# Final Project Proposal

*NourishBox Website*

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## Prepared For:

COM S 3190 - Construction of User Interfaces
Iowa State University Computer Science Department

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# 1. Introduction

We, Jyotika Sharma and Lukus Klipping are from team AB9. Jyotika is a Junior majoring in Computer Science and minoring in Data Science. Lukus Klipping is a Sophomore majoring in Software Engineering. We are in the process of learning the demanding web development skills like HTML, CSS and JavaScript from this class of COM S 319. We learned how to build a website on catalog of products from our in-class activities. Jyotika has taken COMS 309 in the past, so she has experience collaborating with a team. We believe that we can combine our thoughts and skills to make a better website.

# 2. Purpose of the proposal

We aim to develop a subscription website that is simple and accessible for users. Through our website, “NourishBox”, we want to make it easier for people to get clean food to nourish their bodies. Overall we want to create an interactive website that allows users to look good and feel good.

# 3. Goals and Objectives

Our Project’s goals and objectives:

- Developing a user-friendly website with an attractive design.
- Demonstrating proficiency in React, Node.js with Express, MySQL for web development.
- Creating an easy-to-navigate interface for users to explore the possible meal options
- Offer different meal payment plans that vary in prices and time frames

- Incorporate a search feature to make it easier for users to locate different types of meals and delectable desserts.
- Incorporate a easy to use login and sign up page to subscribe to obtain the meals

## 4. Project

With NourishBox, we intend to create a perfect medium for users to get into a healthy diet lifestyle. Along with that, a place to subscribe, review, and view meals alike

Our project will feature several key components:

- A catalog with different meal options (breakfast, lunch, dinner, and dessert)
- A login and sign up page to subscribe to website
- An ecommerce page that includes a shopping cart for users to purchase individual meals, meal plans, and subscriptions
- A home page showcasing meal plans including information for "Why NourishBox"
- Meal plan and benefits page that goes into detail about the meal plans and then the ingredients and then how to make the meal

Example for Homepage:

- A welcoming homepage interface including an interactive gallery showcasing meals with bright foods spread across the homepage. As well why the user should invest in our subscription – "Why NourishBox".
- A navigation bar to search certain meals plans, individual meals, subscriptions, sign up, and view shopping cart

Example image for gallery page:

- A grid layout displaying the article of meals using React

- Each item has a detailed description and users are able to click on the item to reveal more information on ingredients and how to make

Example for Meal Plan page:

- A sleek design of the popular meal plans enlarged on the page along with a description of the health benefits

Example for Subscription Plans page:

- An organized and detailed description of the meal plans users can purchase, which varies with price and time frame

Example for Sign Up Page:

- A simple and clean sign up page allowing users to create an account relating to NourishBox

Example for shopping cart and ecommerce:

- An organized design that displays all of the items in the user's cart and the total amount of the purchase, leading them to enter personal information

## 5. Project Path Selection

Option 2:

- We chose Option #2 because we fully developed and implemented our fashion catalog website and we were unable to brainstorm more features and implementations from a frontend standpoint

## 6. Feature Ownership & Responsibility

- Login & Signup:

    - Description: Handles storing personal information of the user and storing in the database
    - Developer: Jyotika Sharma (Frontend + Backend)
- Shopping cart management:
    - Description: Handles a specific user's shopping cart
    - Developer: Luke Klipping (Frontend + Backend)
- Product CRUD functionality:
    - Description: Handles all of the information about the individual's meals ingredients and descriptions on how to make
    - Developer: Jyotika Sharma (Backend)
- Search & filter:
    - Description: Handles a search functionality, allowing users to search for website information
    - Developer: Luke Klipping (Frontend + Backend)
- Meals subscription page:
    - Description: Handles providing description of the different meal plans (prices) and what is provided
    - Developer: Jyotika Sharma (Frontend + Backend)
- Meal plan ingredients / "how-to" page:
    - Description: Handles meal ingredient information and how to cook the meal
    - Developer: Luke Klipping (Frontend + Backend)

## 7. Resources and Tools

1. Web development programming languages like React, Node.js with Express, and MySQL.
2. Use of MySQL database to store information about user information, shopping cart information, and meal ingredients
3. Time allocation for each team member to collaborate on the project
4. Using GitLab as our version control remote repository to push and pull our work to keep our team's work up to date
5. Using the Bootstrap to outline NourishBox and example from Activities in class
6. Accessing images through free image websites to get free and clear images
7. Use DrawIO to design the prototype for different pages of our website.
8. We will use Excalidraw to create wireframes for our main web pages, including the homepage, gallery of meals, and shopping cart. These wireframes will guide the development of our user interface, ensuring a user-friendly experience.

