



Gymnetics

Sprint 1

Team Byte Squad



Meet Gymnetics



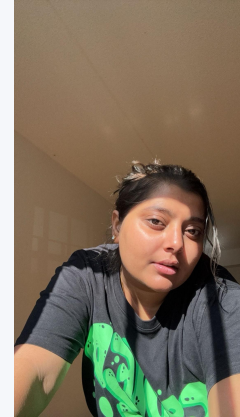
Samiha Shareef



Adam Miftahelidrissi



Jia Lau



Diya Ashish Patel



Marlen Cuevas Duarte



Improvements from Professor Feedback

- Better structured planning (using software like Jira)
- Created list of tasks for each sprint in order to be more organized
- Updating task statuses (in progress, done, not yet completed)
- Able to view who is assigned to each task
- Better communication



Project Description

Team:

ByteSquad

Project Description: The Gymnetics web application is a smart supplement, nutrition, and fitness planning platform that generates AI-powered supplement recommendations and workout routines tailored to each user's goals, body metrics, and experience level. Unlike generic fitness programs or manual research, our application delivers customized plans instantly, helping users achieve results faster and more efficiently.

Benefit Outcomes:

- Increased user adherence to personalized workout and supplement plans
- Improved fitness goal tracking and progress monitoring
- Streamlined onboarding through a guided quiz experience
- Time-saving and confidence-boosting by eliminating the need for manual planning
- User satisfaction from having expert-level guidance without needing a personal trainer

GitHub Link:

<https://github.com/htmw/2025Su-ByteSquad>

Working Agreement

Gymnetics Working Agreement

June 16, 2025

COMMUNICATION

Our team has decided to use WhatsApp as our main communication tool for quick updates, questions, and task follow-ups. We also hold regular virtual meetings through Google Meet to talk in more detail. These meetings are scheduled twice a week at 8:00 PM. After each meeting, any assigned tasks or important notes will be shared in the WhatsApp group to make sure everyone is on the same page, including those who may have missed the meeting. All members are expected to check the group chat regularly and stay updated throughout the week.

Communication Framework:

- Main channels: WhatsApp for messaging and updates; Google Meet for video meetings
- Weekly meetings: Twice a week on Google Meet at 8:00 PM
- Follow-up: Tasks posted on Jira
- Team members are expected to stay active in the chat and give an early notice if they can't attend a meeting

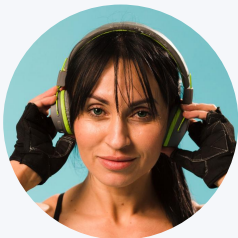
WORKFLOW

Each meeting, the team will go over what needs to be done, and members will be able to volunteer for tasks that they are comfortable with. Responsibilities must be clearly assigned so that everyone understands who is doing what. Throughout the week, team members should update the group on their progress so that others can provide feedback or assistance as needed.

We believe that teamwork is essential, and no one should feel compelled to work alone. If someone is falling behind or requires assistance, others are urged to jump in and help keep things going. Our goal is to divide tasks equally, keep on track, and support one another so that the project is done properly and on schedule.



PERSONA 1 - UNORGANIZED STUDENT



"I WANT TO LEAD A HEALTHIER LIFESTYLE WITHOUT EXTREME DIETING AND EXERCISE. I WANT TO BE CONSISTENT AND DISCIPLINED."

MARIA CASTRO

EXPERIENCE

Beginner - only familiar with at home bodyweight workouts

** Maria will input all her information (age, weight, height, and goals) and receive a 3 day workout split, macro breakdown, and supplement suggestions. She will receive reminders to log in her meals. The suggestions from the store will be daily multivitamins, creatine, and whey isolate or plant-based protein powders.

DETAILS

- 20 years old
- 5'5", 135lbs
- Full time student & part -time Bookkeeper

GOALS

- 1 Build Lean Muscle Mass
- 2 Learn How to Weightlift
- 3 Eat Consistent & Healthy Meals

PAIN POINTS

Has only been to the gym a handful of times, inconsistent with workouts & getting enough meals in the day. Doesn't know what to eat.



PERSONA 2 - AMATEUR BODYBUILDER



"I WANT TO BECOME A BODYBUILDER AND JOIN MY FIRST COMPETITION THIS YEAR. "

JAMES BROWN

EXPERIENCE

Intermediate - lifts often but doesn't keep track of his nutrition & weight

** James will input all his information (age, weight, height, and goals) and receive a 5 day workout split, macro breakdown, and supplement suggestions. The suggestions will be creatine, pre workout, mass gainer, fish oil , and whey isolate or whey blend protein powders.

