

PROJECT PROPOSAL

WEB DEVELOPMENT II / JS / FSD7 TEAM PROJECT

PROJECT NAME

MEAL PLANNER

TEAM

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DESCRIPTION

MEAL PLANNER is a dynamic, web-based application designed for health-conscious individuals aiming to streamline their meal planning and dietary tracking. It functions as an intuitive and comprehensive tool that enables users to formulate personalized meal plans based on an expansive library of products, procured through the EDAMAM API.

This platform presents a breakdown of a user's historical dietary data, showcasing detailed charts of previous caloric and protein intake, along with other vital nutrients. This empowers users to make informed decisions about their future meals, with the goal of optimizing their nutritional health.

Moreover, **MEAL PLANNER** offers a scheduling feature, enabling users to plan ahead and maintain a structured meal regimen, accessible at their convenience. It provides a seamless interface that brings together meal planning, nutritional tracking, and analytics.

EXTRA FEATURES (if time allows it)

- Recipes for each meal
- Shareable meals and meal plans

TECHNOLOGIES USED

JavaScript, Node.js, React/Next.js: frontend/backend.

MongoDB: database.

Firebase: authentication/analytics.

Bootstrap: style/responsiveness.

Chart.js: nutritional analysis charts and graphs.

FUNCTIONAL REQUIREMENTS w/ routes

/

(Home page) Access links to authenticate.

/register

/login

/logout

Authenticate with either built-in system or Google Sign in.

/plan

Search for products through an API.

Add any product to a meal.

Display all nutrition info about specific meal.

Add multiple meals to a meal plan.

/history

Analyze previous meal plans' nutrition info with stats and charts.

/about

(Information page about how the web app is used and how it was created)

/profile

Edit personal info.

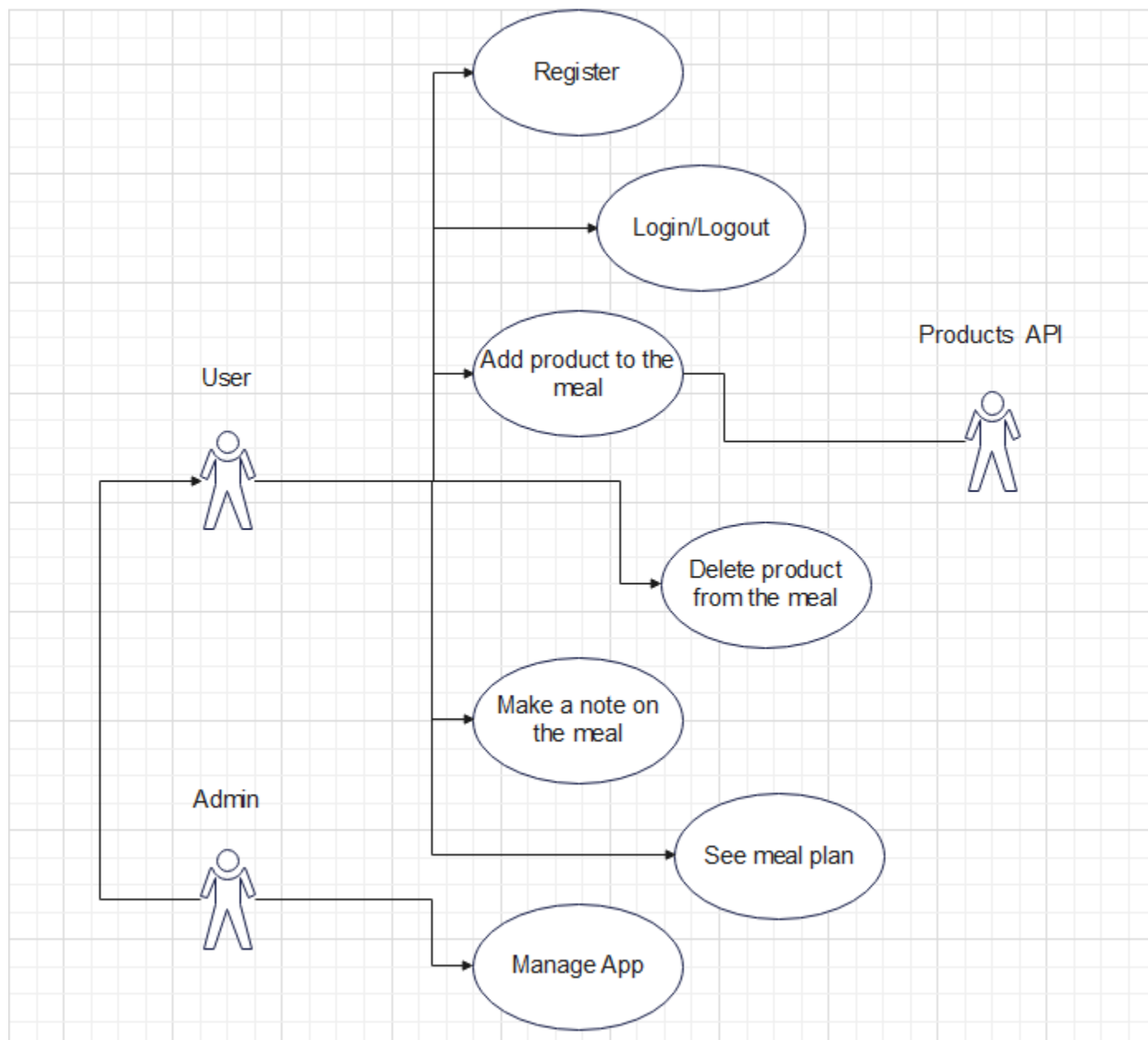
/admin

(Admin panel for Admin role) Manage users.

NON-FUNCTIONAL REQUIREMENTS

- **Performance:** The app should respond quickly to user inputs, load content in a timely manner, and support a certain number of users concurrently.
- **Availability:** The application should be available 24/7 with minimal downtime.
- **Usability:** The app interface should be user-friendly and intuitive, allowing users to easily navigate through the application, find information, and perform actions.
- **Scalability:** The application should be able to scale up to accommodate an increasing number of users, recipes, and meal plans.
- **Security:** The application should securely store user data, with safeguards to protect against data loss or breaches. Any personal data should be encrypted, and proper authentication methods should be used to access user accounts.
- **Maintainability:** The code of the application should be written in a way that it is easy to understand, modify, and update. This could be accomplished by following certain coding conventions, using clear comments, and having thorough documentation.

USE CASE DIAGRAM



DATABASE DIAGRAM

User

```
{  
  userId: <userId>,  
  email: "asd@zxc.lv",  
  password: "somepass"  
}
```

Product

```
{  
  productId: <productId>,  
  name: "chicken",  
  calories: 78,  
  proteins: 14.8,  
  carbs: 24.6,  
  sugar: 2.2,  
  fat: 4.3  
}
```

Meal

```
{  
  mealId: <mealId>,  
  user: <userId>,  
  productsList:  
  [  
    { product: <productId>,  
      quantity: 1.5 },  
    { product: <productId>,  
      quantity: 2.5 },  
    { product: <productId>,  
      quantity: 1.75 }  
  ],  
  date: "06/05/2023",  
  note: "carbonara"  
}
```