## 8. File Structure and Project Organization

Our file structure includes:

- frontend/
  - src/
    - assets/ – images and external data
    - components/ – reusable React components
    - context/ – authentication and user context
    - pages/
      - user/
        - Home.jsx
        - MealPlans.jsx
        - Ingredients.jsx
        - Cart.jsx
        - Subscribe.jsx
      - admin/

            - Dashboard.jsx
            - ManageMeals.jsx
            - ManageUsers.jsx
            - Reports.jsx
        - Login.jsx
        - Signup.jsx
    - App.jsx
    - main.jsx
- backend/
    - routes/
        - authRoutes.js
        - cartRoutes.js
        - mealRoutes.js
        - userRoutes.js
        - adminRoutes.js
    - controllers/
        - authController.js
        - cartController.js
        - mealController.js
        - userController.js
        - adminController.js
    - db/
        - config.js
- Documents/
    - planning-sketches/
    - architecture-doc.md
    - final-report.md
    - video

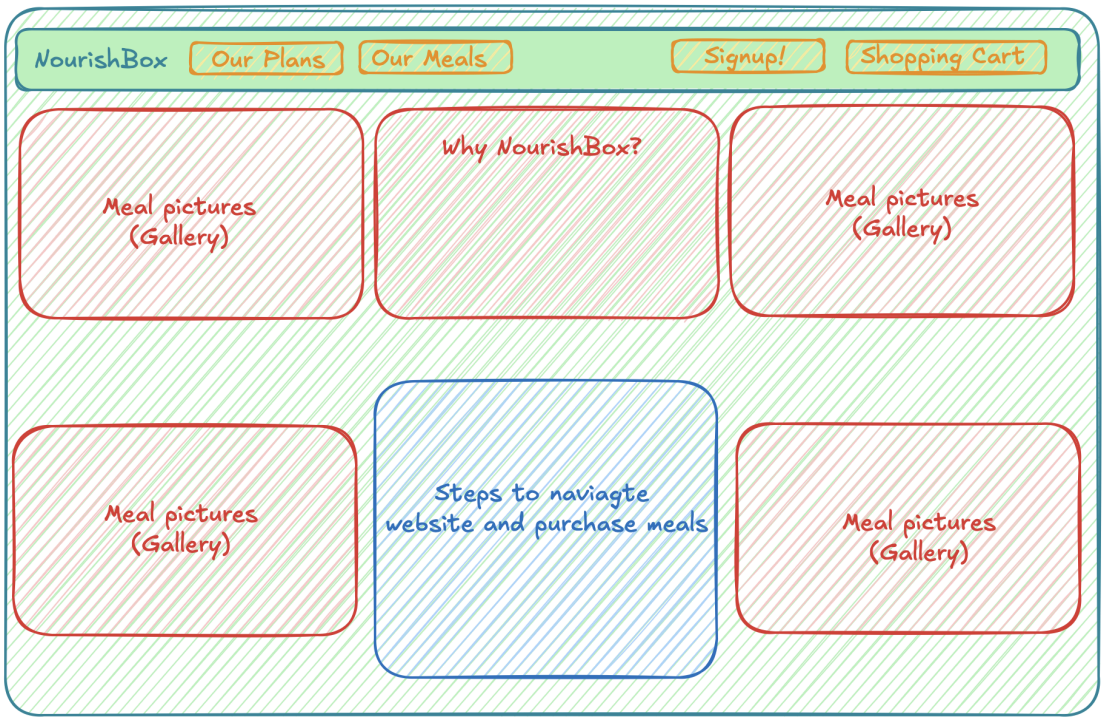
Here is our working and rough file structure outline (subject to change as we actually develop our project).

