

## Deliverable o6 Green Team

Vanier College

Faculty of Science & Technology

**System Development** 

420-436-VA

Prepared for Alex, and Client

Created by

**Green Team** 

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## **Pledge of Certification**

We, the Green Team, certify that this assignment is our own work.

- I, Ariel Wazana, SID #2181476, certify that I have contributed to this deliverable, A.W.
- I, Yaman Alhammy, SID #2195286, certify that I have contributed to this deliverable, Y.A.
- I, Kevin Judal, SID #1995333, certify that I have contributed to this deliverable, K.J.

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## **Executive Overview**

This project will be about the development of the prototype user interface for our application for Lumia Residence in Pointe Claire.

Additionally, it will also contain the manager, Afi, and her comments about the prototype UI and the changes implemented due to her comments. This system will solve all of the business's problems. Let's dive into the executive overview.

In this Executive Overview, we dive into the critical components of our project's Deliverable 6 which is dedicated to the development of the prototype UI for the web application for Lumia Residence's restaurant in Pointe-Claire, under the guidance of our client, Afsaneh Hojabri (Afi) and her comment. This deliverable, aka deliverable #6, focuses on the creation of the prototype UI for the new system. This prototype UI will allow us to have a visualization of the application and provide Afi with a base model to provide changes and comments about.

## Summary description of client

Our client's name is Afsaneh Hojabri, also known as Afi. Lumia Residence is an elderly residence that also has a restaurant where the elderly can go eat delicious food and have some drinks. Afi is the manager of the restaurant in Lumia Residence. She handles the recruitment and supervision of employees, overseeing operations in the restaurant, handling the resident's complaints, and generating financial and restaurant records.

## **Business Problem**

The restaurant faces several challenges or obstacles that affect its overall efficiency and the quality of service it provides to the residents. These challenges revolve around the restaurant's current operational processes, the pen-and-paper system and the impact on order management, menu printing and the overall customer experience.

**Order Management:** The restaurant relies on a manual pen-and-paper system for order management. Waitstaff and kitchen staff use handwritten notes to communicate the resident's orders. While this traditional approach may have worked in the past, it has become increasingly inconvenient and error-prone.

**Menu Printing:** The restaurant relies on the frequent printing of menus, including weekly menus, daily menus, server's personal menus, and notepads for various purposes.

**Customer Experience:** The inefficiencies in order management and menu printing directly impact the customer experience.

Addressing these business problems is essential to improve operational efficiency, reduce costs, enhance customer experience, and align the restaurant with more sustainable practices. The development of the web application aims to provide innovative solutions to these challenges, ultimately benefiting both the restaurant and its valued residents.

## **Revised Narrative Description**

Our application has three roles, the **Resident**, the **Admin**, and finally, the **Kitchen / Cook**. These roles are designed to maintain clear distinctions in permissions and responsibilities.

Revised Changes: There has been no new changes to the narrative description due to the prototype UI being developed directly with the Narrative Description in mind. Although, as of now, Afi's comments have no direct changes to the narrative description due to her liking the design and functions whilst only small things are gonna change.

#### Authentication:

Residents aren't required to login, instead, they scan a QR code on their mobile devices to enter the application and enter the mandatory apartment number in the field. However, Admins require a unique username and password to login and be successfully authenticated. The kitchen/cook will also have a separate unique set of credentials to authenticate themselves.

#### Order Management:

Upon successful authentication, residents are presented with a wide menu where they can easily view and place their orders. Admins will be able to view resident's orders and modify, update, and cancel them. The kitchen staff will be able to view the orders to prepare them.

#### Menu:

Residents will be able to scroll up and down the list of food items and drink items and be able to click any item to add it to the cart. Admins can click the edit menu button where they can modify the title, photo, and description without the option to add to a cart.

#### Cart:

The resident's cart will show all the titles of the items added. They will be able to click the order button at the bottom of the cart-list which will bring them to a new page to confirm their order. This order will be sent directly to the kitchen(after the resident confirmed their order) where they will view the orders as a field that contains the details of the order with the table number. The admins have the same system as the resident in dealing with the cart.

