FITNESS TRACKER

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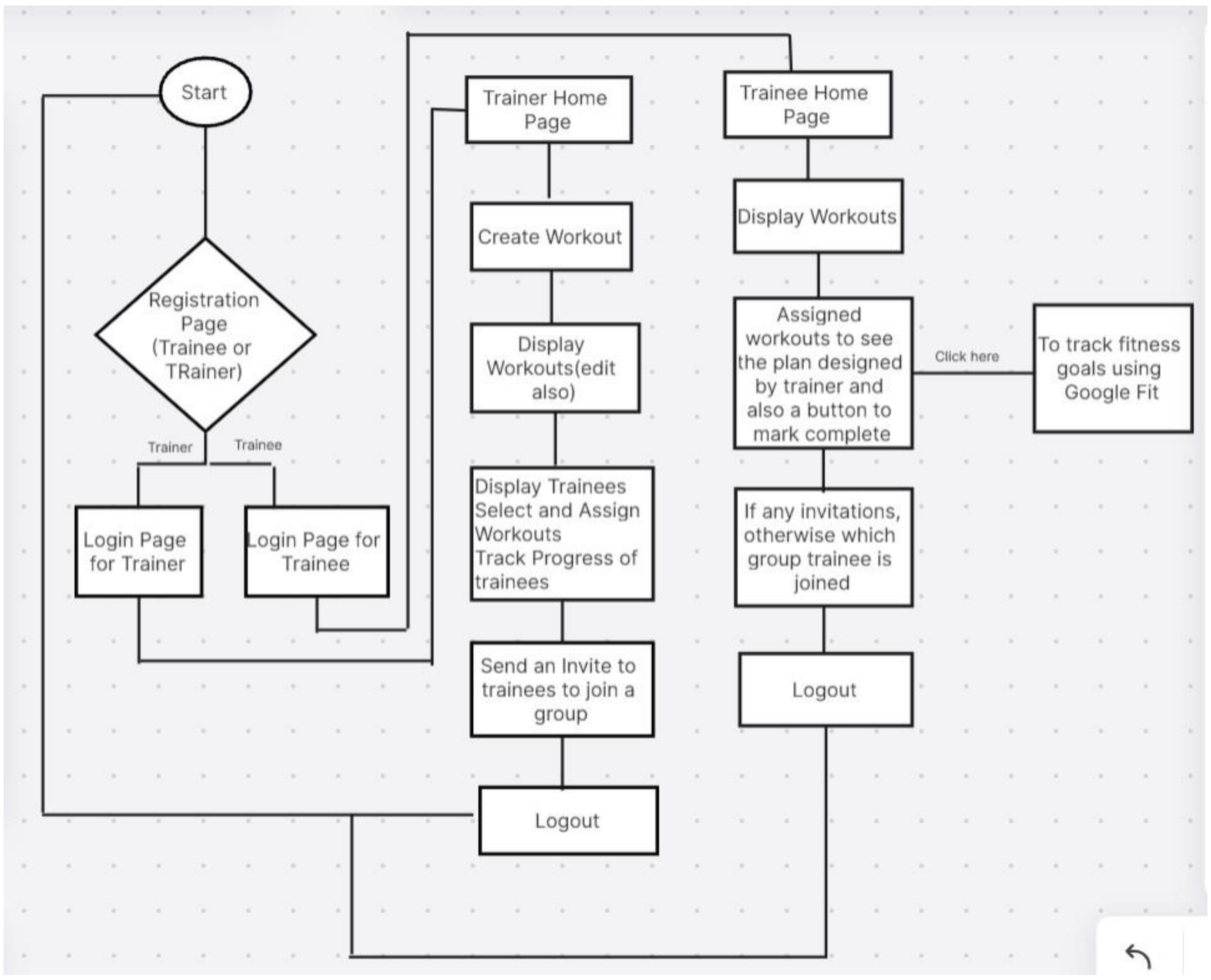
EMPID : 70983753

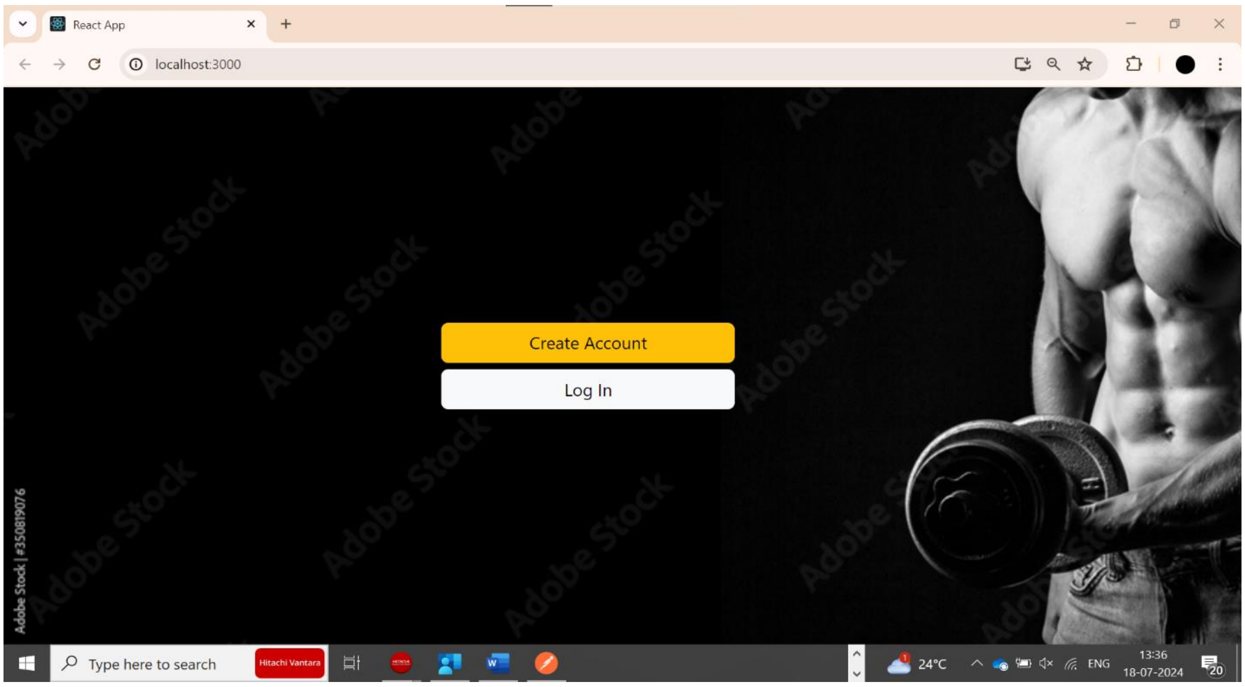
The Fitness Tracker application enables trainers and trainees to manage and track fitness activities effectively. Trainers can register, create, assign, and track workouts, and invite trainees to join specific groups. Trainees can view and complete assigned workouts, track their progress, and sync their fitness goals with Google Fit. The app offers a seamless experience with features like login, registration, and real-time updates on workout progress and group activities.


