



SmartMeal

3/13/23
SmartTeam
Eric Xie (Product Owner)
Edmond Poon
Dylan Burger (Scrum Master)
Ivan Chernyak
Alberto Garagnani



Project Motivation

- Wanted to create a platform to help keep track of meal plans
 - Ingredient Checklist
 - Creating your own recipes
- More customizable meal planner
 - Click and drop recipes into calendar slots
 - Recipes can be uploaded by yourself or other people

Intended users, problem, opportunity addressed

- Intended Users

- People who want to plan out their meals
 - Adds more structure to their lives
 - One decision at the beginning of the week
 - saves time overall

- Problem addressed

- More freedom with your meal plans
 - Track what ingredients you have on a checklist
 - Create your own recipes to add
 - Recipes are better tailored to the user

Goals

Set out to achieve

- Create weekly meal plans from a set of recipes
- Copy previous meal plan of others to the current meal plan
- Generate Ingredients checklist
- See other users' meal plans and recipes
- Set a meal as public or private
- Set user allergies

Goals

Achieved

- Create meal plans from a set of recipes
- Copy a previous meal plan to the current meal plan
- Ingredients checklist
- See other users' meal plans and recipes

Biggest Challenges

Connecting frontend and backend

- This part took longer than expected

Acceptance Criteria

- Considered features implemented if we had frontend and backend, but not the end to end

Merge requests and conflicts

- Git source control would be held up due to merge conflicts

SMARTMEAL

[LOGIN](#)[SIGN UP](#)

You can create and save your own meal plan and generate a grocery list from it!
You can now move away from sporadic buying and instead buy in bulk with a plan in mind!

This will save your time! You will have a clear and concise grocery list with stores to visit provided



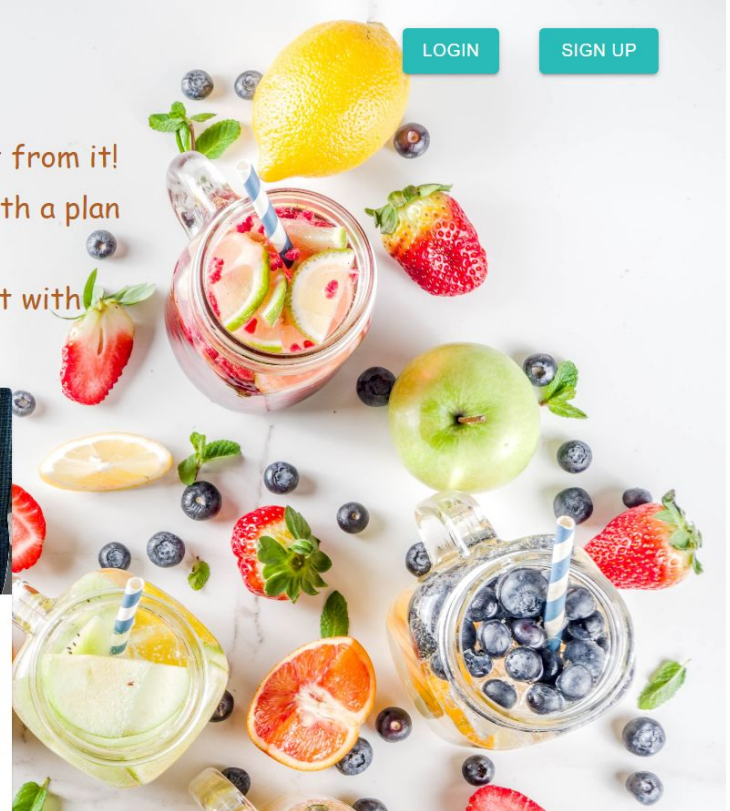
Weekly Schedule

Personalize your weekly meal plan, find the meals that fit you the best and add them to your schedule. Choose your preferred diet with the filter tool and much more



Your recipes

You can create any recipe you want adding a title, an image and a list of ingredients. Personalize your healthy recipes and share them with the world!