#### Ordering:

Residents are able to place an order after at least 1 dish has been added to the cart by clicking the order button. The admin's ordering system works the same as the resident. Kitchen staff are able to view the order in their listview page where they can either press on "Ready" to state that the order is ready(after confirming) or press the "Cancel Order" button to cancel the entire order.

## 10 Usability Guidelines

#### 1. Consistency in User Roles

**Brief description:** Ensure that the roles of Residents, Admins, and Kitchen Staff are consistently defined and applied throughout the application to provide a predictable user experience.

**Source:** This guideline is based on established usability principles and best practices. It is widely recognized in the field of user experience design.

#### 2. Efficient Order Placement:

**Brief description:** Make it efficient for Residents to place orders by designing a user-friendly menu and straightforward item selection process.

**Source:** This guideline is a common usability principle used in e-commerce and ordering systems. It focuses on streamlining user tasks.

#### 3. Clear Confirmation Messages:

**Brief description:** Provide clear and informative confirmation messages for actions like placing orders to reassure users and give them feedback on their interactions.

**Source:** This guideline aligns with the usability principle of providing feedback, as suggested by Jakob Nielsen's 10 Usability Heuristics for User Interface Design (<a href="https://www.nngroup.com/articles/ten-usability-heuristics/">https://www.nngroup.com/articles/ten-usability-heuristics/</a>).

#### 4. Role-Based Interface Clarity:

**Brief description:** Ensure that the user interface clearly indicates the user's role (Resident, Admin, Kitchen Staff) at all times to help users understand their permissions and responsibilities.

**Source:** This guideline is consistent with Nielsen's usability heuristics, specifically the heuristic of match between the system and the real world (https://www.nngroup.com/articles/ten-usability-heuristics/).

#### 5. Password Management Efficiency:

**Brief description:** Design efficient and user-friendly processes for creating new accounts and resetting passwords to reduce friction in these tasks.

**Source:** Password management usability guidelines are derived from general web usability best practices and guidelines for authentication processes.

#### 6. User Feedback on Authentication:

**Brief description:** Collect user feedback on the authentication process to ensure it is intuitive and user-friendly, addressing any issues or confusion.

**Source:** This guideline is aligned with user-centered design principles that emphasize user feedback and iterative improvement.

#### 7. Cart Management Clarity:

10

**Brief description:** Ensure that the process of managing the cart, including viewing, modifying, and removing items, is clear and straightforward for both Residents and Admins.

**Source:** This guideline is based on the usability principle of simplicity and ease of use.

#### 8. Efficient Order Modification for Admins:

**Brief description:** Optimize the order modification process for Admins to ensure they can efficiently manage and update orders with minimal errors.

**Source:** This guideline aligns with principles of task efficiency in user interface design.

#### 9. Menu Search Usability:

**Brief description:** Ensure that the search function for Residents to find specific dishes is user-friendly, providing relevant results and being easy to use.

**Source:** This guideline is based on search usability best practices in information retrieval and user experience design.

#### 10. Viewing and Managing Orders for Kitchen Staff:

**Brief description:** Make it easy for Kitchen Staff to view and manage incoming orders, allowing them to mark orders as complete efficiently for food and drink preparation.

**Source:** This guideline emphasizes task efficiency and is based on principles of workflow optimization in user interface design.

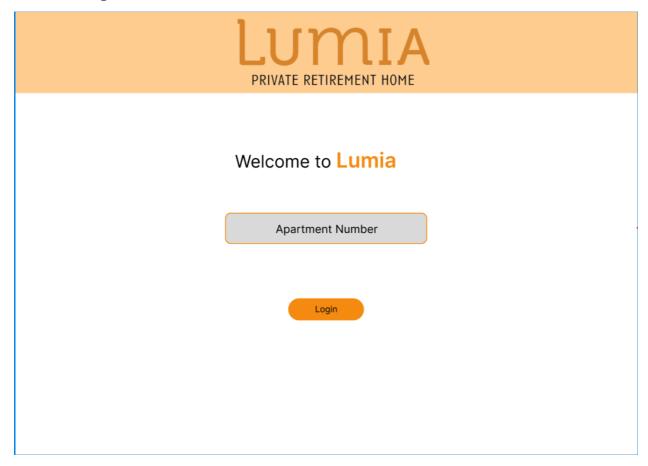
## **Prototype Interfaces**

Our prototype interactive user interfaces can be found on <a href="https://www.figma.com/file/V14ms3e4vfDVHuAbKcUvTo/Lumia?type=design&node-id=0%">https://www.figma.com/file/V14ms3e4vfDVHuAbKcUvTo/Lumia?type=design&node-id=0%</a> <a href="https://www.figma.com/file/V14ms3e4vfDVHuAbKcuvTo/Lumia?type=design&node-id=0%">https:/

