



*Introducing Our*

# FITHOME

Presented by :

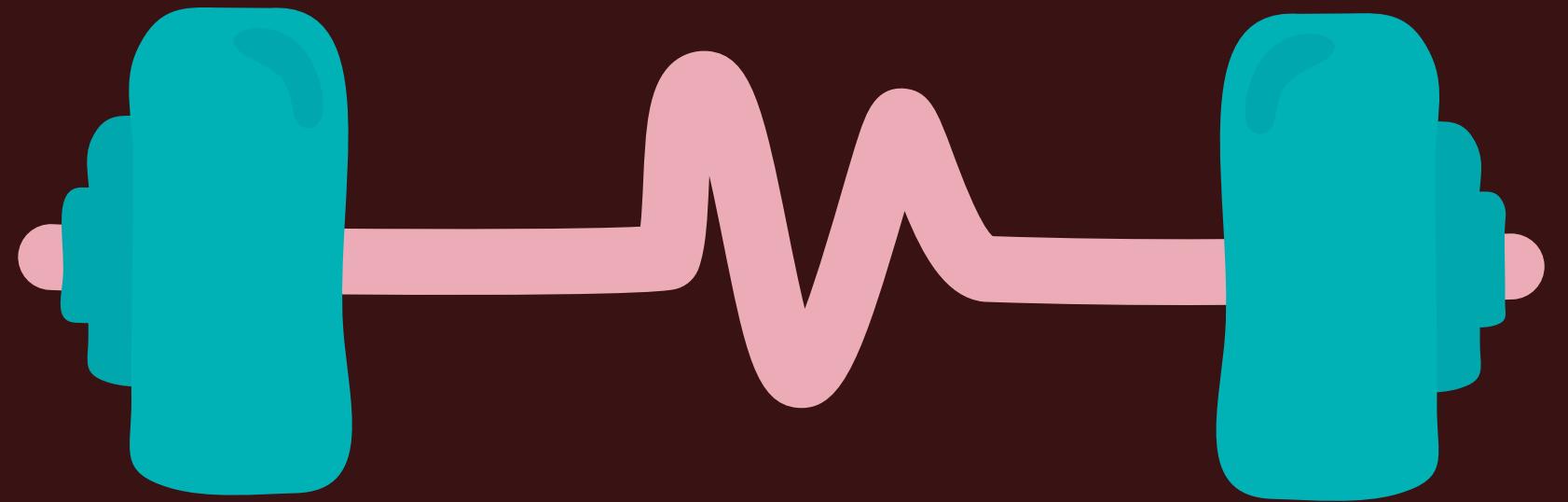
LAXMI (22BCS059)

ARPITA (22BCS017)

BABITA (22BCS026)

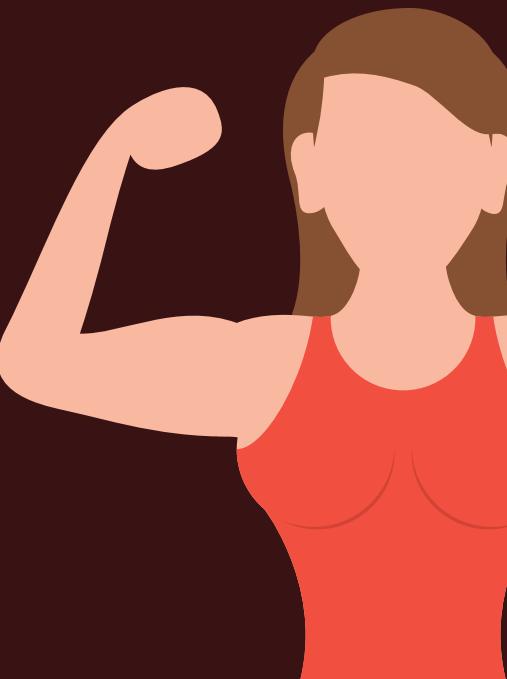


# Software Requirement Process:



- 1.
- 2.
- 3.

**Requirement Elicitation:**  
**Requirement Analysis:**  
**Requirement Specification:**



# Requirement Elicitation

- Gather information about the fitness app's purpose, target audience (fitness enthusiasts, athletes, etc.), and primary functionalities.
- Conduct interviews with fitness trainers and potential users to understand their exercise routines, preferences, and expectations from the app.