DETAILS

- 28 years old
- 6'2", 178 lbs
- Retail Sales Associate

MOTIVATIONS

- 1 Build Muscle Mass & Strength
- 2 Join bodybuilding competition
- 3 Reach 210 lbs

PAIN POINTS

Doesn't have a consistent workout split, doesn't know how to track macros & calories, not familiar with supplements

MVP



- The Minimum Viable Product (MVP) is the simplest version of our app that delivers core value to users.

Gymnetic MVP Features:

- User Sign-up/Login
- Profile: Add height, weight, fitness goals
- Browse Supplements Store
- Add to Cart
- Mock Checkout (no payment yet)
- Simple Trainer Dashboard
- Customized workouts and nutritional recommendations
 - This allows users to experience our fitness ecosystem from Day 1!



Tech Stack

Backend

- Java
- Spring Boot

AI Integration

- Deepseek

Third Party

- Docker
- AWS S3
- Stripe

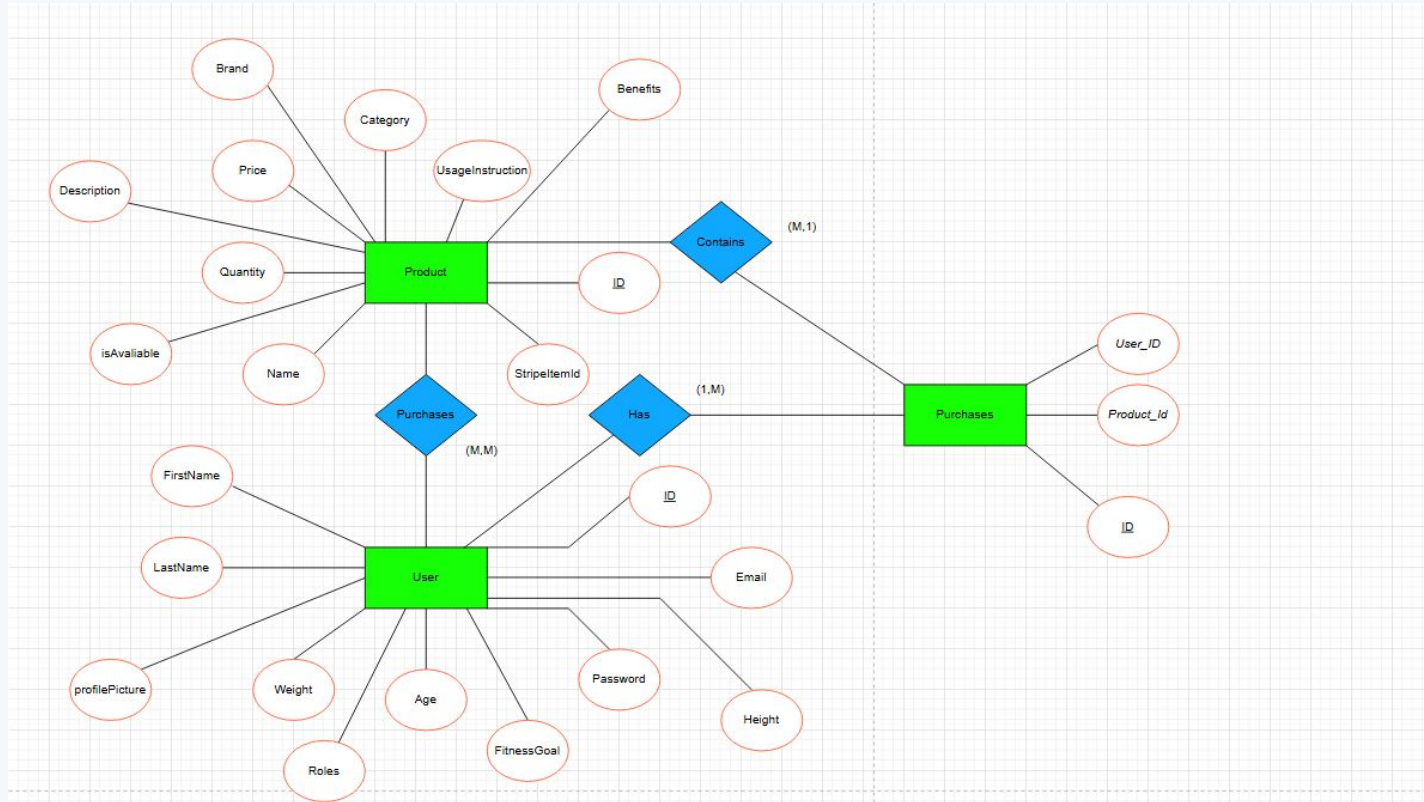
Frontend

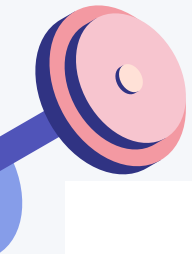
- React
- CSS
- HTML

Database

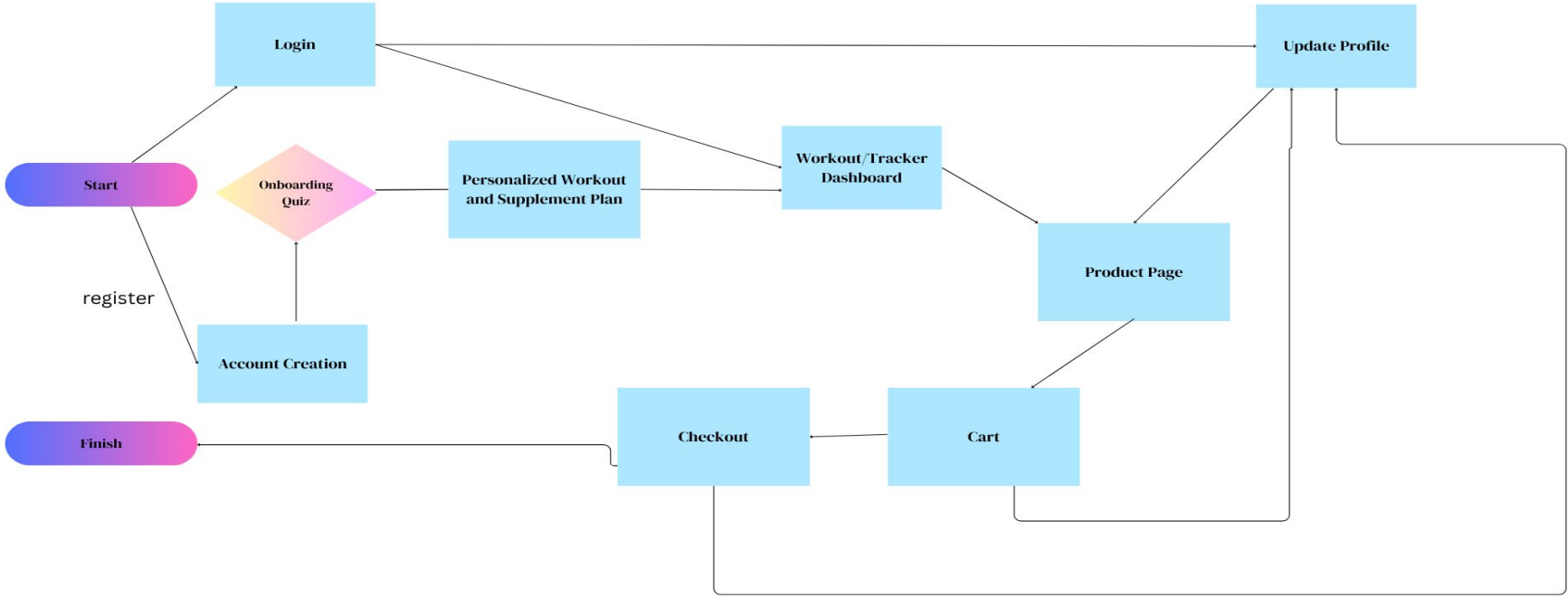
- MySQL

ER Diagram



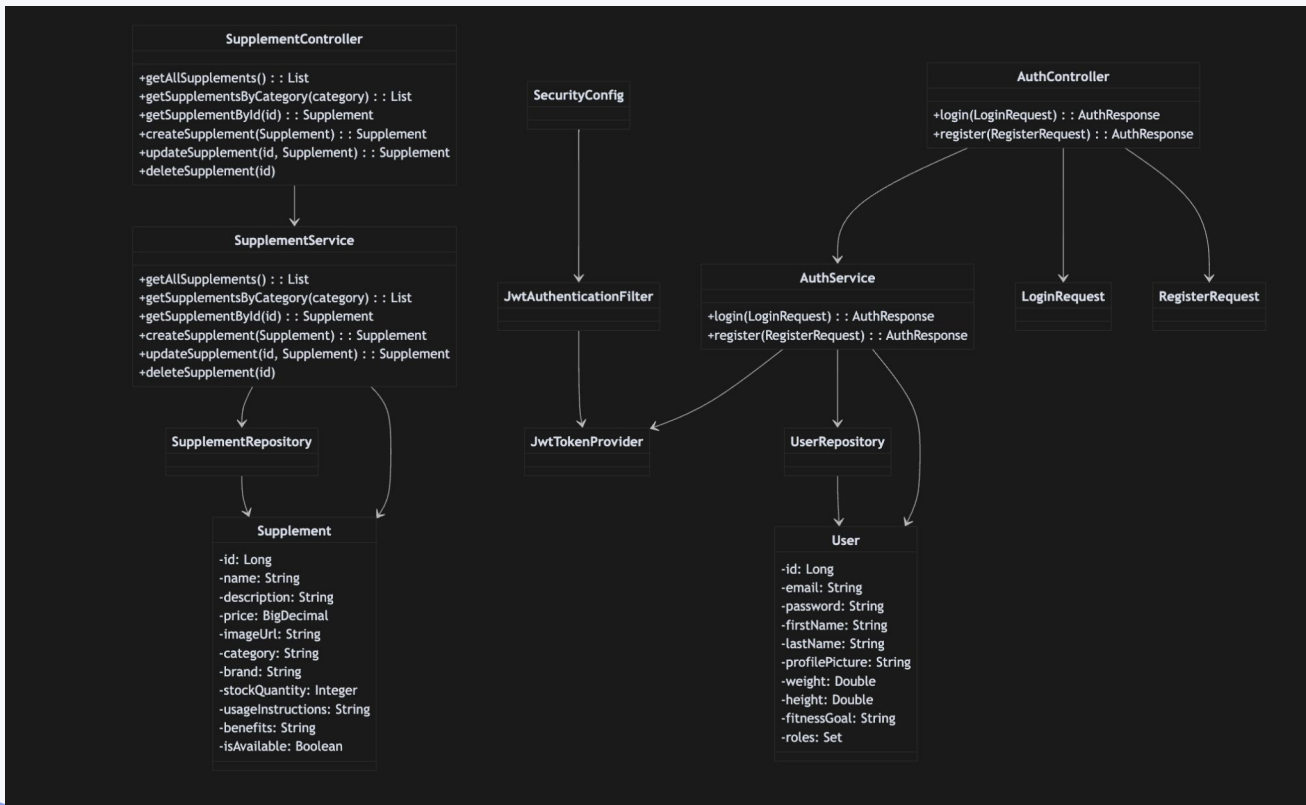


State Diagram



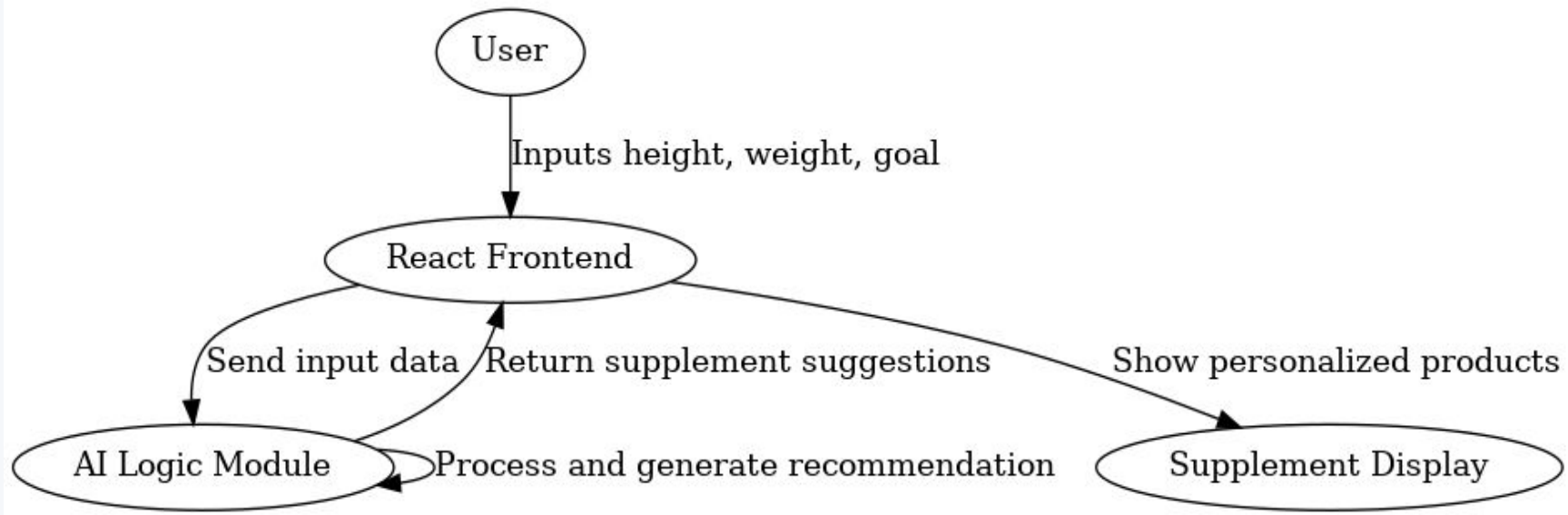


Class Diagram



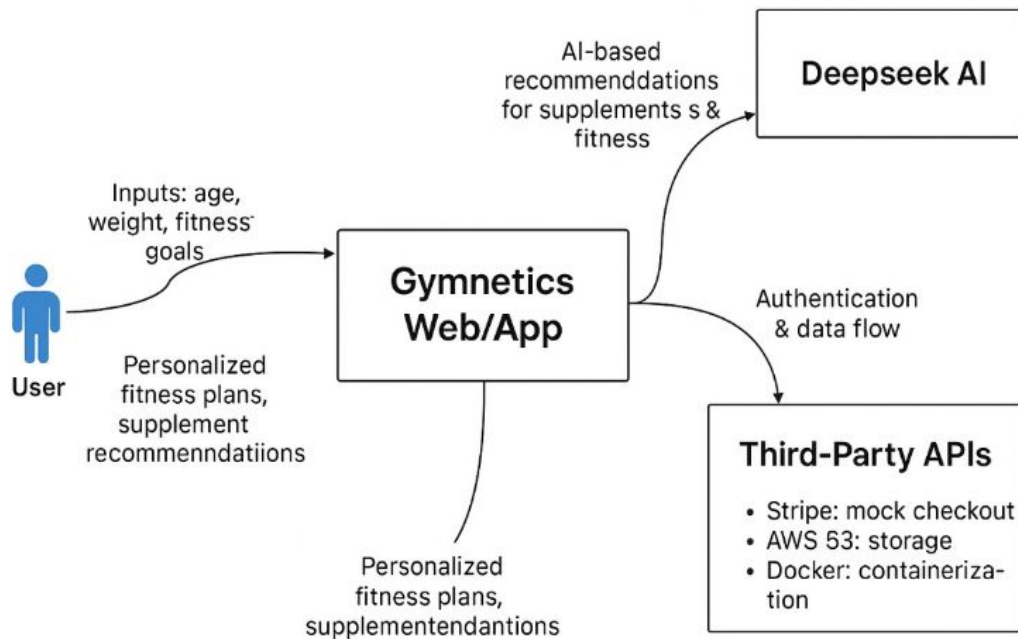


Sequence Diagram



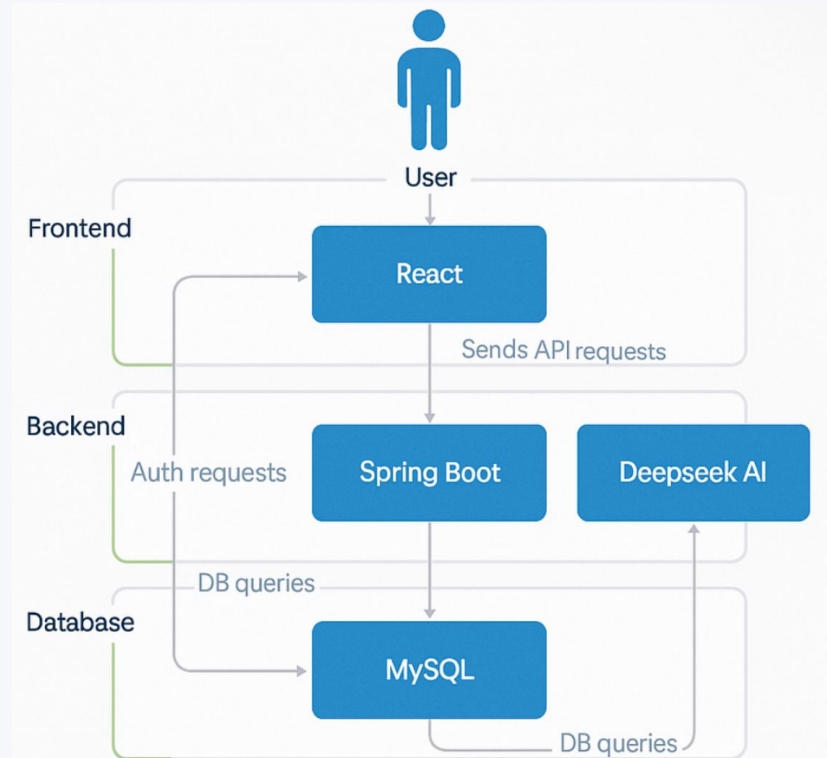


Context Diagram





Architecture Diagram