However, here are some basic screenshots of the prototype user interfaces:

Old design (before applying client's comments and making it interactive)

#### Resident Login:



#### Staff (Admin & Kitchen) Login:



## Login

Username

Password

Forget Password 👙

Login

Wireframe:



Step into a world of culinary delight at Lumia, where every dish is a masterpiece and every meal is a journey through exquisite flavors.





#### What are we Cooking?

We produce pastries and confections "like at home" – without the addition of any preservatives, dyes; formula as close as possible to homemade food.

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We produce pastries and confections "like at home" – without the addition of any preservatives, dyes; formula as close as possible to homemade food.

## Tasty. Quick.



# Our Menu Time to Get Healthy & Active







## Contacts

#### **OPENING TIME:**

Tue-Fri: 8am - 10pm Sat-Sun: 8am - 7pm Closed Monday

#### ADDRESS:

15 Pl. de la Triade, Pointe-Claire, QC H9R 0A3

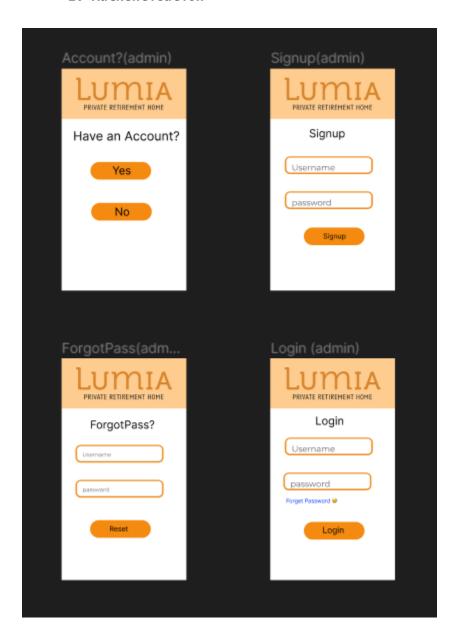
#### PHONE:

(514) 695-6695

**NEW** design (after applying client's comments and making it interactive)

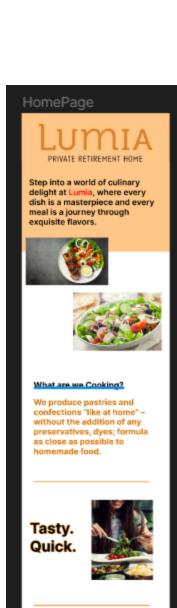
#### Interactive UI Flowmap:

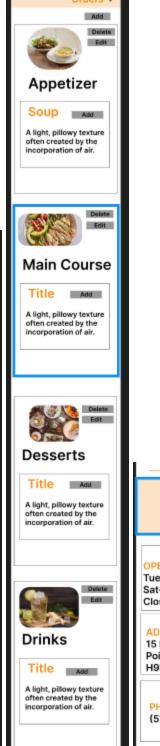
- Admin Part:
  - 1. Dishes
  - I. Authentication