Start
Registration Page (Trainee or TRainer)
Trainer
Trainee
Login Page for Trainer
Login Page for Trainee
Trainer Home Page
Create Workout
Display Workouts(edit also)
Display Trainees Select and Assign Workouts Track Progress of trainees
Send an Invite to trainees to join a group
Logout
Trainee Home Page
Display Workouts
Assigned workouts to see the plan designed by trainer and also a button to mark complete
Click here
To track fitness goals using Google Fit
If any invitations, otherwise which group trainee is joined
Logout

Fitness Tracker Application Flow Diagram

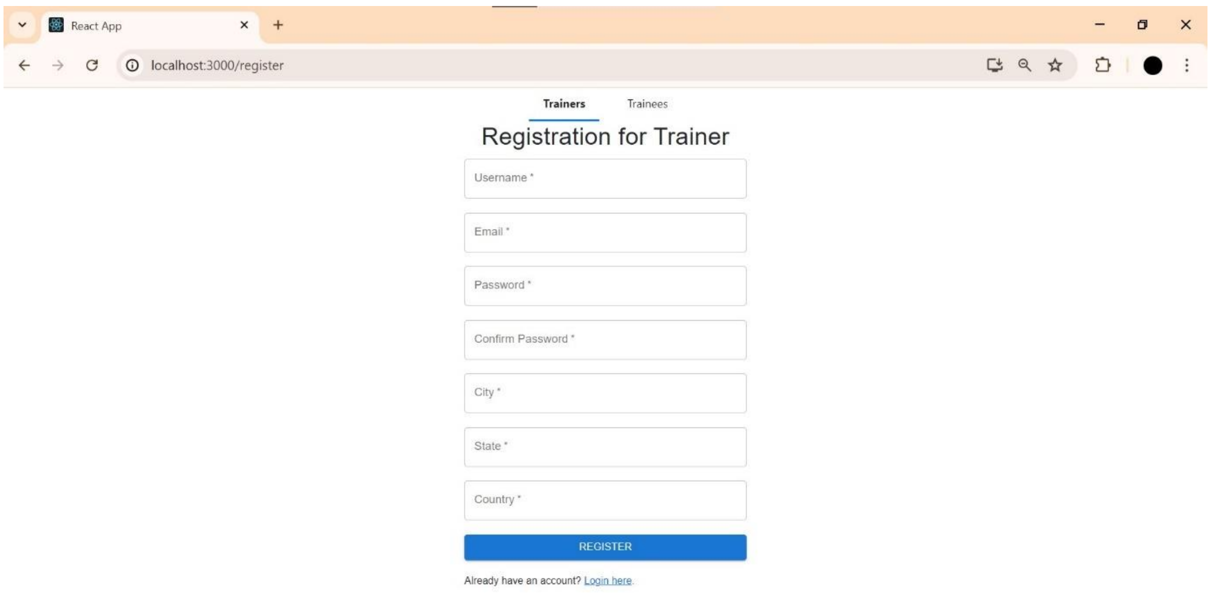
Frontend Implementation:

- React Js is used to implement the frontend.
- Material Ui is used for styling.
- React Router Dom, React Router are used to redirect the pages in this web application
- Axios is used for calling APIs.



Fig(i)

This the Home Page, the **Create Account** button redirects users to the **Registration Page**, while the **Log In** button directs them to the **Login Page** as follows:



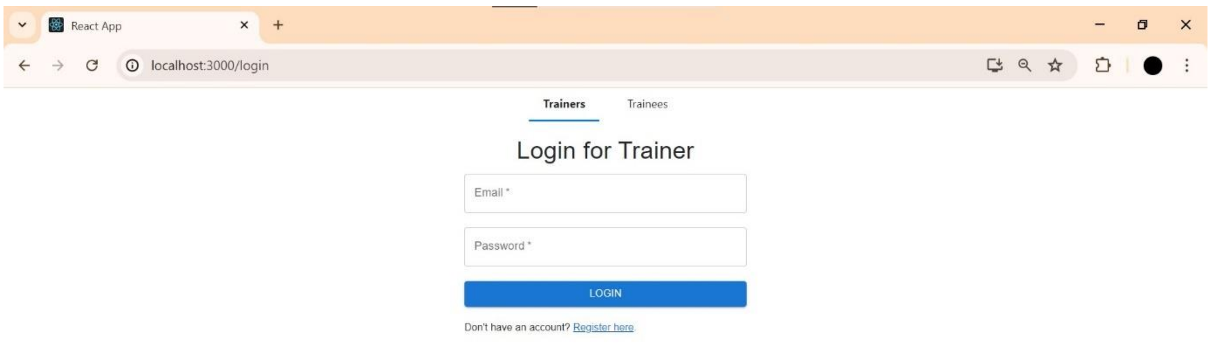
Registration for Trainer

Username *
Email *
Password *
Confirm Password *
City *
State *
Country *

Already have an account? Login here

Fig(ii)

Trainers and **trainees** can register through their respective tabs within the **Registration Container** and log in through their respective tabs within **Login Container** , based on their roles.

