

Git repository: https://github.com/RainZhao01/2350_project

Overview of the project

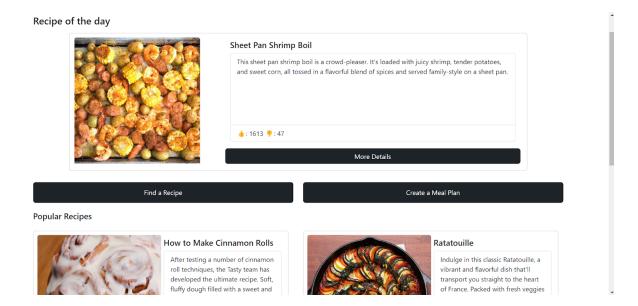
Our project is a software application that provides users with a way to balance out their dietary and physical lifestyles. By combining two key API's: the Tasty API and Exercises API users will have access to a variety of health and lifestyle choices for everyone to benefit from. The Tasty API allows users to display recipes, generate meal plans, create grocery lists, and educational nutrition facts. Saving the time and energy that would have been otherwise wasted on planning and research. Complementing that is the Exercise API which will provide alternatives to pre-existing workout plans and deliver informative demonstration videos. Given that our diets and physical health are closely intertwined, leveraging both APIs together is a great opportunity to streamline and create convenience for the average user. Pairing the Tasty and Exercises API's together supplies users with detailed diets to meet their workout needs and vice versa. Creating a balance and convenience for users' physical health, dietary needs, and overall lifestyle.

Overview of which SDLC

The SDLC we chose is Kanban. We chose this SDIC to combat our busy schedules as the conflicts in our schedule make it difficult to plan meetings. This however backfired on the group. We thought setting up a Kanban board where we individually pick a task and do it would be better if the group could not do a lot of meetings. In reality tasks we not being done which continually lessened the time we had to do tasks. In the end, we had to scrap-making profiles so users would be able to save their meal plans.

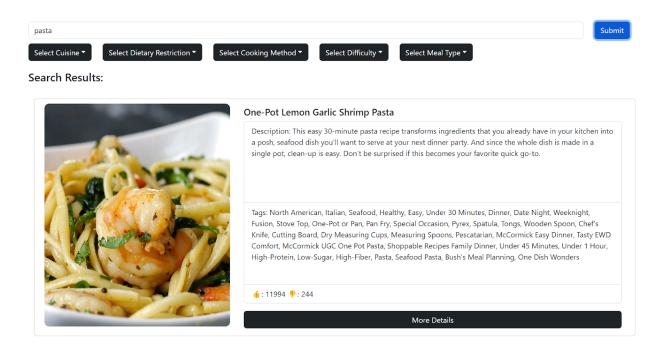
features and their user stories

- Tasty API Feature #1
 - -Quick access to a new recipe every day (aka Daily recipe)
 - -Quick access to popular recipes
 - -User Story
 - -Bob has a busy schedule and needs to find some food to eat
 - -Bob values his health and wellness but doesn't know what to make
 - -Bob decides to visit our website and quickly chooses the recipe of the day as he knows it is a healthy recipe.
 - -Krista also has the same problem as Bob
 - -she doesn't want to make the recipe of the day
 - -Checks popular recipes and picks one as she knows they are healthy.

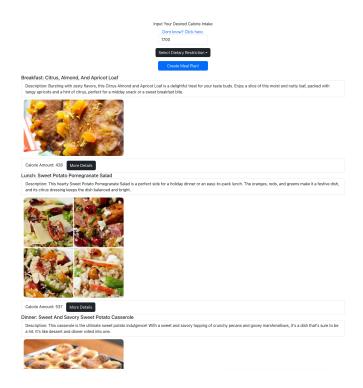


Tasty API Feature #2

- -Recipe Search for those who have more time in their day to look for a recipe
- -Based on tags such as cuisine, dietary restrictions, cooking method, difficulty, and meal type.
- -only one tag per section may be selected to ensure a recipe is received.
- -User Story
- -Jimmy has started his health and wellness journey and is getting bored of the food he usually eats
- -Jimmy visits our website and searches for a recipe that matches his desires.



- Tasty API Feature #3
- Generates a meal plan for breakfast, lunch, and dinner
- Users input the desired calories they want to achieve within their 3 meals
- Meals will always be below what the users provide
- User Story
- Anna's goal is to gain weight, but she struggles to reach her calorie intake. She has a hard time balancing out her meals.
- Most of Anna's meal consist of repeat dishes that usually contain chicken and rice
- Anna benefit's from feature 3 as she is able to achieve her daily calories and macros while simultaneously being able to explore new recipes

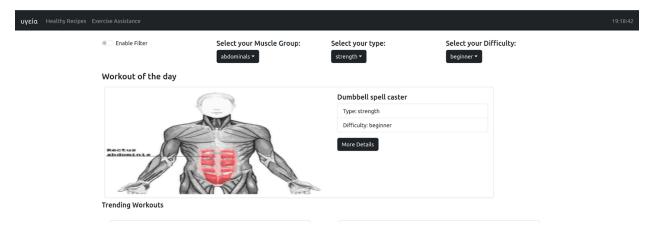


Exercise API Feature # 1

- Workout of the day
- New daily challenges
- Something for users to come back to

User Story

Avery has been an avid gym goer, and wants to switch up their workouts. They are able to see that the Daily Workout feature is there and they can try out something new. It motivates Avery to do more!

