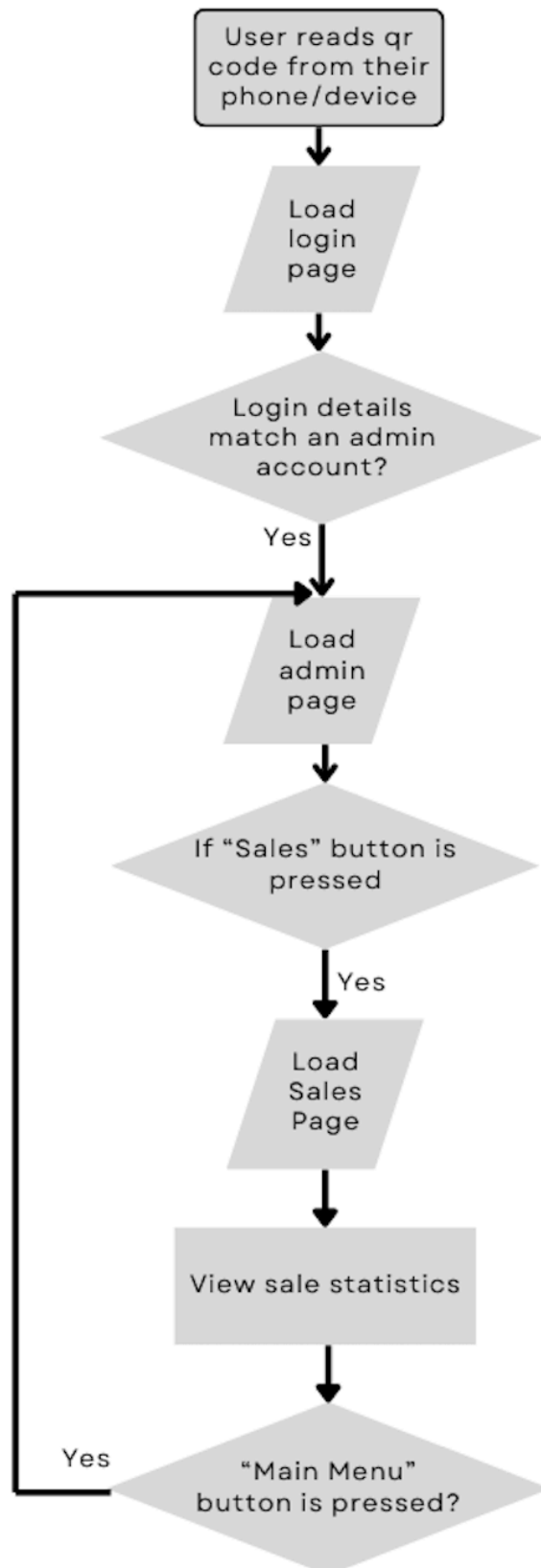


Figure 5 - Flowchart of the algorithm which allows staff to view sales statistics of the website

Draft GUI Design

Asya Princess Hotel Restaurant and Bar

Username

Room number

Password


Phone number

Log in

Figure 5 - Login page common for both customers and kitchen staff.

Asya Princess Restaurant and Bar


Menu



Toast 10₺

Amount


Add to Cart



Omelette 10₺

Amount

Add to Cart






Tea 10₺

View Cart

Figure 6 - Menu page for customers (Tea box is shown half to show that the website is scrollable)

Asya Princess Restaurant and Bar

Cart Details

Your Cart	Amount
 <p>Toast 10₺</p>	<input type="text" value="1"/>
 <p>Omelette 10₺</p>	<input type="text" value="1"/>
 <p>Tea 10₺</p>	<input type="text" value="2"/>

Total Price:

Back to Menu

Send Order

Figure 7 - Cart page where users can see the contents of their order and the total price.

Order is sent!