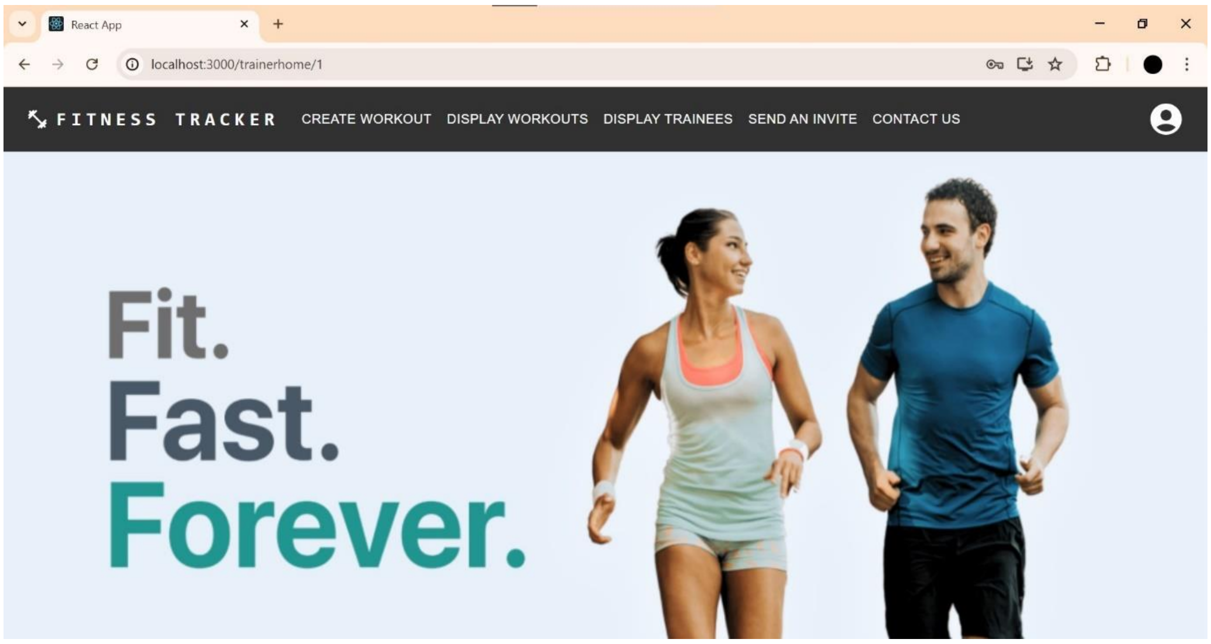


Login for Trainer

Email *
Password *

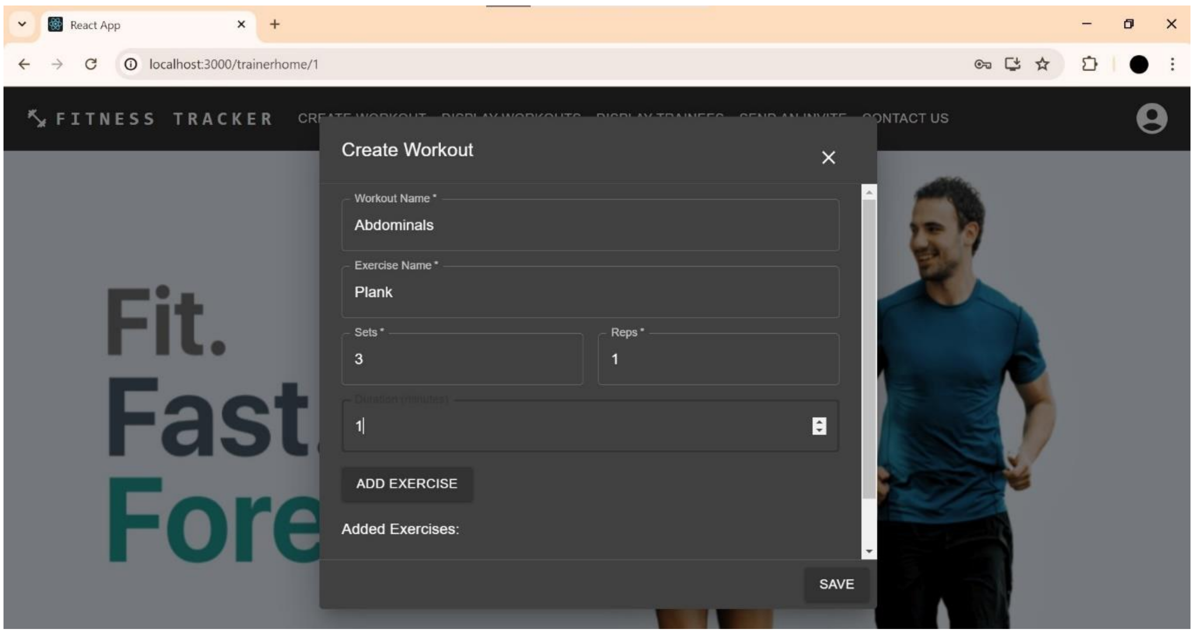
Don't have an account? Register here

Fig(iii)



Fig(iv)

After logging in, the Trainer Home Page features an App Bar with various functionalities. The account circle symbol provides two options: Profile and Logout. Selecting **Profile** displays the details of the logged-in user, while **Logout** redirects the Trainer to the Home Page.