Product Backlog pt.1



Sprint 1 – Product Backlog with User Stories & Acceptance Criteria

ID	User Story	Story Points	Priority	Feature Component	Acceptance Criteria
US_01	As a user, I want to register for an account so I can access the web app.	5	High	User Account	<ul style="list-style-type: none">• Form must include: Name, Email, Password, DOB• Password stored securely (encrypted)• Successful registration redirects to dashboard with confirmation
US_02	As a user, I want to complete an onboarding quiz to get personalized supplement and workout recommendations.	6	High	AI Personalization	<ul style="list-style-type: none">• Quiz captures: fitness goals, weight, height, age, sex, experience level.Data is saved securely to the database.System provides:

Product Backlog pt.2



					System provides: <ul style="list-style-type: none"> • A personalized workout routine (exercises, sets, reps, equipment). • A supplement recommendation list (name, dosage, purpose, timing).
US_03	As a user, I want to log in securely to access my account.	5	High	User Account	<ul style="list-style-type: none"> • Login only succeeds with valid credentials • Invalid credentials show an error message • Secure session token created on login
US_04	As a user, I want to reset my password if I forget it.	4	Medium	Forgot Password Page	<ul style="list-style-type: none"> • "Forgot password" link on login page • Email sent with reset link • Users can choose a new password and log in
US_05	As a user, I want to view the About Us page to learn about Gymnetics.	3	Low	Static Content	<ul style="list-style-type: none"> • Page contains mission statement, team bios, images • Accessible via navbar



Product Backlog pt.3

US_06	As a user, I want to view supplement products available for purchase.	5	High	Products Page	<ul style="list-style-type: none">• Product listing shows image, name, price• “Add to Cart” button present
US_07	As a user, I want to add and manage items in my cart.	5	High	Cart Page	<ul style="list-style-type: none">• Items added/removed update cart• Subtotal displayed• Checkout button present
US_08	As a user, I want to complete my purchase using Stripe payments.	8	High	Stripe Integration	<ul style="list-style-type: none">• Stripe form integrated and functional• Payment success/error displayed• Email receipt sent on success



Product Backlog pt.4

US_09	As a user, I want to view the home page to learn about the web app.	3	Medium	Home Page	<ul style="list-style-type: none">• Welcoming content and banner• Navbar links to login/register/products/about us
