

The background is a light blue gradient with various fitness-related icons in a flat, stylized design. In the top left, there is a blue and pink dumbbell. In the top right, a red barbell is partially visible. On the right side, there is a large orange circle. In the bottom left, a blue barbell is partially visible. In the bottom right, there is a pink and blue jump rope. The title 'BetterFit' is centered in a large, bold, blue font.

BetterFit

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TABLE OF CONTENTS

01

Vision

02

Tools Used

03

**Architecture
Diagram**

04

Challenges

05

**Future
Enhancements**

06

Demo



Our Vision

"To provide a simple, user-friendly platform where individuals can track their gym workouts, discover new recipes, and easily save their favorites—helping users stay motivated, organized, and on track to achieve their fitness goals."

The background is a light blue-grey color. It features several abstract geometric elements: a red line forming a loop in the top left; a pink and blue tool-like shape in the top left; a blue square with the number '02' in the center; a blue cylinder in the top right; a pink ring in the middle right; a blue ring in the middle left; a pink and blue tool-like shape in the bottom right; and a blue cylinder in the bottom right. The word 'Tools' is written in a bold, dark blue font below the square.

02

Tools

Tools Used



Project Tracker: GitHub Project Board

"We used GitHub Project Boards to organize tasks, track progress visually, and integrate seamlessly with version control, ensuring smooth collaboration and on-time delivery."



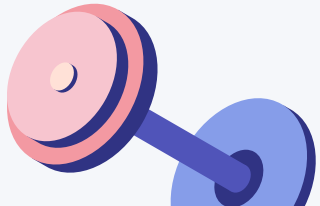
VCS Repository: GitHub

"We used the github version control system to keep track of individual progress and integrate parts of the website. Have checks and balances to manage what change can be integrated and reverting to older versions if need be."



Database: PostgreSQL

"We used PostgreSQL to connect our backend and frontend seamlessly, ensuring efficient data management and smooth communication between the application layers."



Tools Used



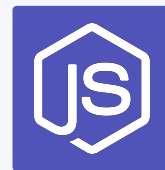
IDE: VS Code

"We used VS Code to program our project. VS Code allows users to code in numerous different languages and has features such as syntax highlighting, code completion, debugging, and extensions"



UI Tools: HTML, CSS, HandleBars

"An important part of our UI development is CSS Bootstrap, it offers various styles of layouts and buttons that helped develop a user friendly website environment. Html coded pages are integrated through handlebars for seamless development."



Application Server: NodeJS

"Node.js extends JavaScript to the server side. This allowed us to create paths from the front end to the back end to fetch or send user information like tracking the users exercises."



Tools Used



Deployment Environment: Render

"We used Render to deploy our application. Render automatically deploys GitHub projects whenever changes are pushed or merged to the linked branch."



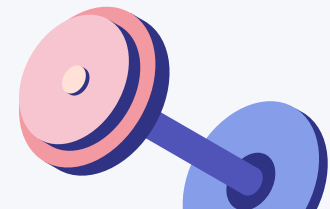
External API: Edamam

"We utilized Edamam, which allows users to browse through various recipes and favorite ones that they want to save."



Testing Tools: Mocha, Chai

"We utilized Mocha and Chai to test some of the functionalities of our website. We tested the add user API to make sure users were being added correctly into our tables along with a default test, login test, and profile update test."



Tools Used



Framework: Express in Node

"Express. is a web application framework for Node.js. It provides features for building web and mobile applications such as routing, middleware, and templating which we used in our project."



Development Methodology: Agile

"We also used Agile methodology to break the project into manageable user stories, preventing it from becoming overwhelming. By assigning ownership of each story, we were incentivized to perform well and complete our tasks efficiently."