SmartMeal

Sign in

Email Address *

Password *

Sign In

Don't have an account? [Sign Up](#)

SmartMeal

Sign up

Already have an account? [Sign in](#)

MyMeal							
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
<div>></div> <div>Home</div> <div>Menu</div> <div>Fork and Knife</div> <div>Settings</div> <div>Share</div>	<div>Breakfast</div> <div></div>	<div>Breakfast</div> <div></div>	<div>Breakfast</div> <div></div>	<div>Breakfast</div> <div></div>	<div>Breakfast</div> <div></div>	<div>Breakfast</div> <div></div>	<div>Breakfast</div> <div></div>
	<div>Lunch</div> <div></div>	<div>Lunch</div> <div></div>	<div>Lunch</div> <div></div>	<div>Lunch</div> <div></div>	<div>Lunch</div> <div></div>	<div>Lunch</div> <div></div>	<div>Lunch</div> <div></div>
	<div>Dinner</div> <div></div>	<div>Dinner</div> <div></div>	<div>Dinner</div> <div></div>	<div>Dinner</div> <div></div>	<div>Dinner</div> <div></div>	<div>Dinner</div> <div></div>	<div>Dinner</div> <div></div>

>

🏠


☰

🔪


⚙️

➡️


Dinner




Dinner




Dinner




Dinner




Dinner



Dinner




Dinner

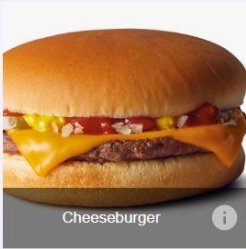


🔍 Search...

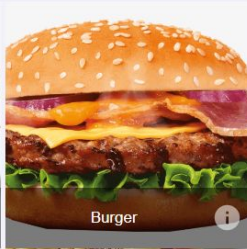
🔼 🔽



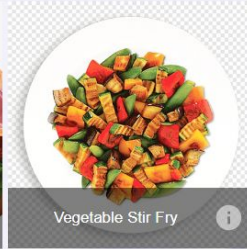
Mushroom Poppers ⓘ



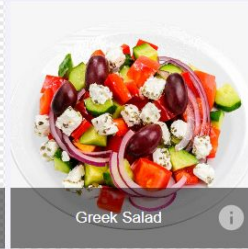
Cheeseburger ⓘ



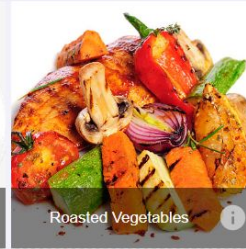
Burger ⓘ



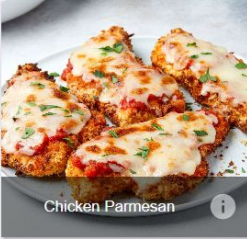
Vegetable Stir Fry ⓘ




Greek Salad ⓘ




Roasted Vegetables ⓘ



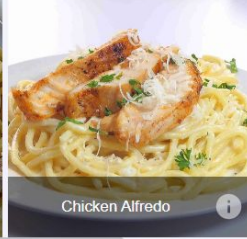
Chicken Parmesan ⓘ




Pepperoni Pizza ⓘ




Spaghetti Carbonara ⓘ



Chicken Alfredo ⓘ



Beef Stroganoff ⓘ



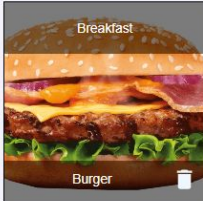

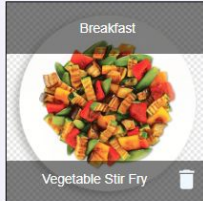

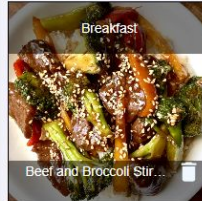
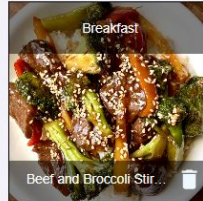
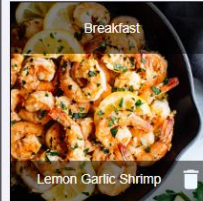
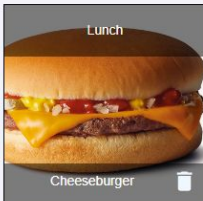