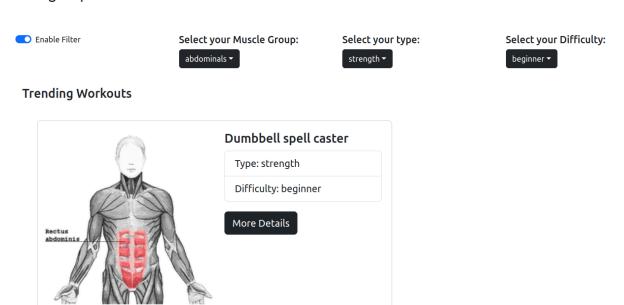


Exercise API Feature # 2

- Enable filter
- Select Muscle Group
- Select type
- Select Difficulty

User Story

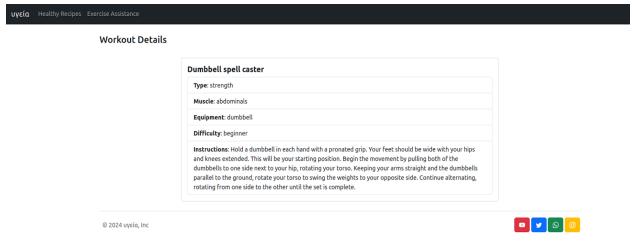
Chelsey is a woman who wants to be able to lift up her grandson in the air and be physically able to play around with him. She struggles in lifting him up and running around with him. Chelsey is able to select the arms and legs muscle groups to find workouts that she can train to be able to achieve what she wants.



Exercise API Feature #3

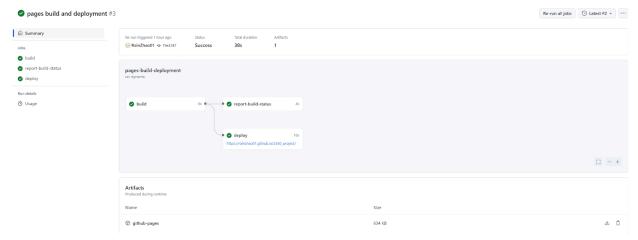
- More details
- Detailed instructions
- Equipment needed

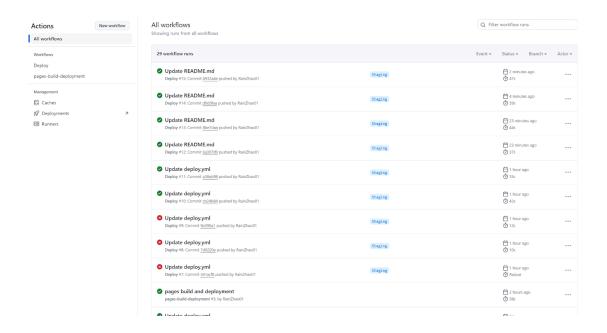
 Trixie does not know exactly how Dumbbell spell caster workout's that her friend told her about. She can select more details to be able to figure out how to do that workout and what equipment is needed.



CI/CD infrastructure

We built and deployed our website through Github Pages.





Test Descriptions

- Given time unit test would have been:
- Testing if API calls worked
- Test if each page was being displayed
- Test if the search bar was getting the right link for the api
- Integration tests
- Test if things the correct data was sent from page to page
- Check if the correct how all the tags work together to create the link for the api call

Project Takeaways

- Communication is key to a good project
- We learned to use react (component based coding, routing etc)
- Utilize testing framework
- Scheduling meetings is harder than we originally thought

Project challenges

- Learning how to use react
- Understanding teamwork code with a limited understanding of react
- learning how to test our code along with the different testing frameworks that work better compared to others

Work Distribution

- Website basics
- Basic Website Layout(Ryan)
- Navbar/Footer(Nam)
- **TastyAPI**(Ryan John)

- Feature 1 (Ryan)
- Feature 2 (Ryan)
- Feature 3 (John)
- Exercise API
- Feature 1(Nam)
- Feature 2(Nam)
- Feature 3(Nam)
- Minor website additions
- More details for recipes (John with help from Ryan)
- More details for exercise(Nam)
- **Testing**(Attempted by Ryan and Nam but could not be finished due to time constraints as a result of our group deciding to do testing at the end)
- **Deployment**(Rain)
- CI/CD infrastructure (Rain)
- Presentation(Everyone)
- Report(Everyone)

Data Flow Diagram