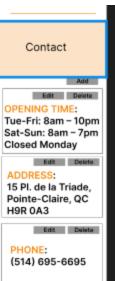


II. Home Page

Our Menu
Time to Get Healthy & Active



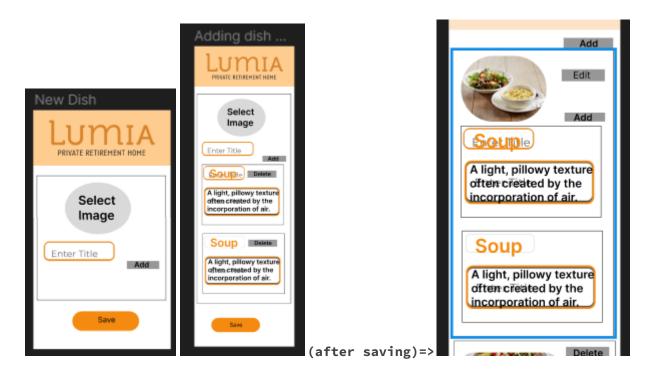




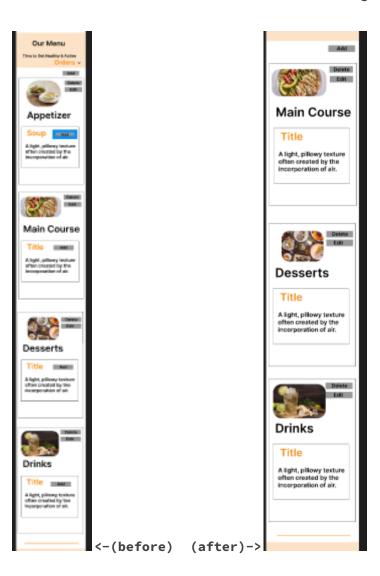
#### III.Editing Dish



IV.Adding Dish

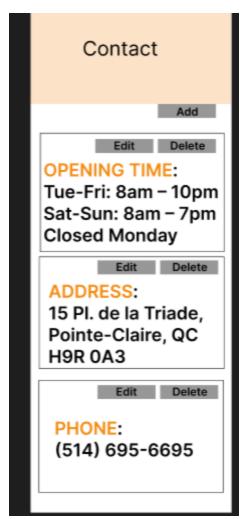


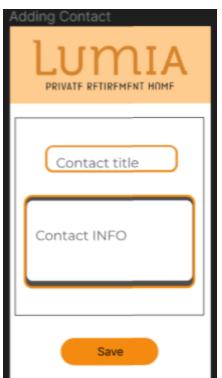
**V.Deleting** 



#### 2. Contacts

#### I. Editing



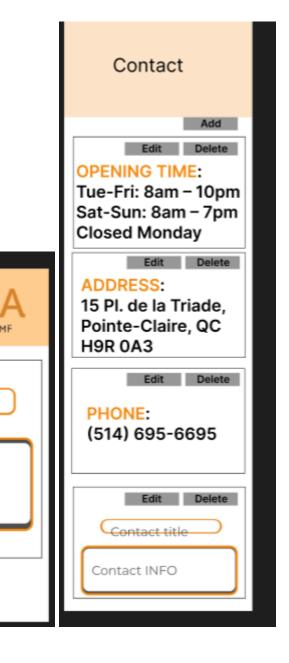


#### II. Adding

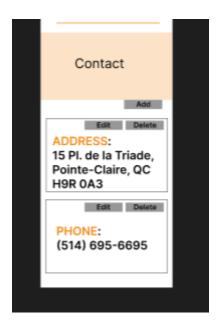
Contact title

Save

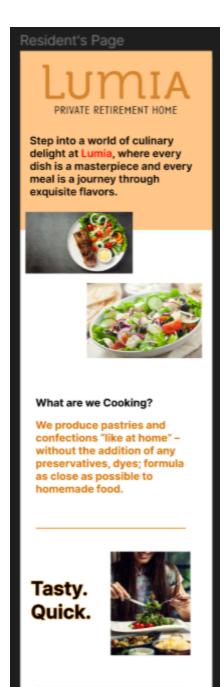
Contact INFO

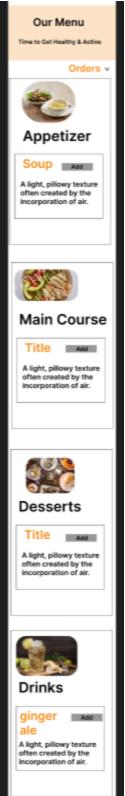


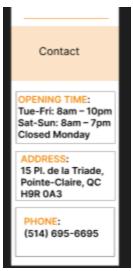
#### III. Delete



- Resident Part:
- 1.Veiw

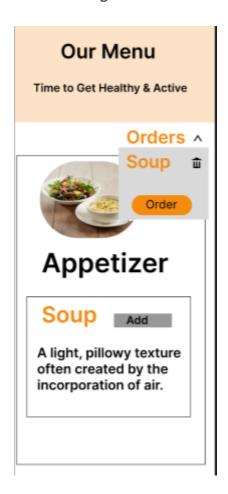






#### 2. Ordering:

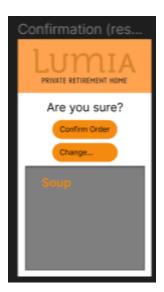
#### I. Adding to Cart



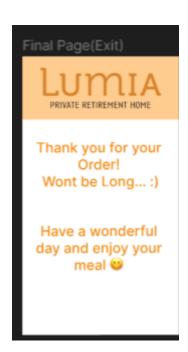
#### II. Removing from cart:



