



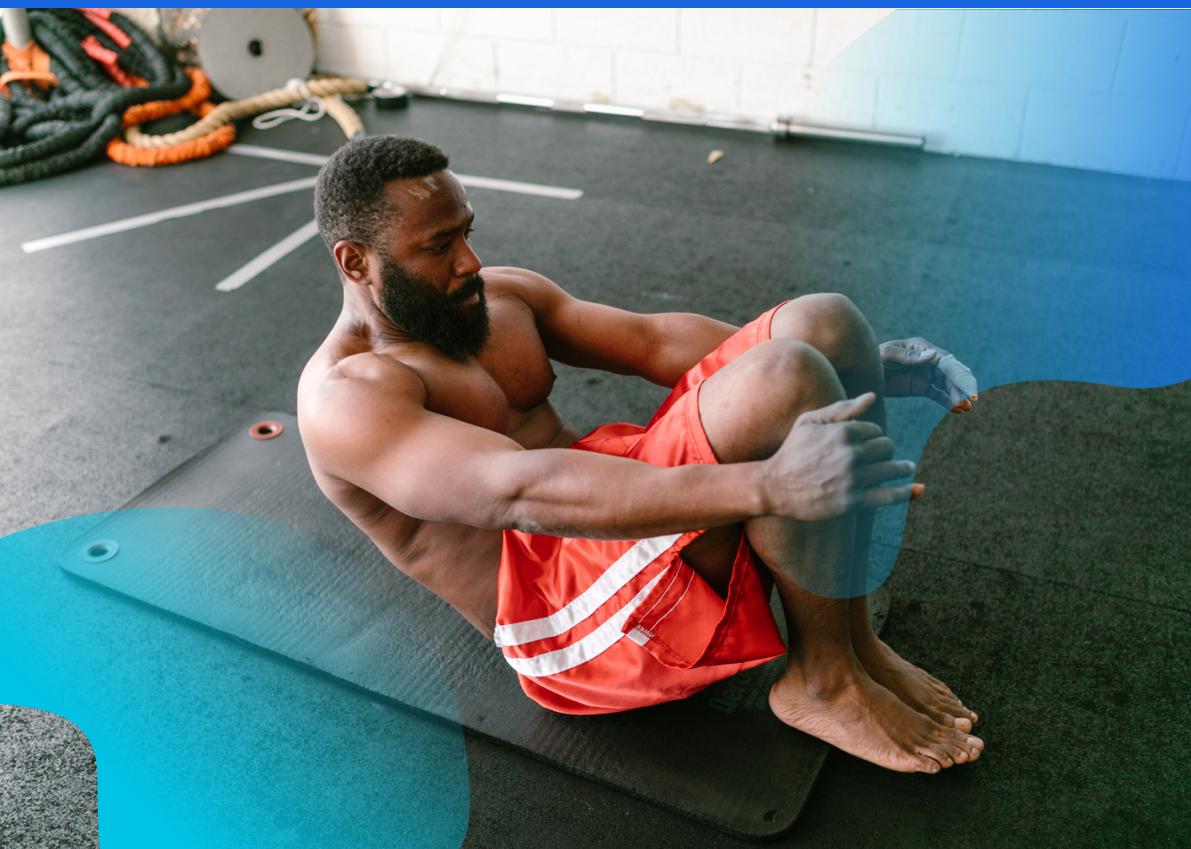
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Atlantic
Technological
University

LYFFE

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Bachelor (Hons) Software and Electronic Engineering