# Requirement Analysis

- Analyze the gathered requirements to identify essential features, including exercise recording, calorie calculation, user management, and graphical representation of workout data.
- Rank the features according to their significance and practicality for the initial launch.

# Requirement Specification

- Document detailed requirements using user stories and functional requirements specifications.
- Specify functional requirements such as exercise tracking for different body parts, user authentication for sign-in/up, and maintaining average calorie burn values.
- Define non-functional requirements including performance, security (data privacy), and usability aspects.

**Calories Burned****27000.00** kcal (+10%)

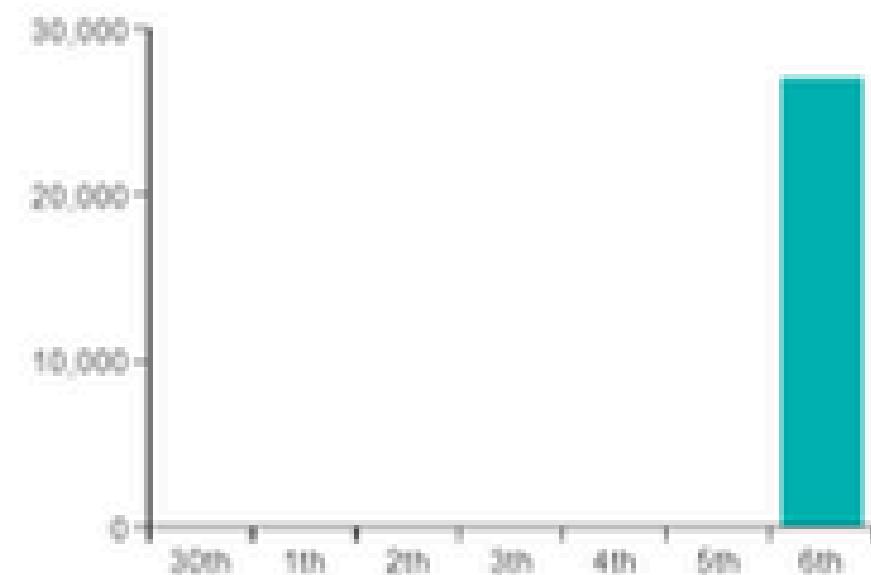
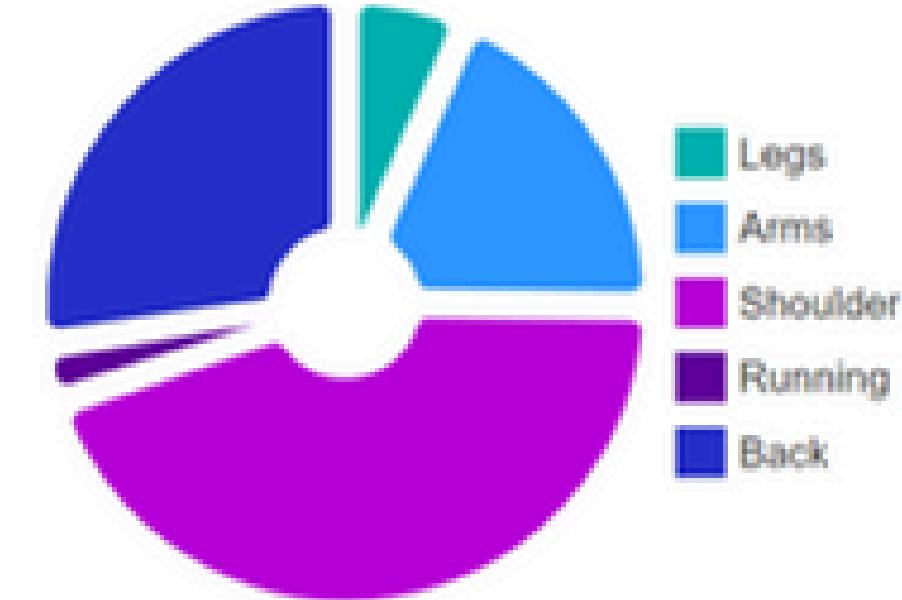
Total calories burned today

**Workouts****5.00** (+10%)

Total no of workouts for today

**Average Calories Burned****5400.00** kcal (+10%)

Average Calories Burned on each workout

**Weekly Calories Burned****Weekly Calories Burned****Add New Workout**

## Workout

#back  
-Cable  
-5 setsX20 reps  
-50 kg  
-30 min

[Add Workout](#)

# Software

# Engineering Process:



# Planning Phase:

- Define the scope of the fitness app, including the dashboard and workout sections.
- Identify the technologies and tools required for development, such as MongoDB for the database, Node.js for server-side logic, and CSS for styling.
- Create a project schedule with milestones for design, implementation, testing, and deployment phases.

cluster0.1shxgv...