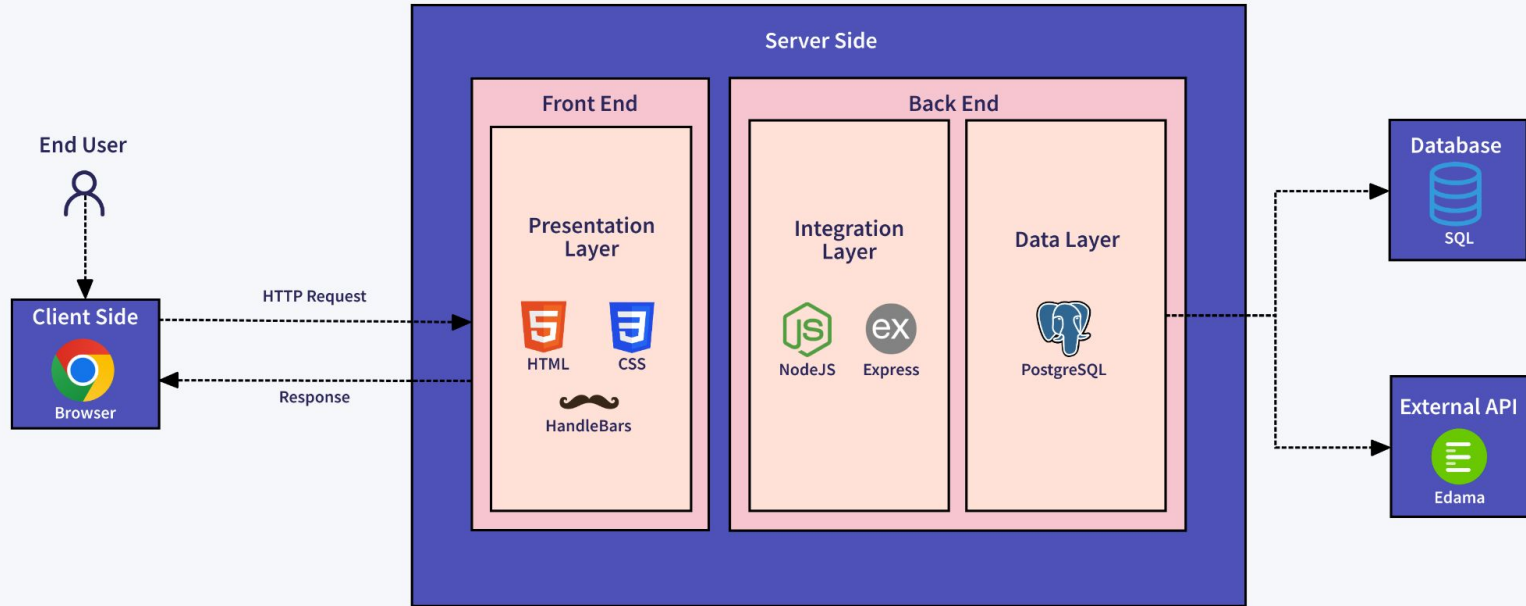


The background is a light gray with several abstract geometric elements. In the top left, a red line loops around a pink and blue cylindrical object. In the top right, a blue diagonal band contains a dark blue cylinder. On the left, a blue ring is partially visible. On the right, a pink ring is partially visible. In the bottom right, a blue cylinder passes through a stack of orange, pink, and blue disks. The number '03' is centered in a dark blue square.

03

Architecture Diagram

Architecture Diagram



The background is a light blue gradient. It features several decorative elements: a red line forming a loop in the top left; a pink and blue striped cylindrical object in the top left; a blue cylindrical object in the top right; a pink ring on the right; a blue ring on the left; and a pink and blue striped cylindrical object in the bottom right.

04

Challenges




CHALLENGES

Crafting a User-Friendly UI/UX

Solution: Refined designs using user feedback and Bootstrap for responsiveness.
Impact: Extended design time but delivered a polished, fitness-themed experience.

Templating for Exercises Page



Solution: passing a post request with the muscle group id to filter exercises by
Impact: Increased page reusability and maintained consistency throughout the exercise pages.

Implementing the Favorite Recipe Feature

Solution: Built a "favorites" table linking user IDs to recipe names.
Impact: Slightly delayed other features but boosted user engagement through personalization.

Post Route for Exercises

Solution: filter based on a shared relationship table between exercises and user
Impact: allowed for distinctions between the user's workouts and workouts not yet added by user.



05

Future Enhancements



FUTURE ENHANCEMENTS

Social Features

Add a community forum to foster connection, share tips, and boost user retention and motivation.

Grocery Integration

Generated shareable grocery lists from selected recipes to simplify meal prep and encourage healthy eating.

Progress Tracking

Created a dashboard with analytics to track fitness progress, keeping users motivated with tangible results.

Gym Partnerships

Partner with gyms for exclusive deals and schedule integration, enhancing real-world fitness connections.

Gamification

Add badges, achievements, and leaderboards to boost motivation and engagement with fun, competitive elements.

User Recipe Sharing

Enabled users to submit and rate recipes, fostering collaboration and expanding options



06

Demo



DEMO

Deployed Application Link

<https://betterfit-10l8.onrender.com/>

Video