Create Workout

Workout Name * Abdominals

Exercise Name * Plank

Sets * 3

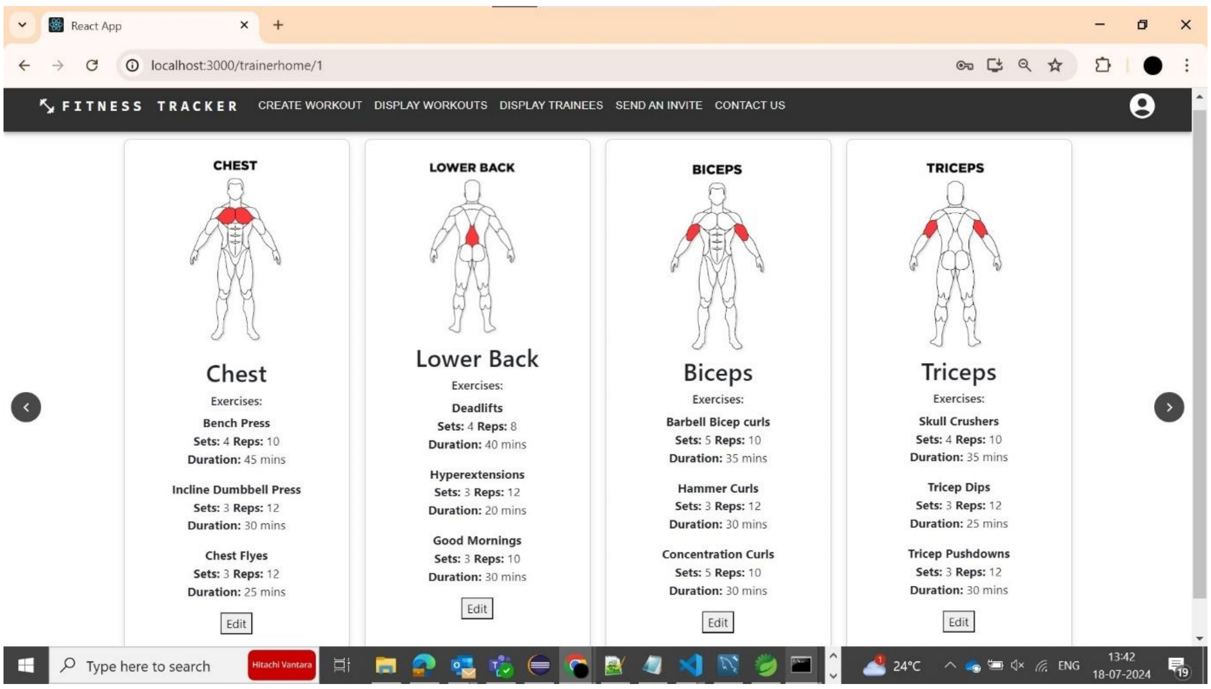
Reps * 1

Duration (minutes) 1

Added Exercises:

Fig(v)

Create Workout: Trainers can create and save workouts. Upon saving, a snackbar notification will appear confirming that the workout has been saved.



CHEST

Chest

Exercises:

Bench Press
Sets: 4 Reps: 10
Duration: 45 mins

Incline Dumbbell Press
Sets: 3 Reps: 12
Duration: 30 mins

Chest Flyes
Sets: 3 Reps: 12
Duration: 25 mins

Edit

LOWER BACK

Lower Back

Exercises:

Deadlifts
Sets: 4 Reps: 8
Duration: 40 mins

Hyperextensions
Sets: 3 Reps: 12
Duration: 20 mins

Good Mornings
Sets: 3 Reps: 10
Duration: 30 mins

Edit

BICEPS

Biceps

Exercises:

Barbell Bicep curls
Sets: 5 Reps: 10
Duration: 35 mins

Hammer Curls
Sets: 3 Reps: 12
Duration: 30 mins

Concentration Curls
Sets: 5 Reps: 10
Duration: 30 mins

Edit

TRICEPS

Triceps

Exercises:

Skull Crushers
Sets: 4 Reps: 10
Duration: 35 mins

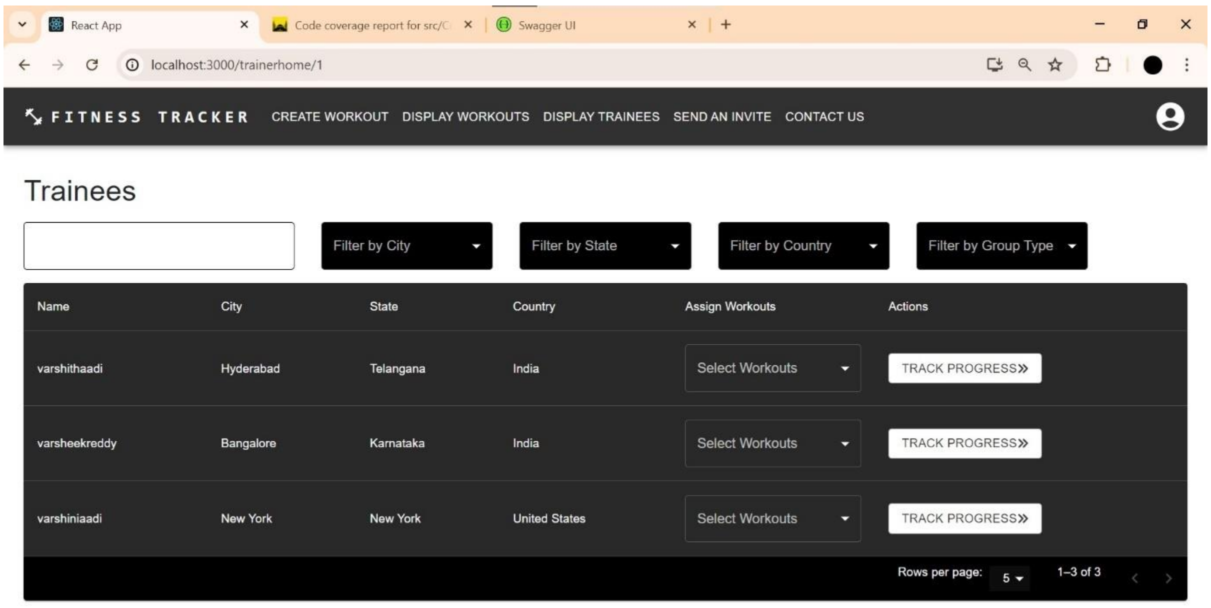
Tricep Dips
Sets: 3 Reps: 12
Duration: 25 mins

Tricep Pushdowns
Sets: 3 Reps: 12
Duration: 30 mins

Edit

Fig(vi)

Display Workouts: This feature shows all available workouts with an edit option for trainers to modify and save workout details. A carousel allows trainers to navigate through the workouts, sliding to view the next or previous entries.