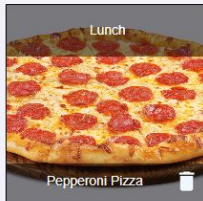
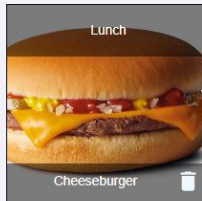
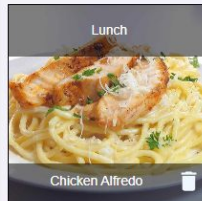

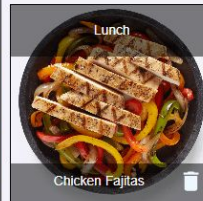

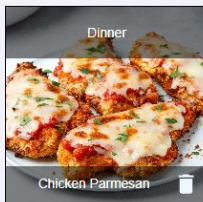
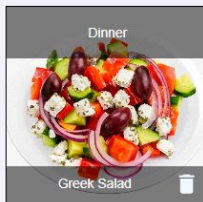
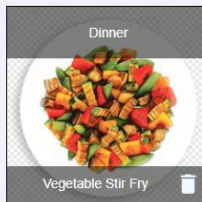
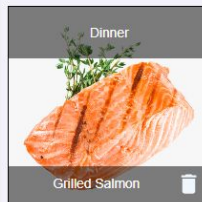

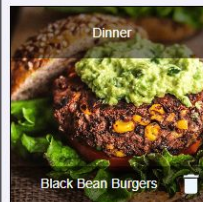
Spicy Szechuan Noodles ⓘ

+

☰

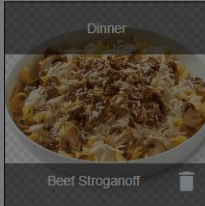
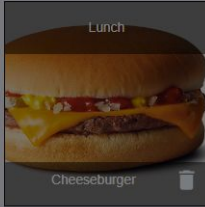
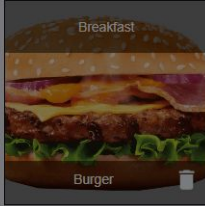
🔪

MyMeal

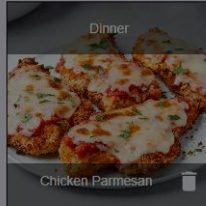
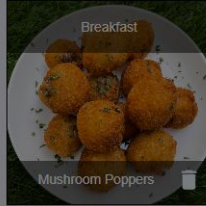
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Breakfast	 A hamburger with a sesame seed bun, beef patty, cheese, lettuce, and tomato. Burger	 A plate of golden-brown mushroom poppers. Mushroom Poppers	 A plate of vegetable stir fry with carrots, bell peppers, and onions. Vegetable Stir Fry	 A plate of golden-brown mushroom poppers. Mushroom Poppers	 A plate of beef and broccoli stir fry with sesame seeds. Beef and Broccoli Stir...	 A plate of beef and broccoli stir fry with sesame seeds. Beef and Broccoli Stir...	 A plate of lemon garlic shrimp with rice. Lemon Garlic Shrimp
Lunch	 A cheeseburger with a sesame seed bun, beef patty, cheese, lettuce, and tomato. Cheeseburger	 A plate of spaghetti carbonara with meat sauce. Spaghetti Carbonara	 A whole pepperoni pizza. Pepperoni Pizza	 A cheeseburger with a sesame seed bun, beef patty, cheese, lettuce, and tomato. Cheeseburger	 A plate of chicken alfredo with spaghetti. Chicken Alfredo	 A plate of pesto pasta with spaghetti. Pesto Pasta	 A plate of chicken fajitas with rice and beans. Chicken Fajitas
Dinner	 A bowl of beef stroganoff with rice. Beef Stroganoff	 A plate of chicken parmesan with spaghetti. Chicken Parmesan	 A plate of greek salad with tomatoes, cucumbers, and olives. Greek Salad	 A plate of vegetable stir fry with carrots, bell peppers, and onions. Vegetable Stir Fry	 A plate of grilled salmon with a lemon wedge. Grilled Salmon	 A whole hawaiian pizza with ham and pineapple. Hawaiian Pizza	 A plate of black bean burgers with guacamole and lettuce. Black Bean Burgers