My Queries

Performance

Databases

Search

- admin
- config
- local
- sample\_mflix
- test

users

workouts

My Queries users

cluster0.1shxgv.mongodb.net > test > users

Documents 1 Aggregations Schema Indexes 2 Valid

Type a query: ( field: 'value' ) or Generate query +

ADD DATA EXPORT DATA UPDATE DELETE

```
_id: ObjectId('6637758d5f2031b9ebab71ca')
name: "Tulip"
email: "tulip@gmail.com"
img: null
password: "$2b$10$LISZadFTe6TYqkTfJLql1O38vH1ysGhKOp/8qyf"
createdAt: 2024-05-05T12:03:25.856+00:00
updatedAt: 2024-05-05T12:03:25.856+00:00
__v: 0
```

admin config local sample\_mflix test

users

workouts

ADD DATA EXPORT DATA UPDATE DELETE

```
_id: ObjectId('6637f26c857748676341dcb3')
user: ObjectId('6637758d5f2031b9ebab71ca')
category: "Legs"
workoutName: "Back Squat"
sets: 5
reps: 15
weight: 30
duration: 10
caloriesBurned: 1500
date: 2024-05-05T20:56:12.561+00:00
createdAt: 2024-05-05T20:56:12.575+00:00
updatedAt: 2024-05-05T20:56:12.575+00:00
__v: 0
```

```
_id: ObjectId('6637f288857748676341dcc2')
user: ObjectId('6637758d5f2031b9ebab71ca')
category: "Running"
workoutName: "sprint"
sets: 5
reps: 15
weight: 5
duration: 20
caloriesBurned: 500
date: 2024-05-05T20:56:40.677+00:00
createdAt: 2024-05-05T20:56:40.680+00:00
updatedAt: 2024-05-05T20:56:40.680+00:00
v: 0
```

# Design Phase:

- Design the system architecture, including database schema for exercises, users, and workouts.
- Create wireframes or prototypes for the dashboard and workout section to visualize the app's layout and user interactions.
- Define data models for exercises, users, workouts, etc., considering the need for recording exercises for different body parts and tracking calorie burn.



# Welcome to FitHome

Please login with your details here

Email Address

Enter your email address

Password

Enter your password

Signin

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

# Create New Account



Please enter details to create a new account

Full name

Email Address

Password



Already have an account? [SignIn](#)

# Implementation Phase:

- Develop the fitness app using JavaScript for both frontend and backend components.
- Implement user authentication and authorization features using Node.js to enable sign-in/up functionality.
- Create functionality for recording exercises for different body parts and calculating calories burned based on exercise type, duration, and user profile.
- Integrate with MongoDB database to store exercise data and user information securely.



## Select Date

May 2024



S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## Todays Workout

#Legs

## Back Squat

Count: 5 sets X 15 reps

🏋️ 30 kg ⏳ 10 min

#Running

## sprint

Count: 5 sets X 15 reps

🏋️ 5 kg ⏳ 20 min

#Arms

## Hover

Count: 5 sets X 20 reps

🏋️ 50 kg ⏳ 20 min

#Shoulder

## Pull

Count: 5 sets X 20 reps

🏋️ 50 kg ⏳ 50 min

#Back

## Cable

Count: 5 sets X 20 reps

🏋️ 50 kg ⏳ 30 min

# Testing Phase:

- Conduct unit tests to verify the correctness of individual modules and components.
- Perform integration testing to ensure seamless interaction between different parts of the app, such as exercise recording, calorie calculation, and graph generation.
- Test the app's usability, performance, and security to identify and address any issues or bugs.

# Deployment Phase:

- Deploy the fitness app on a hosting platform using Node.js server.
- Configure MongoDB database settings and security measures to safeguard user data.
- Perform final checks to ensure the app is running smoothly in the production environment and accessible to users.

# Maintenance Phase:

- Monitor the app's performance and user feedback to identify areas for improvement.
- Release updates with new features or enhancements based on user requests and market trends.
- Regularly update dependencies and security patches to keep the app secure and up-to-date.



*We Want to Say*

# Thanks For Your Attention

@fithome