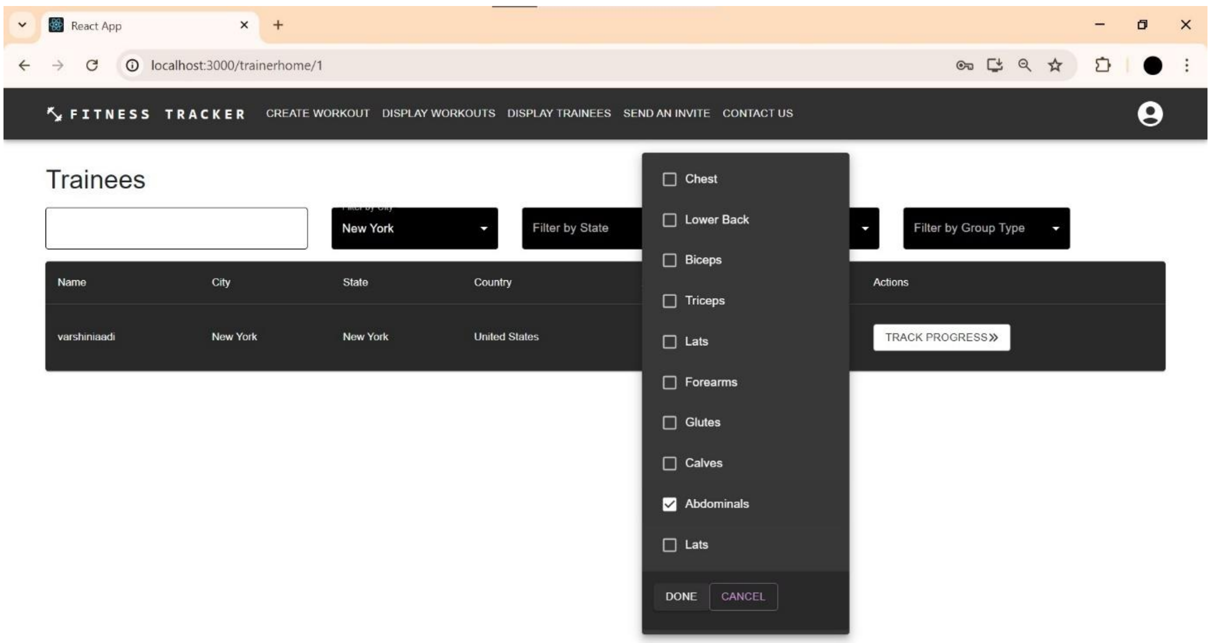
Trainees

Name	City	State	Country	Assign Workouts	Actions
varshithaadi	Hyderabad	Telangana	India	Select Workouts	TRACK PROGRESS»
varsheekreddy	Bangalore	Karnataka	India	Select Workouts	TRACK PROGRESS»
varshiniaadi	New York	New York	United States	Select Workouts	TRACK PROGRESS»

Rows per page: 5 1–3 of 3

Fig(vii)

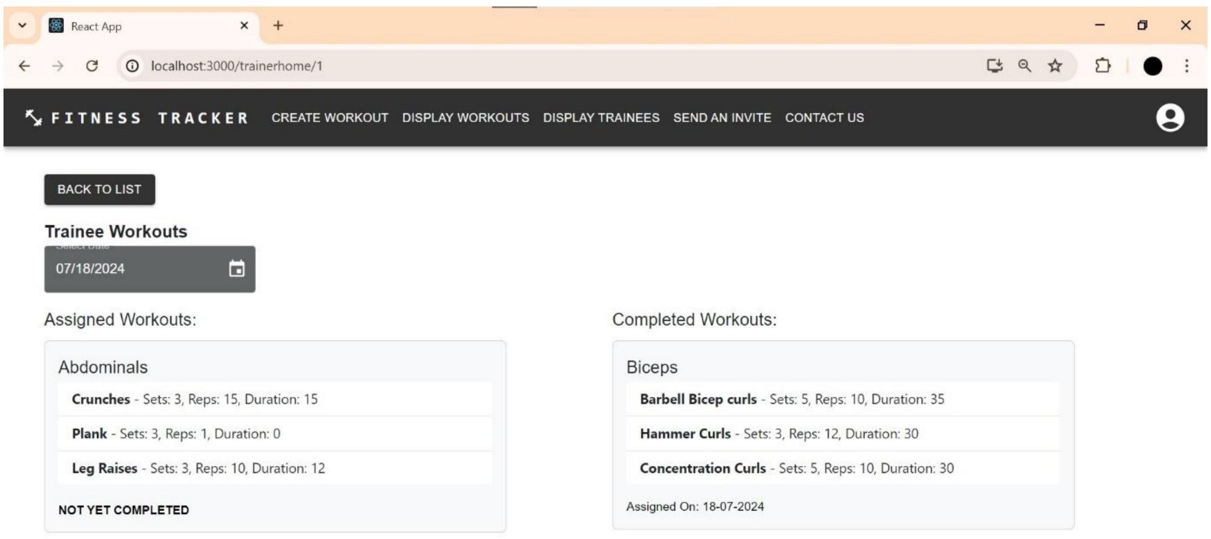
Display Trainees: This feature displays all trainees along with their details. Trainers can filter the data based on lines, dates, month, year, state, city, country, and group type. It also includes pagination for navigating through the list and a search bar for quick data retrieval.



Name	City	State	Country	Actions
varshiniaadi	New York	New York	United States	TRACK PROGRESS»

Fig(viii)

Based on the selected filter criteria, the Display Trainees feature shows the relevant data. When a trainer clicks on "Select Workouts", chooses the desired workouts, and then clicks the "Done" button, those selected workouts will be assigned to the specific trainer.