MyMeal

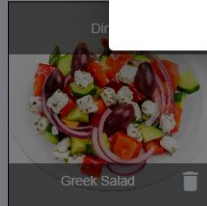
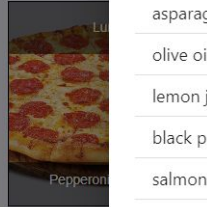
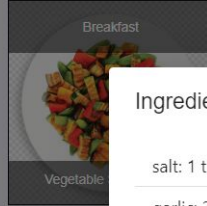
Sun



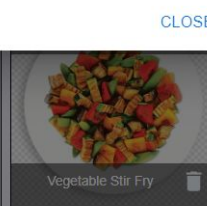
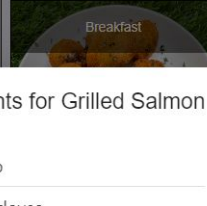
Mon



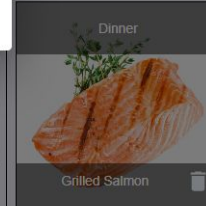
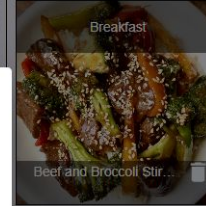
Tues



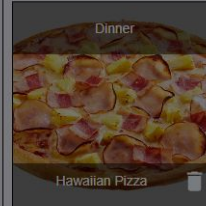
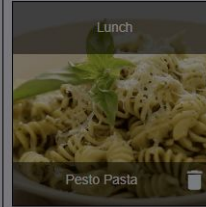
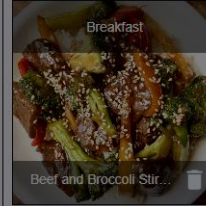
Wed



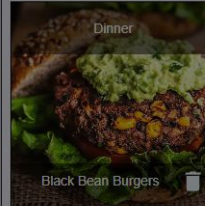
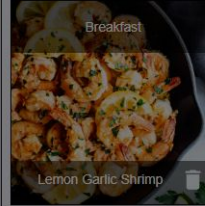
Thurs



Fri



Sat



Ingredients for Grilled Salmon

salt: 1 tsp

garlic: 2 cloves

asparagus: 1 asparagus

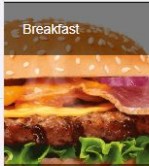
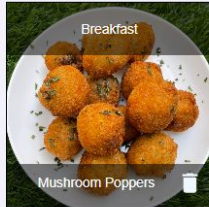
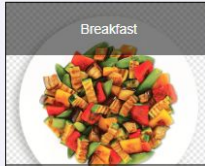
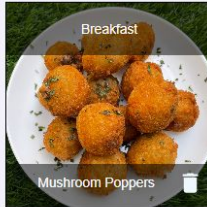
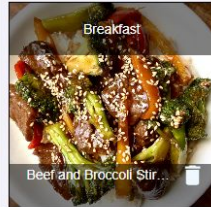
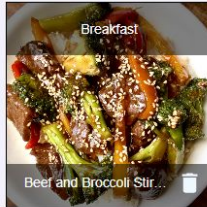
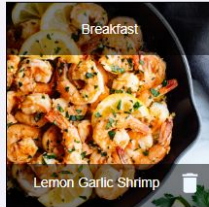
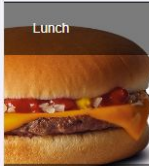

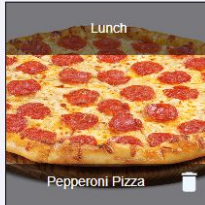

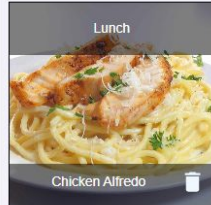

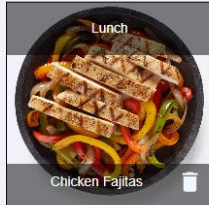

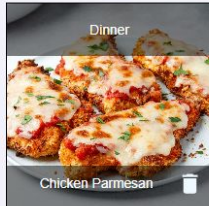

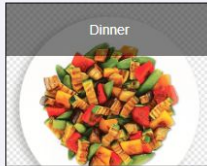
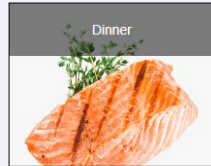

