FitBuddy

User Guide

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What is Fitbuddy?

FitBuddy is a social media app for gymgoers that allows them to post workouts, message friends, and find people that match their experience, goal, or lifting style. The app was developed using Dart for its front end and Firebase for its back end.

What is Dart?

Dart is an object-oriented programming language developed by Google. It can be used to develop mobile apps and web applications and is the primary language for FitBuddy

What is Firebase?

Firebase is a backend cloud-based service provided by Google. Firebase can host a database and can handle authentication for a variety of login methods.

Making an account:

Upon starting the app user can either sign in (with an existing account) or make an account. To make an account the user must insert the following information when prompted: email, password, confirmed password, Name, username, DOB, and gender. They will also be prompted to choose one option for each category in their account.

Experience	Goal	Lifting style
0-3 Months	Lose weight	Calisthenics
6 Months - 1 Year	Build Muscle	Powerlifting
1-2 years	Build Strength	Bodybuilding
2-4 Years		Crossfit
5 Years+		General Health

After this is all completed the user's account will be completed and the app will begin displaying the timeline page.

How it works:

The sign-up process works using the Firebase authentication system. Each user is given a unique identifier(UID) to help identify and track that user. This uid is stored inside of the Firestore Database and is the document that stores the rest of the user's data.

Email and password will be used to allow users to log into their accounts. Username will be used to help identify and find users on the app. The rest of the information will be used for the matchmaking system which will display a card with a user's name, age as well as their three category choices.

The user information is stored as such:

Field name	Type
displayName	String
username	String
email	String
dob	timestamp
gender	String
experience	String

goals	String
liftingStyle	String
uid	String

Creating a post:

A workout post is a post containing a description and exercise you did, as well as the sets, reps, and weight of that exercise. The user can create a workout post by tapping on their icon on the timeline page to display the drawer and tapping Log workout. From here the user can tap “add exercise” to choose the exercise they have completed and setting sets and reps using the interactive “-” and “+”. The user can add multiple exercises by tapping the “Add exercise” button.

If a user completed multiple sets of the same exercise using different weights or reps they can tap “add set” next to the exercise name and fill out a second set for the same exercise.

A post can be posted as public or private. A public post will be viewable to other users on their timeline. A private post will only be viewable by the user on their profile page. A post being public or private is determined by the eye icon on the top right corner with an open eye being public and a closed eye being private.

A workout post is posted by tapping “publish” on the top right which will create a prompt confirming if you want to post the workout. Tapping “Post” will post the workout and tapping “Cancel” will allow you to continue editing the post.

How it works:

Each workout post is stored in Firebase which is set to generate a UID for each post. Each UID will contain fields for the data of that post. These fields include activities the description, a timestamp, the UID of the user, and whether it's public or private. The activities field is used to store the exercises in an array which stores an array called activity that contains the sets, reps, and weight for each exercise

The post information is stored as such:

Field Name	Type
activities	array
Creator_uid	String

description	String
timestamp	timestamp
visibility	String

Profile Page

The profile page is a page unique to each user. It shows their complete profile image, username, Name, and displays all posts created by them. It also allows user to display 3 of their achievements.

This is also where users can change their profile image by tapping on the camera in the bottom right corner of their picture and choosing a picture from their phone gallery.

How it works:

The user information is pulled from the user data and is displayed here. The profile image is set to a default profile image upon account creation and when changed, the image they choose is uploaded to the Firebase storage and replaces the default profile image on their account.

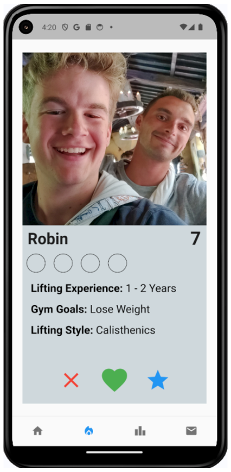
Matchmaking

The matchmaking tab is where users can try and find someone to work out with.

This page lets users view another user's account and see the other user's name, age, displayed achievements, experience, goals, and lifting styles. The user can then dislike, like, and superlike an account by tapping on the X, heart, and star. If both users match then they become friends and can begin messaging each other.

How it works:

The app will generate a list based on a user's information(goals, lifting style, experience, etc..) and return a customized list of other users with similar information. The user can tap on the bottom 3 icons and the like/superlike will increase the likelihood of their account showing up on the liked user's matchmaking page. Should both users like/superlike the other then they are added to each other's friendsList and can begin messaging each other.



Robin 7

Lifting Experience: 1 - 2 Years

Gym Goals: Lose Weight

Lifting Style: Calisthenics

TimeLine

The Timeline page is where users can view their own and each other's workout posts. Each workout post will show a user’s name and post info such as the exercise name, reps, sets and weights.

This page also has a search icon on the top right corner that allows the user to search for someone and add them to their friend list which will allow their post to be displayed on the user's timeline

How it works:

This page works by reading the UID in the friendList from a user's information, looking through the “post” collection on Firebase for posts that match UID, and returning all public posts made by those users in chronological order.
Should a user on a friendList make a private post then that post will not show up on the timeline and can only be viewed by the user that created it on their profile page.

Settings

The settings page is where users can update or change their user information.

This can be done by tapping on the redo button located on the left side of each field. Tapping a redo button will create a pop-up that will allow the user to update or change that field.

How this works:

The settings page retrieves the user’s information from the database and returns the data in the correct account field. The redo button returns a pop-up that allows the user to change/update their account info. The pop-up will vary depending on the field. For Display Name, Username, and Email it will ask for a string input. For Gender, Lifting Style, Gym Goals, and Gym Experience it will give a drop-down menu to choose from. For Date of Birth, it will ask for a new date.

Cancelation of a change can be done by tapping off the pop-up.

Messages

The Messages page allows users to send messages to other users on their friend’s lists. These messages are then stored in the database.

How it works:

When a user sends a message to another user for the first time it will create a new document in the chats collection. This new document will have its own UID made from the user UID from the sender and receiver. This document will contain a collection called “messages”. Messages will contain documents with each message in a conversation. These documents are given a UID and contain fields for the message, the sender's UID, and a timestamp.

If a user already has an existing message history with another user then the app will display that conversation in chronological order using the timestamps stored with each message.

Achievements

Not present in the final product

When a user makes a post and the post is correctly uploaded to the database, the post will be used to update or create an achievement collection for the user. This collection will then be used on the achievements page to display a user's achievements for each exercise. And allows user to choose what achievements to display on their account.

How it works:

The user will submit a post and after the database confirms that the post has been stored the app will then scan the stored post and update (or create) the user's collection based on the requirements for the achievements.

Each achievement has a total of 9 ranks with a new user starting at rank 0 with no achievements. The requirements for the achievement are raised with each rank

If no achievement is reached then no changes will be made

If a user meets an achievement requirement then the achievement will go up by 1 rank and the user can use that achievement on their profile page.