Trainee Workouts

07/18/2024

Assigned Workouts:

Abdominals
- **Crunches** - Sets: 3, Reps: 15, Duration: 15
- **Plank** - Sets: 3, Reps: 1, Duration: 0
- **Leg Raises** - Sets: 3, Reps: 10, Duration: 12

NOT YET COMPLETED

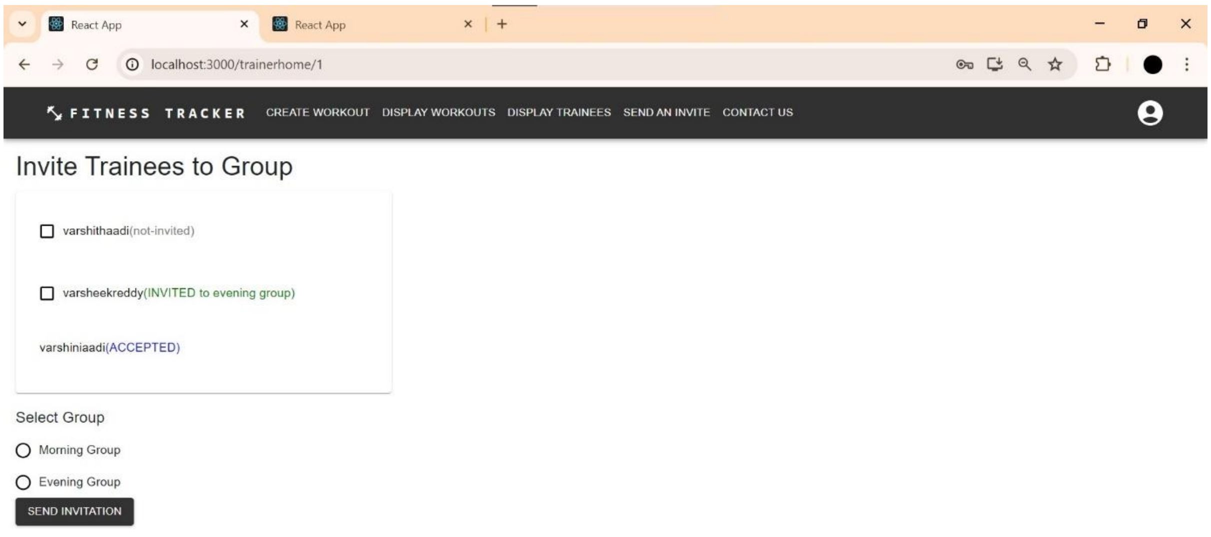
Completed Workouts:

Biceps
- **Barbell Bicep curls** - Sets: 5, Reps: 10, Duration: 35
- **Hammer Curls** - Sets: 3, Reps: 12, Duration: 30
- **Concentration Curls** - Sets: 5, Reps: 10, Duration: 30

Assigned On: 18-07-2024

Fig(ix)

Clicking the **TRACK PROGRESS** button displays the trainee's details, including assigned workouts and completed workouts. Additionally, a date picker allows you to select a specific date, showing the information for that day.



Invite Trainees to Group

☐ varshithaadi(not-invited)

☐ varsheekreddy(INVITED to evening group)

varshiniaadi(ACCEPTED)

Select Group

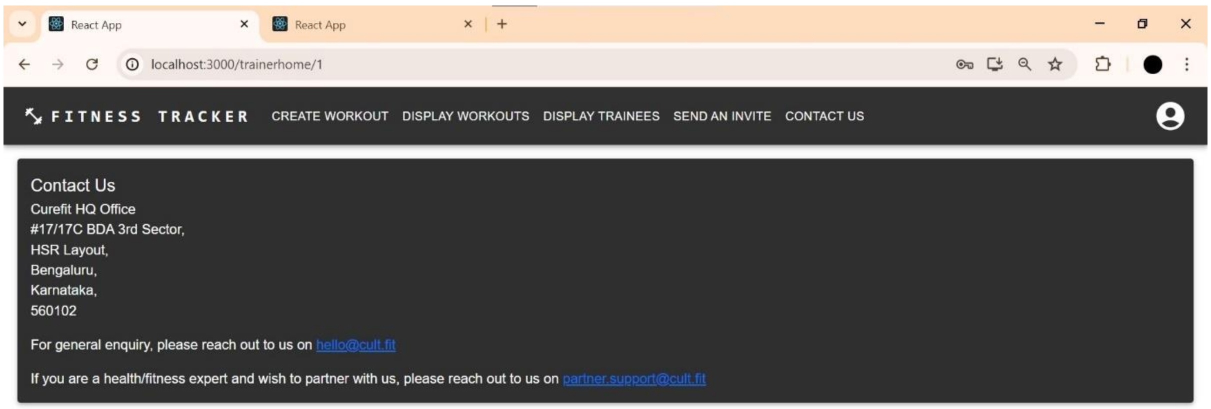
○ Morning Group

○ Evening Group

SEND INVITATION

Fig(x)

Send An Invite-This feature allows trainers to select one or more trainees, choose a group to invite them to, and view the status of invitations. Trainers can see who has accepted, who has been invited to which group, and who has not yet been invited.