US_10	As a team, we want to publish our sprint planning video to YouTube.	2	Medium	Planning Documentation	<ul style="list-style-type: none">• Uploaded video link in wiki• Title/description include GitHub link and sprint goals



Test Cases w/ User Stories pt.1

Sprint 1 – Test Cases					
User Story					
US_01	As a user, I want to register for an account so I can access the web app.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_01_01	Verify Account Creation	Fill registration form → Submit	Account created and dashboard redirect	Pass	07/07
User Story					
US_03	As a user, I want to log in securely to access my account.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_02_01	Verify Account Sign-in	Go to login → Enter email/password → Submit	User logged in and session started	Pass	07/07



Test Cases w/ User Stories pt.2

User Story					
US_02	As a user, I want to complete an onboarding quiz to get personalized supplement and workout recommendations.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_03_01	Complete Onboarding Quiz and Receive Recommendations	Login → Open quiz → Submit responses	User receives both workout and supplement recommendations on dashboard	Pass	07/07
User Story					
US_04	As a user, I want to reset my password if I forget it.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_04_01	Reset Password	Click "Forgot Password" → Enter email → Follow link → Set new pass	Password reset successfully; login works	Pass	07/07



Test Cases w/ User Stories pt.3

User Story					
US_06	As a user, I want to view supplement products available for purchase.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_05_01	Display Products Page	Navigate to /products	Product list displays with image, name, and price	Pass	06/30
User Story					
US_07	As a user, I want to add and manage items in my cart.			Pass	06/23
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_06_01	Add to Cart	Click "Add to Cart" on a product	Item appears in cart, total updated	Pass	06/23
TC_06_02	Remove from Cart	Remove item from cart view	Cart updates, total recalculated	Pass	06/23



Test Cases w/ User Stories pt.4

User Story					
US_08	As a user, I want to complete my purchase using Stripe payments.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_07_01	Complete Stripe Payment	Add item → Proceed to checkout → Submit payment	Payment success message + email receipt	Pass	06/23
User Story					
US_05	As a user, I want to view the About Us page to learn about Gymnetics.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_08_01	Load About Us Page	Click 'About Us' in nav bar	About Us content displays	Pass	06/30