Back to Menu

Figure 8 - Pop-up which occurs to confirm that the order has been sent after the “Send order” button is pressed. (Image not to scale)

Asya Princess
Restaurant and Bar

Kitchen Page

Edit Digestibles

Manage Orders

Figure 9 - Admin page for kitchen staff. (Admin pages are minimalist because for staff usability is significantly more important than aesthetics)

Asya Princess
Restaurant and Bar

Manage Orders

*Ordered by oldest to newest

Order Id: 1
Room Id: 201

Food + Count:
- Toast 1
- Omelette 1
- Tea 2

Order Id: 2
Room Id: X

Food + Count:
- Toast 2
- Omelette 2
- Tea 1
- Water 2

Back Delete order

Figure 10 - The page where staff can manage products available.

Food Id:

Food Name:

Food Price:

Food URL:

Figure 11 - Pop-up which occurs after the “Add Food” button is pressed where staff can add a digestible to the menu. (Image not to scale)

DELETING Food Id:

Figure 12 - Pop-up which occurs after the “Remove Food” button is pressed where staff can remove a digestible from the menu. (Image not to scale)

Asya Princess
Restaurant and Bar

Manage Orders

*Ordered by oldest to newest

Order Id: 1
Room Id: 201
Food + Count:
- Toast 1
- Omelette 1
- Tea 2

Order Id: 2
Room Id: X
Food + Count:
- Toast 2
- Omelette 2
- Tea 1
- Water 2

Back

Delete order

Figure 13 - The page where staff can view requested orders.

DELETING Food Id:

X

Figure 14 - Pop-up which occurs after the “Remove Food” button is pressed where staff can remove a digestible from the menu. (Image not to scale)

The Database

Field Name	Data Type	Description	Key Type
id	string	ID of the user, unique for every user	Primary key
password	string	Password of the user which gets stored as a hashed code.	
role	string	Role of the user/account as in tenant or admin.	
room_number	integer	The number of the room the order is made from.	

Table 1 - Users data table

Field Name	Data Type	Description	Key Type
id	integer	Id given to digestibles to make them unique from others	Primary key
dtype	string	Type of digestible, either drink or food	
name	string	Name of the digestible	
photo_url	string	URL link of the image of the digestible used	
size	integer	Size of the digestible in terms of grams or milliliters	
price	double	Price of the digestible	

Table 2 - Digestibles data table

Field Name	Data Type	Description	Key Type
id	integer	ID of the order noted in order to avoid confusion, unique for every order	Primary key
is_delivered	boolean	Whether or not the order is delivered	
note	string	A note users may leave when ordering	
room_name	integer	The number of the room the order is made from	
date	string	The date when the order was made	
total_cost	double	Total cost of the order	

Table 3 - Order details data table

Field Name	Data Type	Description	Key Type
id	integer	ID of the requested digestible, unique for every digestible	Primary key
count	integer	Amount of the digestible ordered	
order_id	integer	ID of the order, unique for every order	Foreign key
digestible_id	integer	ID of the digestible, unique for every digestible	Foreign key