Contact Us
Curefit HQ Office
#17/17C BDA 3rd Sector,
HSR Layout,
Bengaluru,
Karnataka,
560102

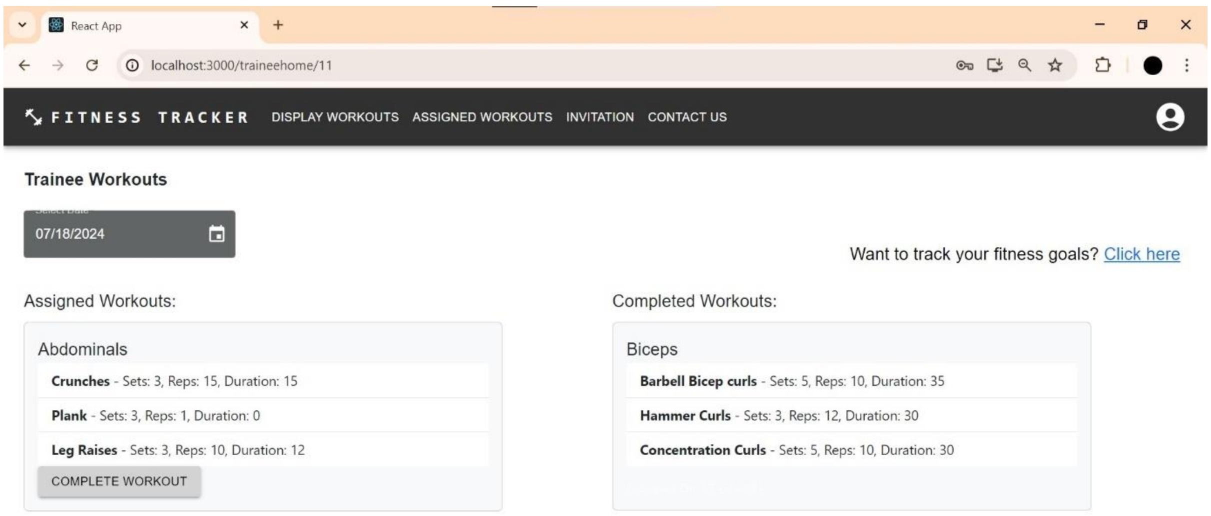
For general enquiry, please reach out to us on hello@cult.fit

If you are a health/fitness expert and wish to partner with us, please reach out to us on partner.support@cult.fit

Fig(xi)

Contact Us- This feature displays the address of the fitness center and provides an email contact for inquiries.

When a **trainee** logs in, the Trainee Home Page closely resembles the Trainer Home Page but features different options in the App Bar. The Display Workouts section shows all available workouts without an edit button, and the Contact Us section operates the same way as on the Trainer Home Page.



Trainee Workouts

07/18/2024

Want to track your fitness goals? Click here

Assigned Workouts:

Abdominals

Crunches - Sets: 3, Reps: 15, Duration: 15

Plank - Sets: 3, Reps: 1, Duration: 0

Leg Raises - Sets: 3, Reps: 10, Duration: 12

COMPLETE WORKOUT

Completed Workouts:

Biceps

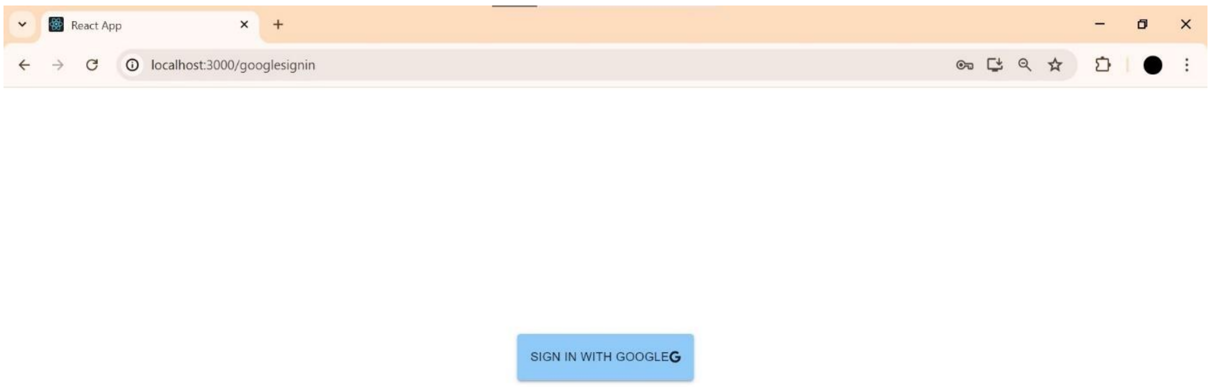
Barbell Bicep curls - Sets: 5, Reps: 10, Duration: 35

Hammer Curls - Sets: 3, Reps: 12, Duration: 30

Concentration Curls - Sets: 5, Reps: 10, Duration: 30

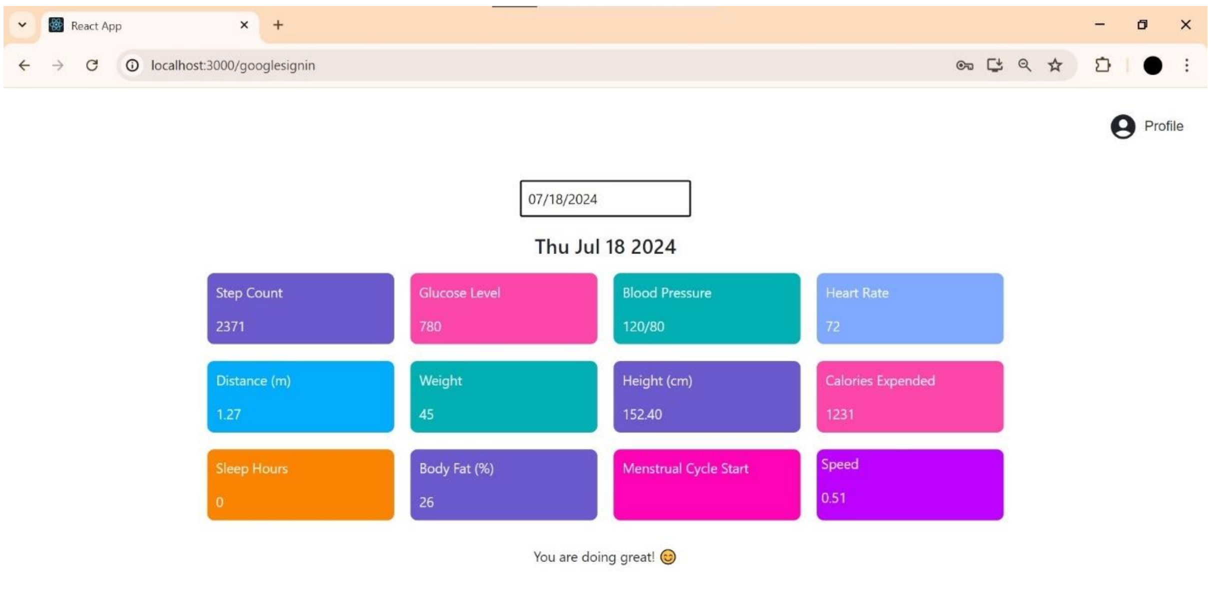
Fig(xii)

Assigned Workouts-This feature allows trainee to see plan assigned by Trainer. A date picker lets you select a specific date to view information for that day. Assigned workouts have a **Complete Workout** button instead of a **NOT YET COMPLETED** status; when marked as completed, they move to the Completed Workouts section. This allows trainee to update their fitness activities. Additionally, there is an option to track fitness goals by clicking on the **Click Here** button.