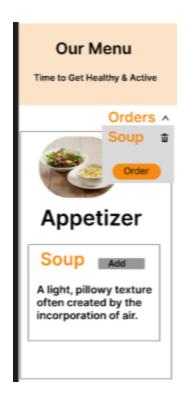
#### II. Ordering (Confirmation)



#### i. If Confirmed



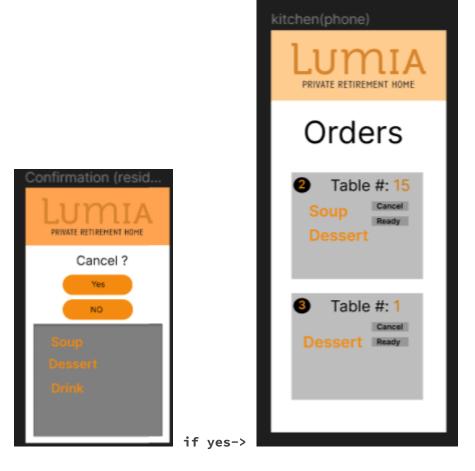
ii. If they want to change



- Kitchen's Part:
  - 1. Viewing Orders



#### 2. Canceling an Order: (Confirmation)



If No it goes back to the same page.

#### 3. Order Ready (Confirmation)



If yes it goes back to the main View (and it gets removed) if no they go back to the main View without removing it.

## Client's Comments

Process to interact with client: Our process to interact with our client, Afi, was via our communicator Kevin Judal. Kevin Judal booked an <a href="in-person">in-person</a> meeting with Afi, and showcased and demonstrated the prototype UI to her.

**Client's Comments:** Afi, the Lumia Residence Manager, said that overall she liked the design but she wants us to make sure that everybody can see the text

since the residents are older. We also discussed with the head chef and he said he wants to see a beverage section because they like tea and soft drinks. Also, here's a quote by the head chef: "They can't live without their ginger ale."

Changes done after client comments: We implemented a few changes after the client's comments. The first change was to make every section (more specifically every text) way bigger to ensure that all residents can see the text. The next thing we changed was to add a "Beverage" section so that the residents can order drinks. Other than that, everything was up-to-par.

## Revised Appendix 1 & Appendix 2

#### What changed in the revised appendix 1 & appendix 2?

There have been no new changes to appendix 1 and appendix 2 due to the prototype UI being developed directly with the Narrative Description in mind which correlates to Appendix 1 & Appendix 2. Although, the changes implemented based on Afi's comments are all design-related and not process related so the flowchart and user stories all remain the same.

#### Process for Obtaining User Stories:

In order to obtain these user stories, we met with Afi and ourselves to discuss the process of how a typical resident, a typical admin, and a typical cook would use the web application. We discussed every feature that the user would be capable of doing and what information they are capable of viewing when using the application. The User Stories are split into three sections, the Resident User Stories (R), the Admin User Stories (A), and the Kitchen User Stories (C).

### Resident User Stories

Title: Logging in

User Story:

As a Resident (R)

I want to login into the application

so that I can place my order to eat my food and drink my beverages.

#### Acceptance Criteria:

Given that the user has a mobile device

When the user scans the QR code and the user enters their appt number

Then the user will be authenticated and allowed to view the menu and place orders.

Title: Entering apartment number

#### User Story:

As a Resident (R)

I want to enter my apartment number into the mandatory field displayed so that I can place my order to eat my food and drinks.