## 9. Data Sources and Management

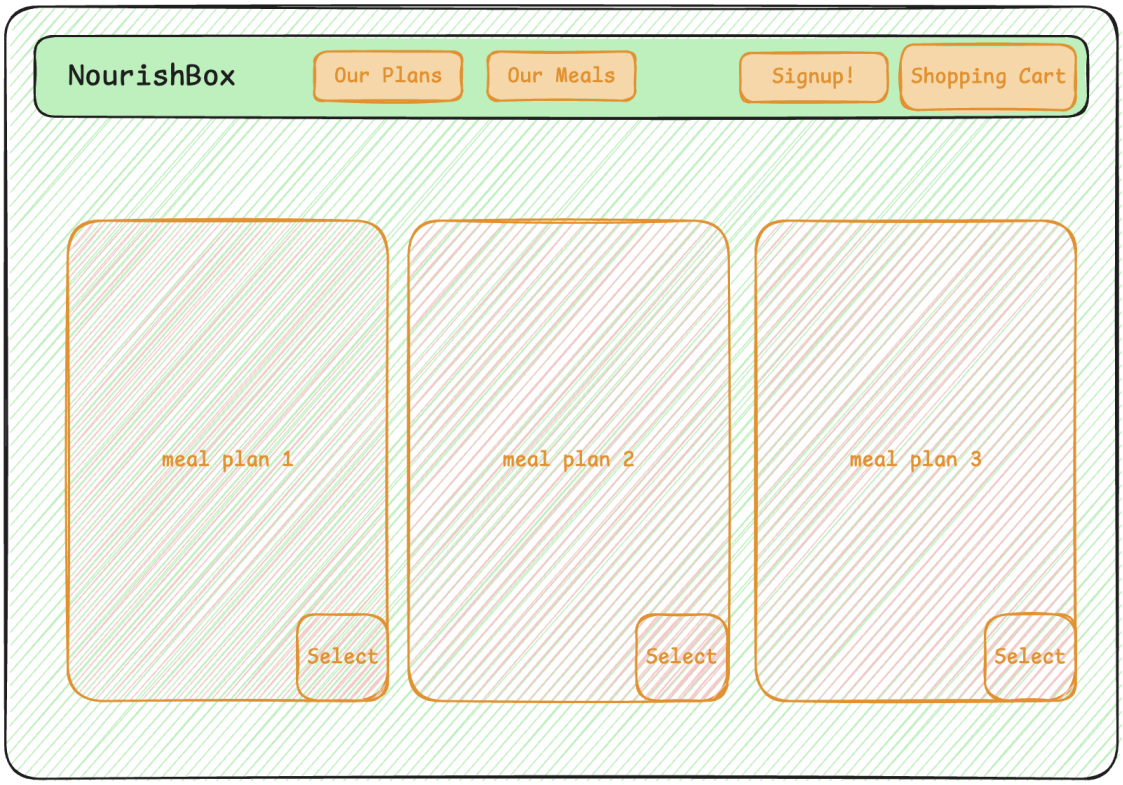
We are going to use MySQL to store user's personal information which we will create through the sign up functionality, and read through the login functionality. The user's personal information will come into play when purchasing items through the shopping cart. We will create meals, including the ingredients, which we will store in the database. Our information about meals will come from third-party API's about nutrition and food. This information will be visible to users.