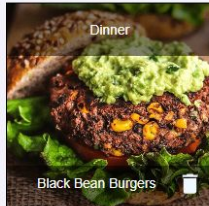
olive oil: 2 tbs

lemon juice: 2 tbs

black pepper: 1 tsp

salmon fillet: 4 salmon fillet

CLOSE

<div><</div>		MyMeal						
		Sun	Mon	Tues	Wed	Thurs	Fri	Sat
<div>Home</div>		<div>Breakfast</div> <div></div> <div>Burger</div> <div></div>	<div>Breakfast</div> <div></div> <div>Mushroom Poppers</div> <div></div>	<div>Breakfast</div> <div></div> <div>Vegetable Stir Fry</div> <div></div>	<div>Breakfast</div> <div></div> <div>Mushroom Poppers</div> <div></div>	<div>Breakfast</div> <div></div> <div>Beef and Broccoli Stir...</div> <div></div>	<div>Breakfast</div> <div></div> <div>Beef and Broccoli Stir...</div> <div></div>	<div>Breakfast</div> <div></div> <div>Lemon Garlic Shrimp</div> <div></div>
<div>Grocery List</div>		<div>Lunch</div> <div></div> <div>Cheeseburger</div> <div></div>	<div>Lunch</div> <div></div> <div>Spaghetti Carbonara</div> <div></div>	<div>Lunch</div> <div></div> <div>Pepperoni Pizza</div> <div></div>	<div>Lunch</div> <div></div> <div>Cheeseburger</div> <div></div>	<div>Lunch</div> <div></div> <div>Chicken Alfredo</div> <div></div>	<div>Lunch</div> <div></div> <div>Pesto Pasta</div> <div></div>	<div>Lunch</div> <div></div> <div>Chicken Fajitas</div> <div></div>
<div>Meal Plans</div>		<div>Dinner</div> <div></div> <div>Beef Stroganoff</div> <div></div>	<div>Dinner</div> <div></div> <div>Chicken Parmesan</div> <div></div>	<div>Dinner</div> <div></div> <div>Greek Salad</div> <div></div>	<div>Dinner</div> <div></div> <div>Vegetable Stir Fry</div> <div></div>	<div>Dinner</div> <div></div> <div>Grilled Salmon</div> <div></div>	<div>Dinner</div> <div></div> <div>Hawaiian Pizza</div> <div></div>	<div>Dinner</div> <div></div> <div>Black Bean Burgers</div> <div></div>
<div>Settings</div>								
<div>Logout</div>								

>

Home

Menu

Favorites

Settings

Share

Burger

Mushroom Poppers

Vegetable Stir Fry

Mushroom Poppers

Beer and Broccoli Stir...

Beer and Broccoli Stir...

Lunch

Lunch

Lunch

Lunch

Lunch

Lunch

Dinner

Dinner

Dinner

Dinner

Dinner

Dinner

Search...

vegan

Close

Bad

Good

vegan

halal

healthy

kosher

Bad

Good

Bad

Good

Bad

Good

Bad

Good

>

🏠


☰

🍴


⚙️

🔗


Dinner




Dinner




Dinner




Dinner




Dinner



Dinner



Dinner




🔍 Search...