#### Acceptance Criteria:

Given that the user has scanned the QR code and is prompted with the field

When the user clicks on a field for entering their apartment number

Then the user will be able to enter their apartment number using a displayed keyboard

Title: Searching for a dish

#### User Story:

As a Resident (R)

I want to search for a specific dish

so that I can add it to my cart, to place the order

#### Acceptance Criteria:

Given that the user has scanned the QR code, and has entered their appt number and is prompted with the menu and search bar

When the user clicks on the search bar or at the menu

Then the database will return to another screen any dishes that match with the user's search. If no dishes match that search then nothing a warning will be displayed.

Title: Selecting a dish

#### User Story:

As a Resident (R)

I want to select a specific dish from main page or from search result

so that I can read about the details such as the description, and photos to perhaps add it to my cart.

#### Acceptance Criteria:

Given that the user has scanned the QR code, and has entered their appt number and has found the menu item / dish they want to select

When the user clicks on the menu item

Then the user will be taken to another screen where they can see all of the details such as the title, description, photo, as well as the add to cart button.

Title: Add to cart

#### User Story:

As a Resident (R)

I want to add a specific item to my cart

so that I can place my order to eat.

#### Acceptance Criteria:

Given that the user has scanned the QR code, and has entered their appt number and has selected a dish that they want to add to cart

When the user clicks on the "Add to cart" button

Then the user will be prompted with a field saying "Successfully added to cart!" with a +1 notification to the cart icon in the top right corner.

Title: View cart

#### User Story:

As a Resident (R)

I want to view my cart

so that I can finalize the order details and perhaps place the order

#### Acceptance Criteria:

Given that the user has scanned the QR code, and has entered their appt number

When the user clicks the cart icon button in the top right corner

Then the user will be brought to a new page where they can view all the added dishes in a listview fashion with an X icon to remove the dish or a + icon that will bring them back to the menu, and most importantly, a "Place Order" button at the bottom

Title: Place order

#### User Story:

As a Resident (R)

I want to place my order

so that I can eat food and drink my beverages.

#### Acceptance Criteria:

Given that the user has scanned the QR code, and has entered their appt number, has added at least 1 dish to their cart

When the user clicks the "Place Order" button

Then the user will be prompted with a confirmation message saying "Confirm?" if the user clicks yes they will be brought to a new page displaying a message saying "Thank you for your order! Order ID: ####". If they click no, they will return back to the cart.

## Admin User Stories

Title: Logging in

#### User Story:

As an Admin (A)

I want to login into the application

so that I can manage the orders for my work.

#### Acceptance Criteria:

Given that the user is an existing employee in the database

When the user enters their credentials in the login page and clicks log in

Then the user will be authenticated and let into the application.

Title: Creating an Account

#### User Story:

As an Admin (A)

I want to create an account

so that I can log into the application.

#### Acceptance Criteria:

Given that the user is a new employee in the database

When the user enters their credentials to create a new account

Then the user's credentials will be saved in the database and now, have access to the application.

Title: Resetting Password

#### User Story:

As an Admin (A)

I want to reset my password

so that I can log in to the application.

#### Acceptance Criteria:

Given that the user is an existing employee in the database and has forgotten/lost their password

When the user resets their password and clicks confirm new password

Then the user's new password will be saved into the database and now, able to log in to the application.

Title: Dish Management

#### User Story:

As an Admin (A)

I want to manage the dish section which includes the dish' title, description, and images

so that I can improve the restaurant service.

#### Acceptance Criteria:

Given that the user is an existing employee in the database

When the user enters their credentials in the login page and clicks log in

Then the user will have access to admin permissions to manage the dish section.

Title: Contact Management

#### User Story:

As an Admin (A)

I want to manage the contact section which includes the contact's name,

email address, contact information, and address

so that I can improve the restaurant service and inform contact details.

#### Acceptance Criteria:

Given that the user is an existing employee in the database

When the user enters their credentials in the login page and clicks log in

Then the user will have admin permissions to manage the contact section.

Title: Add to cart (Admin)

#### User Story:

As an Admin (A)

I want to add a specific item to my cart from the selected dish

so that I can place my order for the resident.

#### Acceptance Criteria:

Given that the user is an existing employee in the database and has selected a dish that they want to add to their cart

When the user clicks on the "Add to cart" button

Then the user will be prompted with a field saying "Successfully added to cart!" with a +1 notification to the cart icon in the top right corner.

Title: Remove from cart (Admin)

#### User Story:

As an Admin (A)

I want to remove a specific item from my cart from the selected dish

so that I can place my order for the resident.