Test Cases w/ User Stories pt.5

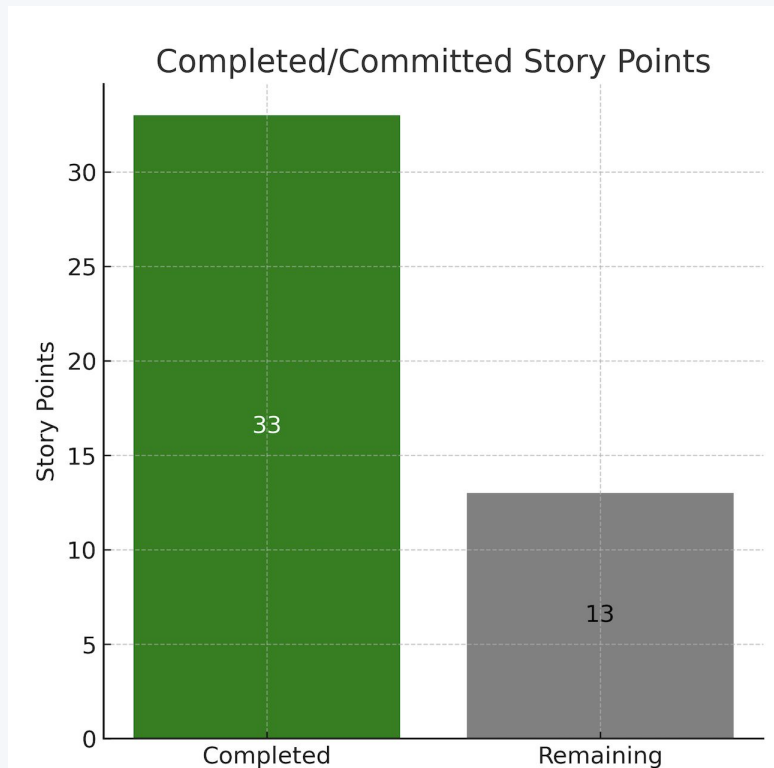
User Story					
US_09	As a user, I want to view the home page to learn about the web app.				
TC ID	Test Case Title	Steps	Expected Result	Execution Status	Execution Date
TC_09_01	Load Home Page	Navigate to home (/)	Welcome message and navigation links shown	Pass	06/30
Testers					
Marlen Cuevas Duarte					
Jia Lau					
Adam Miftahelidrissi					
Diya Patel					
Samiha Shareef					