vegan


▼

🔼


🔄



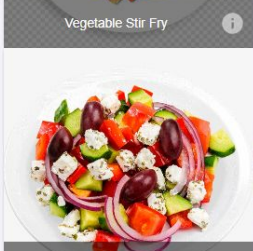
Vegetable Stir Fry*i*



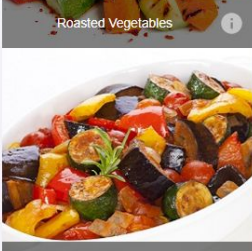
Roasted Vegetables*i*



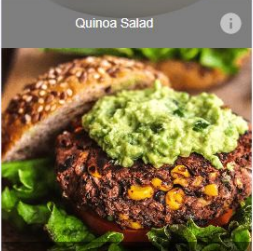
Quinoa Salad*i*



Greek Salad*i*



Ratatouille*i*



Black Bean Burgers*i*

+

☰

🍴

>

🏠


☰

🍴


⚙️

📄


Dinner




Dinner




Dinner




Dinner




Dinner



Dinner



Dinner




🔍 cheese


×

▼


🔴 ↺




Cheeseburger ⓘ




Greek Salad ⓘ



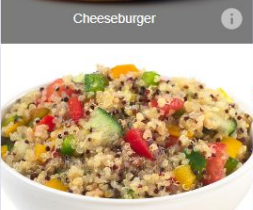
Mushroom Poppers ⓘ



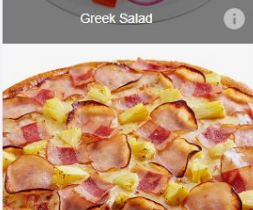
Pesto Pasta ⓘ




Spaghetti Carbonara ⓘ




Quinoa Salad ⓘ



Hawaiian Pizza ⓘ



Chicken Alfredo ⓘ



Pepperoni Pizza ⓘ

+

☰

🍴

Add your Recipe

You can add your own recipe adding a title, ingredients, diets and an optional URL image.



System



Metric



US



Quantity

Unit



[ADD RECIPE](#)

[CLOSE](#)

