Chelsea's Research

1. **What should a diet awareness shopping assistant do?**

   - Personalized recommendations: Based on the user's dietary needs and preferences, the system should provide personalized recommendations for food items to purchase.

   - Nutritional information: The system should provide information on the nutritional content of food items, including calorie count, fat content, protein content, etc.

   - Allergen and ingredient information: The system should provide information on allergens and ingredients that may be present in food items, including any warnings or substitutions that may be necessary.

   - Food substitutions: The system should be able to suggest alternative food items that meet the user's dietary requirements in case certain items are not available or the user wants to make a healthier choice.

     Meal Planning related suggestions. Not necessarily needed.

   - Meal planning and tracking: The system should provide tools to help users plan and track their meals, including the ability to add items to a shopping list and track the nutrients they are consuming.

   - Recipe suggestions: The system should provide recipe suggestions based on the user's dietary needs and the ingredients they have on hand.

2. **How can I incorporate all this information effectively into the user-interface design?**

   - User-centred Design
   - Simple and intuitive interface
   - Visual aids: Visual aids, such as graphs, charts, and icons, can be used to present information clearly and concisely. For example, a traffic light system can be used to indicate the healthiness of different food items.
   - Personalization: Users should be able to select their dietary restrictions and preferences, and the interface should adjust accordingly.
   - Contextual information: Provide contextual information relevant to the user's current context, such as their location, the time of day, or the food items they have selected. This will help users make informed decisions in real time.
   - Feedback and error handling
   - User testing

3. **Most common dietary needs and preferences for users**

- Gluten-free
- Low-fat
- Vegetarian/ Vegan
- Low-carb
- Dairy-free
- Low-sugar
- Kosher
- Halal
- High-protein
- Low-sodium
- Paleolithic
- Mediterranean
- FODMAP-free
- Anti-inflammatory
- Organic
- Rice-based
- Spicy
- Fermented
- Fish-based

Kosher: Adhering to Jewish dietary laws, which specify which foods are permissible and how they must be prepared.

Paleolithic: Seeking foods that are like those consumed by early humans, including meat, fish, fruits, and vegetables, and avoiding processed foods and grains.

FODMAP-free: Avoiding foods that contain fermentable oligosaccharides, disaccharides, monosaccharides, and polyols, which can cause digestive discomfort in some individuals.

4. **What are some questions I can ask to understand the user's needs and goals?**

- What is your current eating and shopping behaviour like?
- What are your dietary restrictions and preferences?
- What challenges do you face when shopping for food that meets your dietary needs?
- How important is nutritional information to you when shopping for food?
- What features would make your shopping experience easier and more convenient?
- What factors influence your food choices when shopping?
- Do you have any specific goals or target numbers for your nutrition, such as daily calorie intake or macronutrient ratios?
- How would you like to be alerted to potential food allergens or ingredients you want to avoid?
- How do you currently plan and track your meals?
- How do you typically choose recipes to prepare for meals?

5. **Can I have some more questions specific to the design of the system?**

- How do you prefer to access nutritional information about food items, such as through text or visual aids?
- How important is the ability to personalize the system to your specific dietary needs?
- How do you want to be able to filter food items based on your dietary restrictions or preferences?
- What is your preferred method of adding items to a shopping list?
- How would you like to be able to track your meals and nutrition over time?
- How important is the ability to access recipe suggestions based on the ingredients you have on hand?

- How would you like the system to alert you to potential food allergens or ingredients you want to avoid?
- How important is the ability to make food substitutions on-the-fly while shopping?
- What type of feedback would you like to receive from the system, such as alerts, notifications, or summaries?

6. **Some questions regarding the interface they have to use**

- How do you prefer to navigate the interface, such as through menus, icons, or gestures?
- How important is the ability to personalize the interface to your preferences?
- What type of visual aids do you prefer, such as graphs, charts, or icons?
- How important is the ability to view nutritional information about food items at a glance?
- How do you want to be able to add items to your shopping list?
- How important is the ability to view your shopping list in a store or online?
- How important is the ability to view your meal and nutrition history?
- How do you want to be able to access recipe suggestions?
- How important is the ability to view information about food items, such as ingredients and nutritional content, while shopping in a store or online?
- How do you want to be able to receive feedback from the system, such as alerts, notifications, or summaries?

7. **Steps to make the design to the point.**

- Use clear and concise language
- Minimize the use of visual aids: Only include visual aids that are essential and add value to the user experience. This will help keep the interface uncluttered.
- Prioritize information: Focus on displaying only the most important information and provide a way for users to access additional information if needed.
- Use simple and consistent navigation
- Consider using a minimalist design
- Offer options for customization: Allow users to personalize the interface to their preferences, including the ability to hide or show certain information.
- Make use of whitespace

8. **What kind of information is most important to be present on the screen?**

- Shopping list: A clear and easily accessible list of items that the user needs to purchase.
- Nutritional information: The ability to view detailed information about the nutritional content of food items, including calorie count, fat, carbohydrates, and protein.
- Dietary restrictions and preferences: A way to filter food items based on specific dietary restrictions or preferences, such as gluten-free, low-fat, or vegan.

- Food substitutions: The ability to suggest alternative food items that meet the user's dietary needs or preferences.
- Allergen warnings: A way to alert the user to potential allergens or ingredients to avoid.
- Product information: Information about food items, including ingredients, price, and nutritional content, while shopping in a store or online.

9. How to make it accessible to people with disabilities?

- Support accessibility technologies: Ensure the system is compatible with assistive technologies such as screen readers, speech recognition, and magnifiers.
- Make use of alternative forms of input: Offer multiple ways for users to input information and interact with the system, including keyboard, touch screen, and voice commands.
- Offer high-contrast display options: Provide options for high-contrast display to make the interface easier to read for people with visual impairments.
- Use clear and descriptive text: Use clear and descriptive text to label buttons, links, and other interface elements, making it easier for screen readers to understand.
- Make use of audio cues: Provide audio cues to support users who are blind or have low vision.
- Ensure proper keyboard navigation: Ensure that users can navigate the entire interface using only the keyboard, making it accessible to users with mobility impairments.
- Provide alternative ways to access information: Offer alternative ways to access information, such as audio descriptions or sign language videos, to support users with cognitive or hearing impairments.