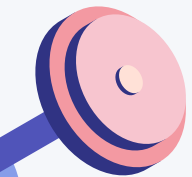


Velocity & Completed/Committed Ratio Chart

Total Story Points: 46

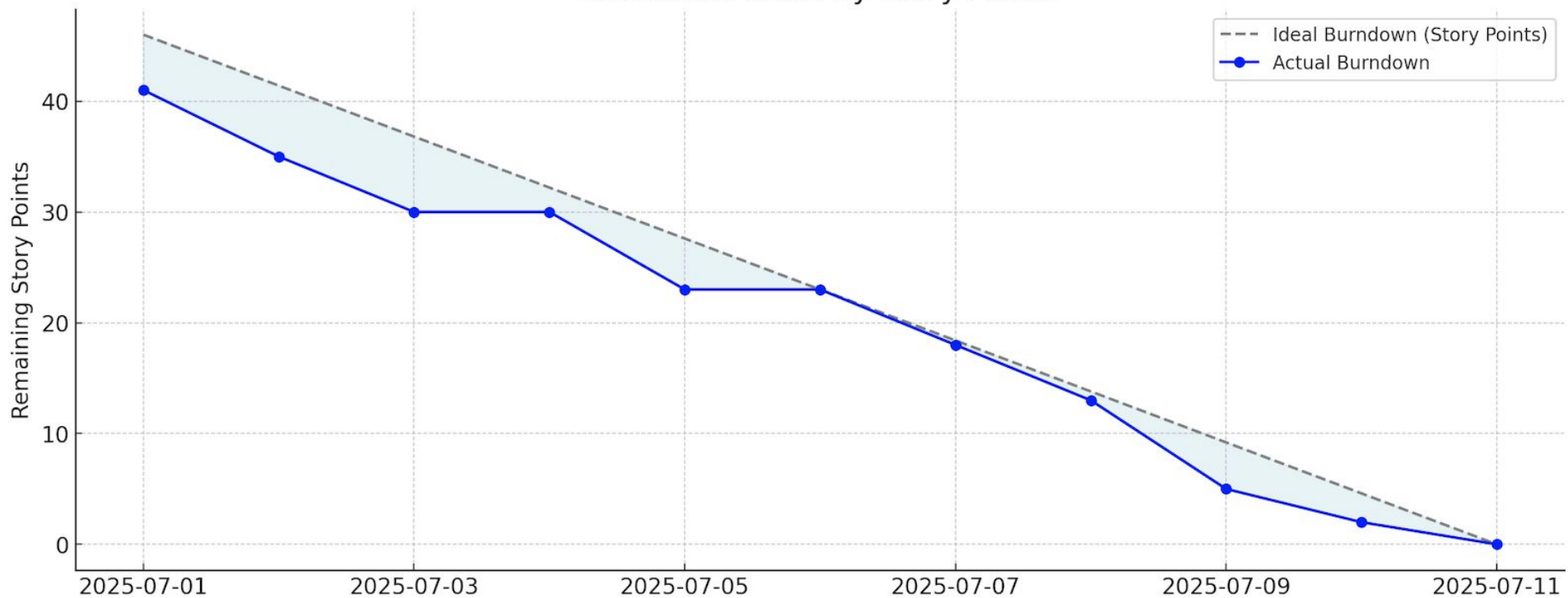
Story Points Completed: 35





Burndown Chart

Burndown Chart by Story Points





API

Stripe API

Type: REST API

Purpose: Loading checkout shop, and allowing users to purchase items listed in Stripe

How it works:

- The application makes a POST request which allow users to checkout the item they want to purchase.
- API being called is in StripeController with backend logic in StripeService

DeepSeek API

Type: REST API

Purpose: Analyzes users information such as age,weight,height and recommend supplements from our shop.

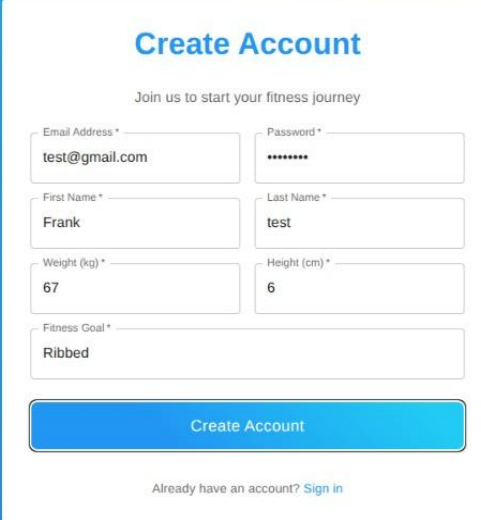
How it works:

- The application will read a GET request of user's information, and injected that information to the Prompt.
- API being called is in DeepSeekController with backend logic in DeepSeekService

APP

CREATING AN ACCOUNT

- A first time user registers their account on the app before signing in.
- Once inside the app, a user can navigate to a supplements store where they can select items on the screen and add them to a cart.
- Once satisfied they open the cart and pay the online checkout.



Create Account

Join us to start your fitness journey

Email Address *	Password *
test@gmail.com	*****
First Name *	Last Name *
Frank	test
Weight (kg) *	Height (cm) *
67	6
Fitness Goal *	
Ribbed	

Create Account

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

SIGNING IN

Welcome Back

Sign in to access your account

Email Address *

|

Password *

Sign In

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



SUPPLEMENTS STORE

Fitness Store

[SUPPLEMENTS](#) [LOGOUT](#)

Premium Supplements

Whey Protein Isolate

Whey Protein Isolate

OptimumNutrition

Premium whey protein isolate for muscle recovery and growth

Protein

\$49.99

★★★★☆

Add to Cart

BCAA Complex

BCAA Complex

Dymatize

Branch Chain Amino Acids for muscle preservation

Amino Acids

\$29.99

★★★★☆

Add to Cart

Creatine Monohydrate

Creatine Monohydrate

MyProtein

Pure creatine for strength and power

Performance

\$19.99

★★★★☆

Add to Cart

Pre-Workout Energy

Pre-Workout Energy

C4

Advanced pre-workout formula

Energy

\$39.99

★★★★☆


Add to Cart

Omega-3 Fish Oil



ZMA Complex

CHECKOUT



Fitness StoreSUPPLEMENTSLOGOUT

Shopping Cart

 BCAA Complex
\$29.99
- + 

Order Summary

Subtotal	\$29.99
Shipping	Free
Total	\$29.99

PROCEED TO CHECKOUT

THANK YOU



<https://github.com/htmw/2025Su-ByteSquad/wiki>