# 10. User Experience Views

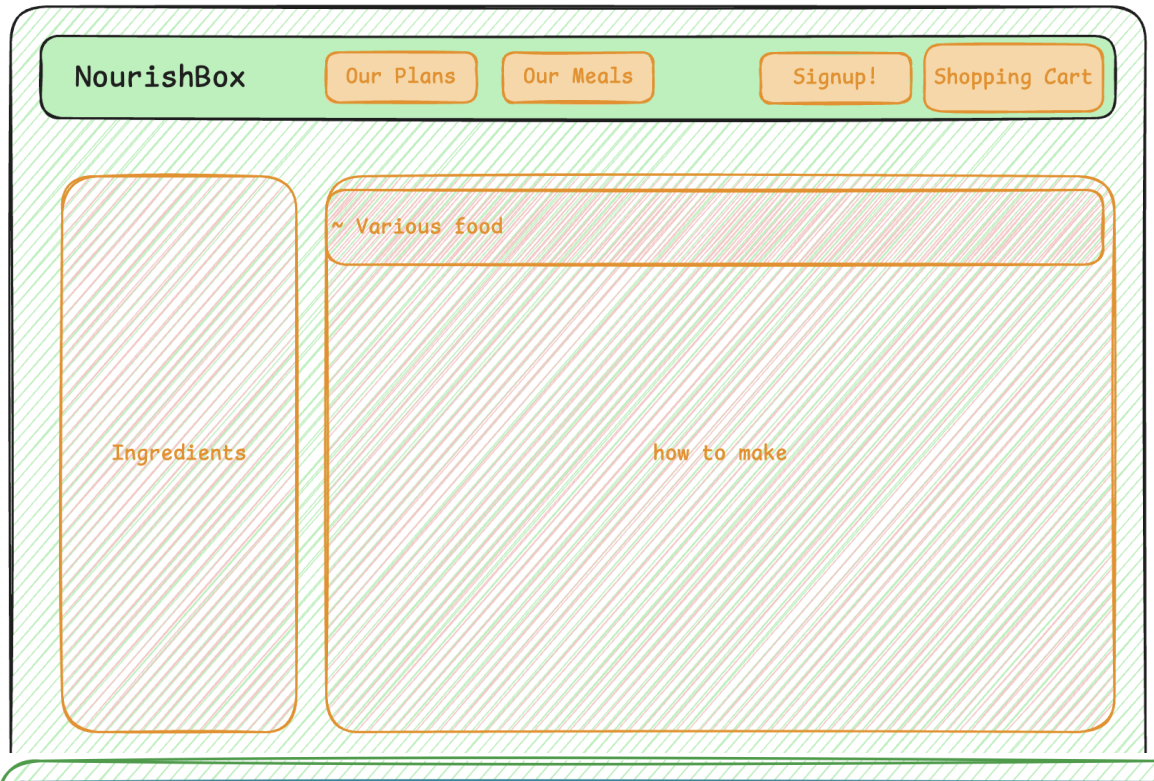
**Homepage**

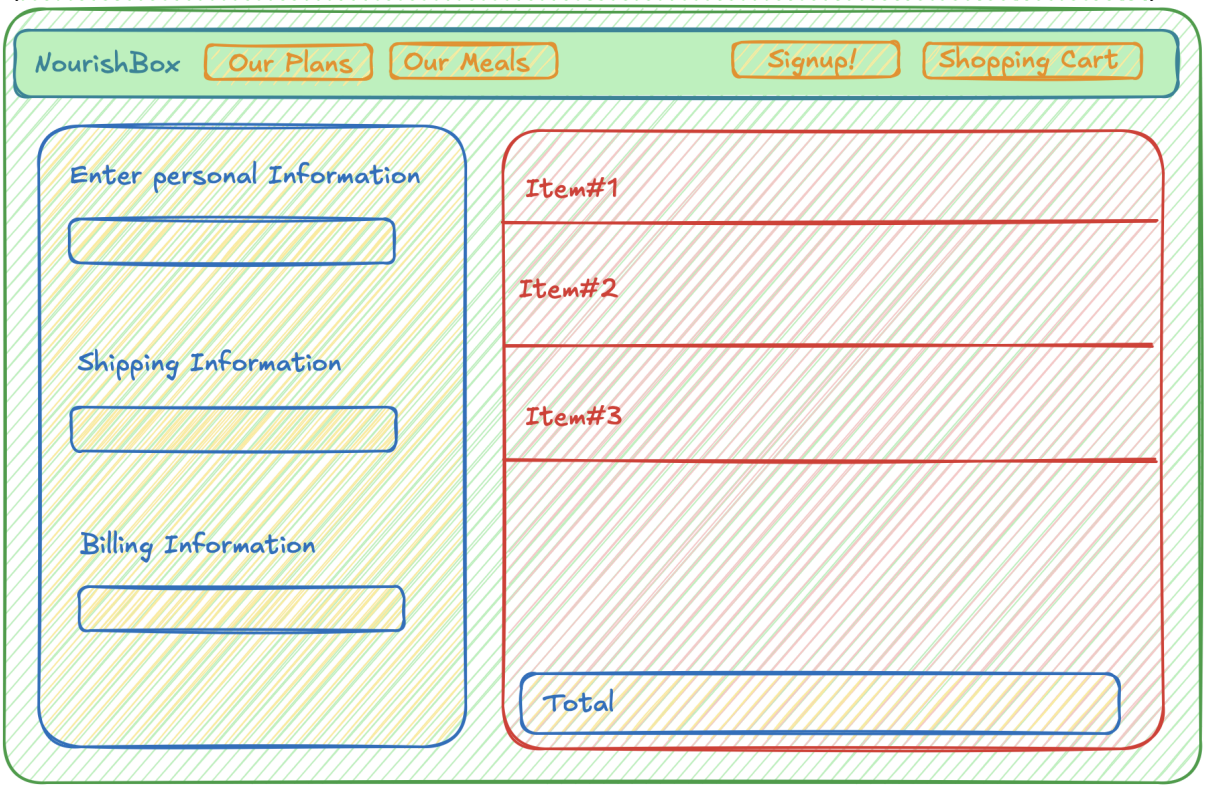



**Meal plans:**



**Ingredient page**




**Shopping cart**

- Users will be able to see meals along with the ingredients, description, and instructions on how to make the meal
- Users will be able to see their items in the shopping cart where users can click on buttons to add meals to the shopping cart
- User will be able to click buttons to purchase different subscription meal plans

## 11. Final Comments

This is our proposal for the NourishBox meal plan website. We believe this project will not only enhance our learning but also provide a valuable resource for clean and healthy eating. Thank you for considering our proposal. We are open to suggestions.

You can reach out to us at:

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