>

- ☐ ☐ ☐
- ☐ ☐ ☐
- ☐ ☐ ☐



⏪ ⏩ ⏴ ⏵

>

☐

Rows per page: 5 1-2 of 2 |< < > >|



Week: 3/12/2023 - 3/19/2023



Meal

Mushroom Poppers - Sunday lunch

Ingredient

cheese

tradefor ^

Low Fat Cheese

Fat Free Cheese

veganalternative ^

Cashew Cheese

Daiya Cheese

Cancel

Change All

Change this

☐ Dairy ^

☐ cheese, 2 cup

☐ Other ^

☐ egg, 1 egg

☐ baby bella mushroom, 20 baby bella mushroom

☐ Grains ^

☐ rice, 4 g

☐ Protein ^

☐ burger patty, .25 lb

☐ Vegetables ^

☐ jalepeno, 4 jalepeno



Week: 3/12/2023 - 3/19/2023



Meal

Mushroom Poppers - Sunday lunch

Ingredient

cheese

tradefor ^

Low Fat Cheese

Fat Free Cheese

veganalternative ^

Cashew Cheese

Daiya Cheese

Cancel

Change All

Change this

☒ Dairy ^

☒ cheese, 2 cup

☐ Other ^

☐ egg, 1 egg

☒ baby bella mushroom, 20 baby bella mushroom

☐ Grains ^

☐ rice, 4 g

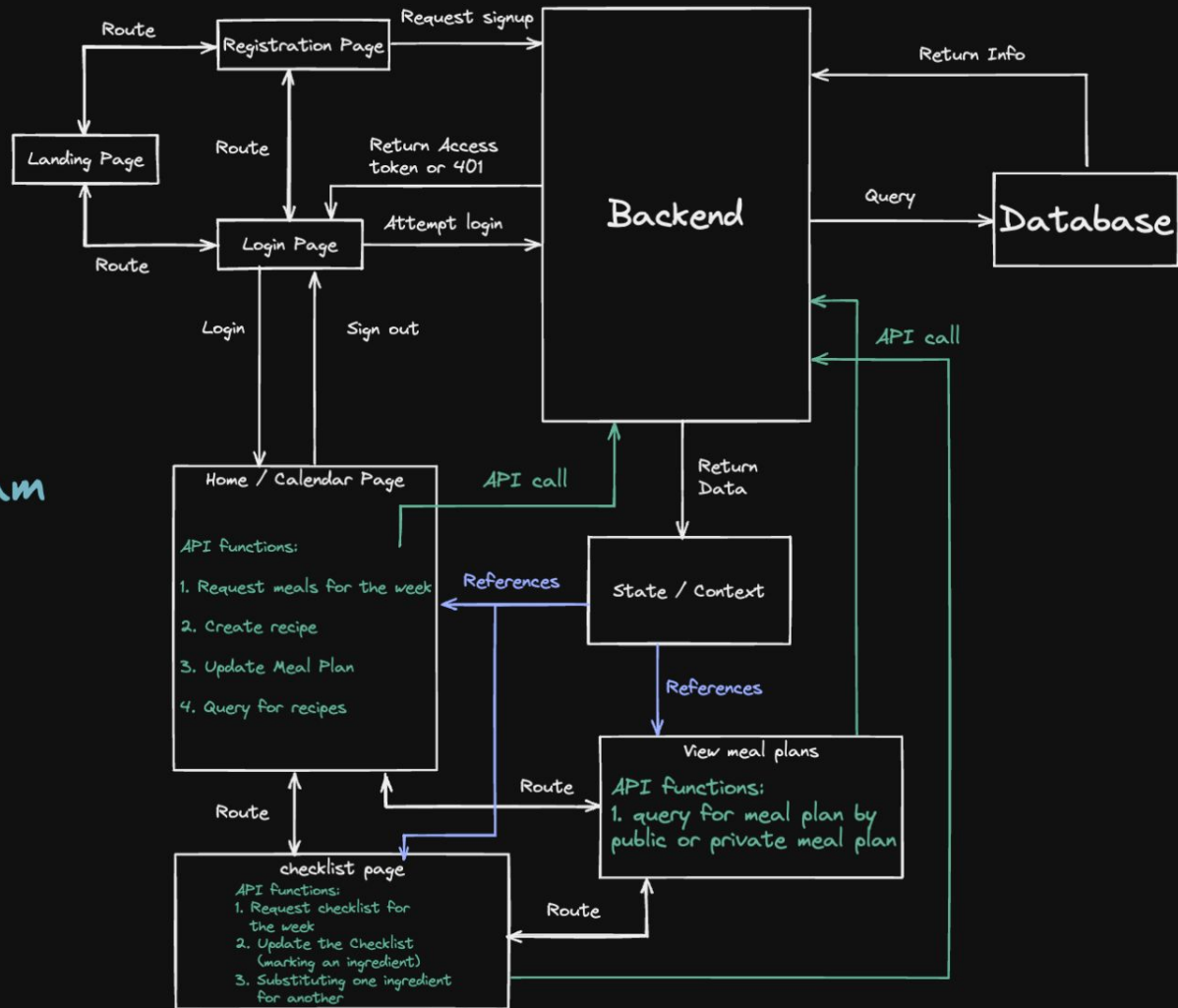
☐ Protein ^

☐ burger patty, .25 lb

☐ Vegetables ^

☐ jalepeno, 4 jalepeno

System Overview/Diagram



Technologies used and what they were used for

Javascript

- Main language used for coding

Express

- Used for Backend Middleware to manage endpoints

Swagger.io

- Used to generate interactive API for backend testing

React + MUI

- Main framework for frontend coding

Jest

- Unit test framework

Project management techniques used (1)

- Scrum Board
 - Instead of a physical scrum board, we used Jira
 - Pros
 - Allowed everyone to access from anywhere
 - Jira had useful tools to help us manage workflow
 - e.g. different types of progress charts
 - intuitive ui to help us keep track of completed work
 - Cons
 - Higher learning curve
 - It took us more time to get familiar with the technology

Project Management techniques used (2)

- Agile Scrum meetings held on Discord
 - Held Monday Wednesday Friday from 1:15 pm to 1:30 pm
 - Kept people more accountable for their work
 - Let the team know how progress was coming along
 - During storm, scrum meeting was asynchronous to accommodate for power outages
- Sprint review meetings held in person
 - 2 hour meeting for our sprint review and retrospective
 - Working face to face helped us with in depth planning because we could be more responsive to each other

Things we enjoyed/didn't enjoy

Things we enjoyed

- App customization
- Piecing components together

Things we didn't enjoy

- Merge Conflicts
- Color Themes
- Unit Testing!!

Lessons Learned

What worked

- Having scheduled short scrum meetings
 - Held people accountable
 - People didn't "disappear"
- Holding in person long form sprint post mortem meetings
 - More productive than an online meeting
 - Less likely to get distracted
- Online scrum board
 - Everybody knew what they had to do
 - Easily accessible

Lessons Learned

What didn't work

- Leaving end-to-end to sprint 4
 - Not connecting frontend and backend right away when features were finished
 - Led to redesign of the features in the end
 - Many bugs discovered late in project lifespan
- Better documentation up front
 - Documentation was not clear enough sometimes
 - Led to confusion when frontend would need to look at backend functions and vice versa

Lessons Learned

Things we wish we had done

- Schedule more meetings outside of scrum meetings
 - We would bring up roadblocks in our scrum meetings
 - needed more follow up
- Included actual recipes to the meal plans
 - Users would benefit from being reminded on recipes

Thank you

