Aidan Shields
BEng(H) Software
Electronic Engineering

G00370587

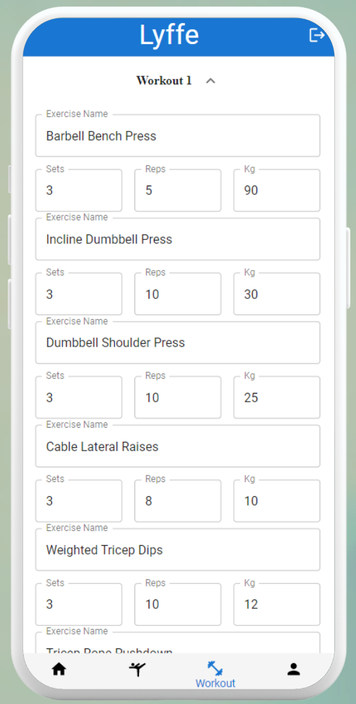
Lyffe

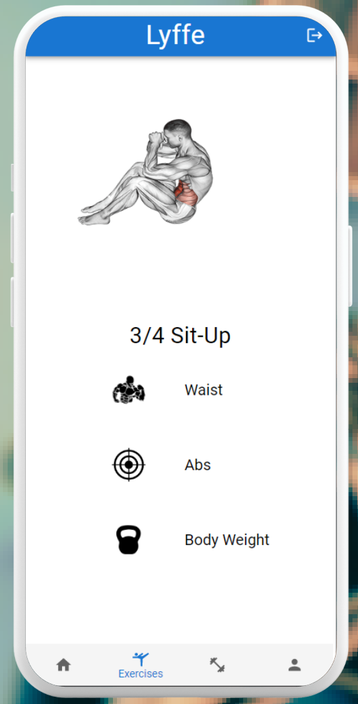
Description

Lyffe is a cutting-edge MERN full-stack web application designed to provide an all-inclusive workout plan to fitness enthusiasts. With its React-based Material UI library, it offers a comprehensive list of exercises that can be done with or without equipment, catering to all fitness levels and requirements.

Designed with a passion for fitness, Lyffe aims to help individuals overcome the daunting experience of starting at the gym by offering them a user-friendly platform to kickstart their fitness journey. From beginners to advanced goers, the app provides step-by-step guidance on how to undertake each exercise and which body parts they target.

By offering an alternative exercise program to gym-goers, Lyffe aims to inspire and motivate individuals to achieve their fitness goals. Its user-friendly interface and comprehensive workout plan make it an ideal choice for fitness enthusiasts looking to take their training to the next level.





Technologies

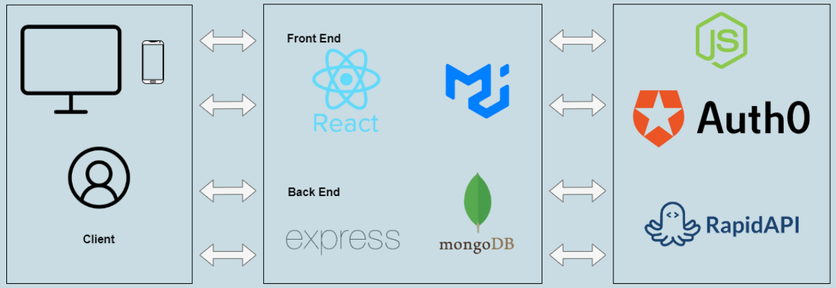
Front-end: Dynamic web applications are constructed using the React framework for Javascript and Material UI, which provides access to a pre-made React component library for developing standardized and responsive UI components.

Back-end: Express is a popular framework used in web applications for handling HTTP requests and responses, Storage is done with MongoDb which is a noSql database. The server-side code is written in Javascript inside the Node.js environment

Node: Node.js is an open-source runtime environment for executing JavaScript code outside of a web browser. It uses an event-driven, non-blocking I/O model to allow for scalable and efficient server-side applications.

Api: RapidAPI is a marketplace that allows developers to discover, test, and connect to thousands of APIs. Auth0 is a cloud-based identity platform that provides secure authentication and authorization services, including single sign-on (SSO), multifactor authentication (MFA), and user management.

Architecture Diagram



Conclusion

The Lyffe web app is a web application designed for fitness enthusiasts. The front-end is built with React and Material UI, while the back-end uses Express and MongoDB for data storage. Node.js is used for server-side development, and RapidAPI and Auth0 are integrated for API management and secure authentication.

The app provides a comprehensive workout plan with step-by-step guidance on over 1400 exercises, catering to users of all fitness levels.