Table 4 - Digestible requests table

Database Entity-Relationship Diagram

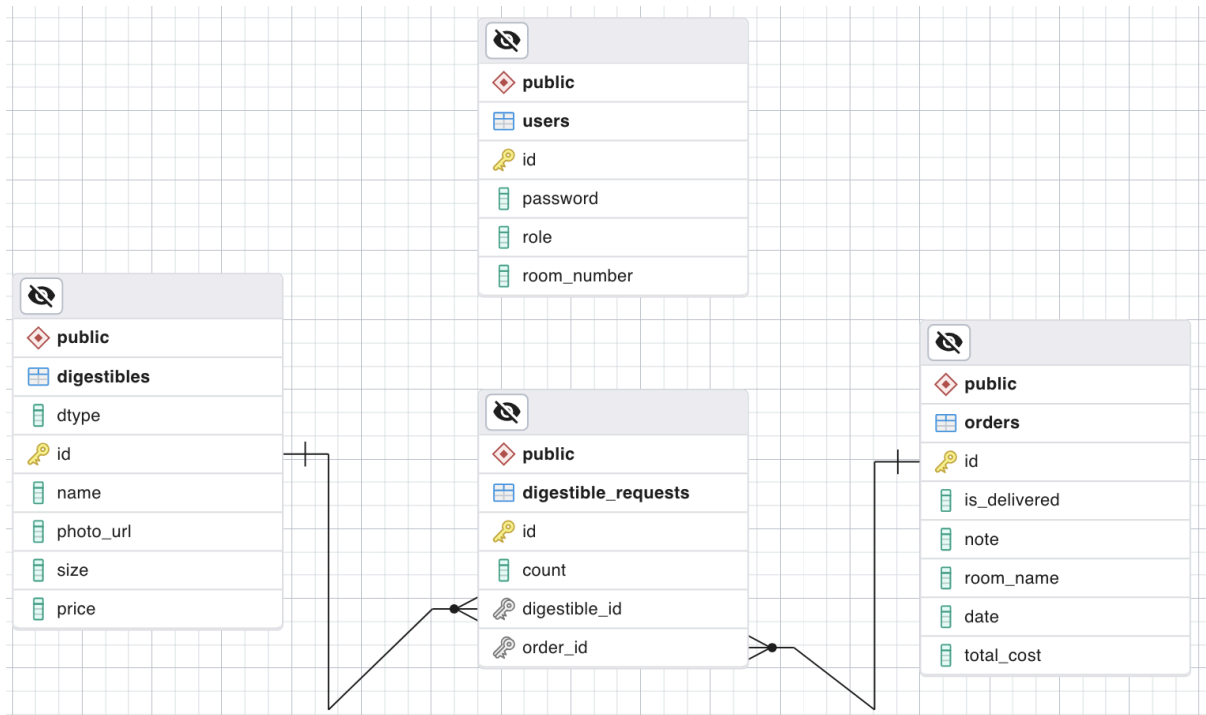


Figure 15 - This ER diagram shows the relationship between database fields. It is drawn in PostgreSQL. The gold keys represent primary keys and silver keys represent foreign keys.

Test Plan

What to Test	How to Test and Analyze Results
Test if the qr code works properly.	Read the qr code from a phone, if it opens the login page then this test is successful.
Test if devices can open the website using the hotel's internet (in my case the internet my host computer is connected to)	If the website can be accessed just by the url then this test is successful.
Test if correct user details being entered directs users to the correct page.	If two inputs of account details for customers and admins in the login page are directed to different pages, this test is successful.
Test if incorrect account details result in returning to the login page.	If entered username and password values aren't valid and the user gets redirected to the login page, this test is successful.
Test if customers can see the names, images and prices of each time on the menu.	If details of the items on the menu like name, image and price are visible on a customer account, this test is successful.

Test if foods and drinks can be viewed separately.	If there is a clear divider between drinks and foods in the menu, this test is successful.
Test if customers can see all their chosen products in one page	If all the chosen digestibles are visible in one page with all their details, this test is successful.
Test if customers can select an amount of an item and add it to their cart.	If after pressing the add to cart button the item and the number of it added is visible in the cart, this test is successful.
Test if users can remove items from their cart.	If users can change the number of purchases for an item in the cart page, this test is successful.
Test if users can return to the menu page without ordering.	If users can return to the menu page after pressing the "Back to menu" button and after reclicking on the "Show Cart" button the cart contents haven't changed, this test is successful.
Test if users can see the total price of their order in the cart.	If in the cart page the total price of every item is visible as a number, this test is successful.
Test if customers can select a method of payment before ordering.	If customers can select cash or credit, or use different credit cards while ordering, this test is successful.
Test if admins/kitchen staff have a separate page from customers	If the login details match an admin account and admins have a separate page for management, this test is successful.
Test if admins can see the list of pending orders.	If the admins can see a list of pending orders after clicking the "Manage Orders" button, this test is successful.
Test if admins can remove orders from the order list.	If admins are able to remove orders from the pending orders list after clicking the "Finish Order" button this test is successful.
Test if admins can add items to the menu.	If admins can add items to the menu after clicking the "Add New Item to Menu" button and the result is visible in the customer accounts' menu page, this test is successful.
Test if admins can edit details of already existing foods in the menu.	If admins can edit the name, photo and price of foods in the menu, this test is successful.
Test if admins can see the revenue brought in each day.	If admins can see the amount of money earned per day as a table, this test is successful.
Test if users can't access others' accounts by changing the url.	If changing values in the URL results in being sent to the login page, this test is successful.

Table 4 - This table shows the test plan which consists of tests that can be done to Test if functions work.