#### Acceptance Criteria:

Given that the user is an existing employee in the database and has selected

a dish that they want to remove from their cart

When the user clicks on the "Remove from cart" button

Then the user will be prompted with a field saying "Successfully removed from cart!" with a +1 notification to the cart icon in the top right corner.

Title: View cart (Admin)

#### User Story:

As an Admin (A)

I want to view my cart

so that I can finalize the order details and perhaps place the order.

#### Acceptance Criteria:

Given that the user user is an existing employee in the database

When the user clicks the cart icon button in the top right corner

Then the user will be brought to a new page where they can view all the added dishes in a listview fashion with an X icon to remove the dish or a + icon that will bring them back to the menu, and most importantly, a "Place Order" button at the bottom

Title: Place order (Admin)

#### User Story:

As an Admin (A)

I want to place a resident's order

so that I can help or assist the resident.

#### Acceptance Criteria:

Given that the user is an existing employee in the database, has added at least 1 dish to their cart

When the user clicks the "Place Order" button

Then the user will be prompted with a confirmation message saying "Confirm?"

if the user clicks yes they will be brought to a new page displaying a message saying "Thank you for your order! Order ID: ####". If they click no, they will return back to the cart.

## Kitchen User Stories

Title: Logging in

#### User Story:

As a Kitchen staff (C)

I want to login into the application

so that I can view the orders to prepare the food and drinks for the resident.

#### Acceptance Criteria:

Given that the user is an existing employee in the database

When the user enters their credentials in the login page and clicks log in

Then the user will be authenticated and let into the application.

Title: View orders

#### User Story:

As a Kitchen staff (C)

I want to view the incoming orders

so I can start preparing the food and drinks for the clients

#### Acceptance Criteria:

Given that a resident has already placed an order

When the kitchen staff press View Orders button

Then the kitchen staff will be brought to a new page with a listview of placed orders

Title: Creating an Account

#### User Story:

As an Kitchen Staff (C)

I want to create an account

so that I can log into the application.

#### Acceptance Criteria:

Given that the user is a new employee in the database

When the user enters their credentials to create a new account

Then the user's credentials will be saved in the database and now, have access to the application.

Title: Resetting Password

#### User Story:

As an Kitchen Staff (C)

I want to reset my password

so that I can log in to the application.

#### Acceptance Criteria:

Given that the user is an existing employee in the database and has forgotten/lost their password

When the user resets their password and clicks confirm new password

Then the user's new password will be saved into the database and now, able to log in to the application.

Title: Cancel Order

#### User Story:

As an Kitchen Staff (C)

I want to cancel an order

so that I can let the resident know.

#### Acceptance Criteria:

Given that the order is placed and can't be made in real life

When the cook clicks cancel order

Then the order will be canceled and deleted off the view order list

Title: Mark Order as complete

#### User Story:

As an Kitchen Staff (C)

I want to mark the order as complete

so that a waiter can go bring them the food and drinks.

#### Acceptance Criteria:

Given that the order is placed and the cook has finished making it

When the cook checks the checkbox next to the word Complete

Then the status of the order will be changed to complete and a waiter can come pick it up to serve to the resident.

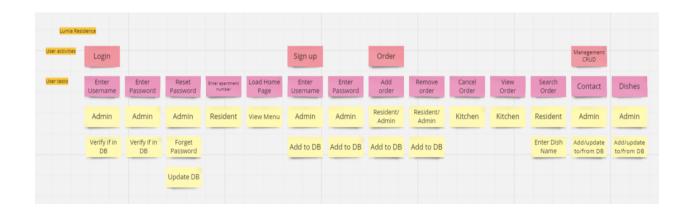
## Revised User Story Map

#### Choice of Tool:

The tool we chose to represent the story map is Miro. Miro is a very flexible Agile project management tool. We are using <a href="www.miro.com">www.miro.com</a> with the User Stories Map template with cards to represent the story map.

#### Revised User Story Map:

No new changes since the changes based on Afi's comments are design-related and not process-related therefore the User Story Map will remain the same and the User Stories are also remaining the same way as before.



## Project Plan

The Project Plan will be updated every deliverable so by the end it is super detailed and perfect.