LYFFE's Objectives

Create a fitness app that provides:

personalised workout plans

Detailed Exercise information

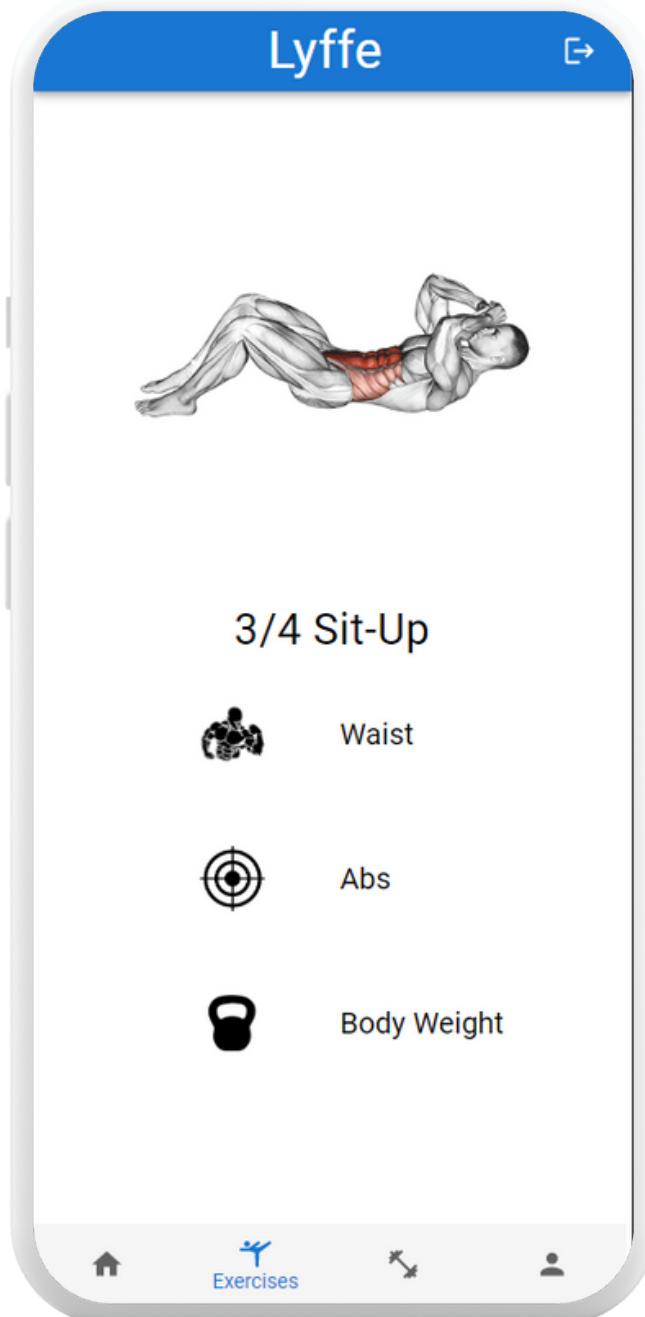
Background:

Evergrowing interest in health and fitness

Active injury prevention

Cater to all fitness levels

Key Features



Simple user interface

Streamlined On boarding

For users

Easy to navigate workout plan creation and management

Easy Information

Exercise information needs to be close by

Application flow

- User registration and login via Auth0
- Creation of personalised workout plans
- Access to detailed exercise information
- Workout modification and management

User Satisfaction

PROVIDE COMPREHENSIVE EXERCISE DATABASE

CUSTOMIZABLE WORKOUT PLANS

USER FRIENDLY INTERFACE

Technologies

Frontend

- React for dynamic ui
- React router for navigation
- Material UI component library

Backend

- Node.js and Express.js
- Mongoose & MongoDB
- Auth0 for secure login and registration

Third Party

- ExerciseDB API from RapidAPI
- Auth0 for authentication



Implementation

Data validation: MongoDB schemas to enforce consistency, Mongoose for communication

RESTful API Routes: creating efficient routes for handling of CRUD operations

Third Party integrations: ExerciseDB and RapidAPI for comprehensive exercise database

Challenges

Ensuring Data Consistency using CRUD

Balancing features and user experience while maintaining scalability and performance

Providing useful information to the user through simplicity

Conclusion

- Lyffe provides an effective and user friendly platform for users to create, manage and track their workouts
 - Successfully implemented user authentication, data storage and integration with third party API's
- Gained a deeper understanding of full stack development, working with multiple technologies and frameworks, such as React, MUI, Node.js, Express and MongoDB.
- Implement progress tracking and progress visualisation
 - Enhance user engagement by incorporating gamification elements, such as achievements, leaderboards and challenges.

Future Works