Fig(xiii)

When you click on **Click Here**, it prompts you to **SIGN IN WITH GOOGLE**.


React App

localhost:3000/googlesignin

Profile

07/18/2024

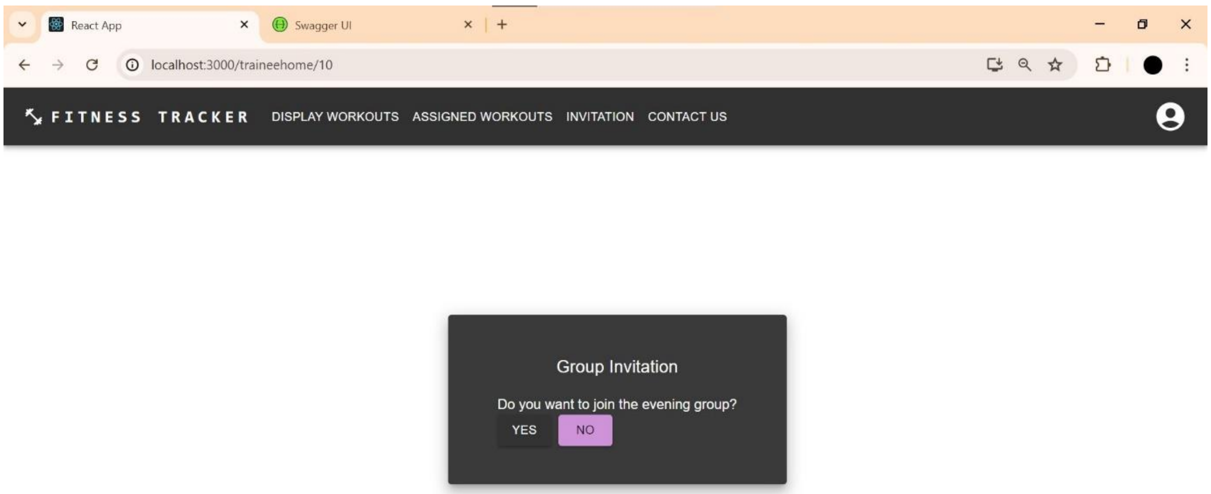
Thu Jul 18 2024

Step Count 2371	Glucose Level 780	Blood Pressure 120/80	Heart Rate 72
Distance (m) 1.27	Weight 45	Height (cm) 152.40	Calories Expended 1231
Sleep Hours 0	Body Fat (%) 26	Menstrual Cycle Start	Speed 0.51

You are doing great! 😊

Fig(xiv)

After signing in, it displays all fitness goals achieved based on the selected date, with data synchronized from the **Google Fit** app linked to your Google account. Additionally, the account circle has two options: Profile and Logout. Clicking Profile shows the username and email of the logged-in person.


React App | Swagger UI

localhost:3000/traineehome/10

FITNESS TRACKER DISPLAY WORKOUTS ASSIGNED WORKOUTS INVITATION CONTACT US

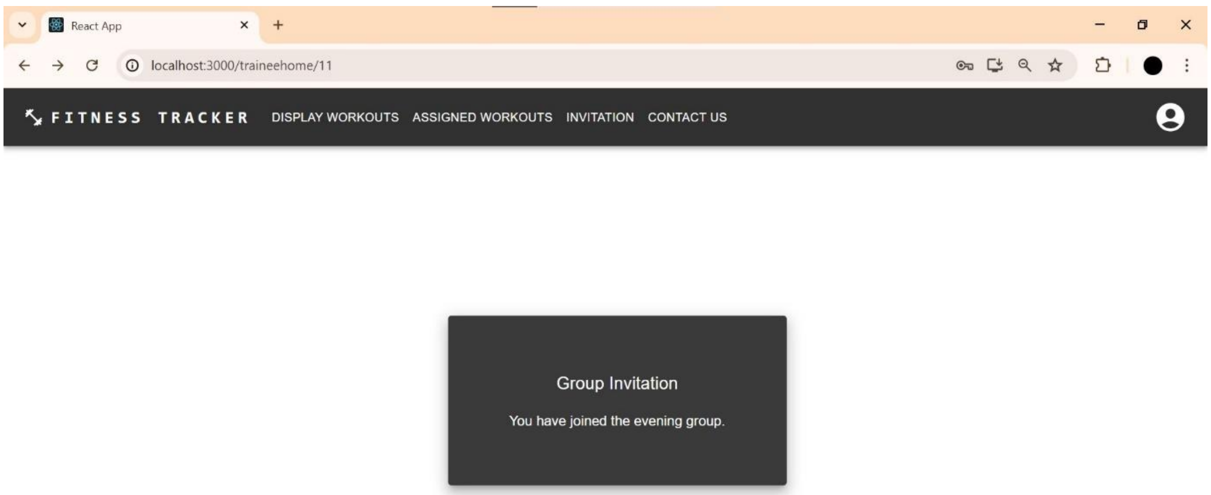
Group Invitation

Do you want to join the evening group?

YES NO

Fig(xv)

Invitation-This feature shows us a card if we got any invite to join a group, trainee can choose to click yes or no and if clicked yes it will show you have joined the evening/morning group



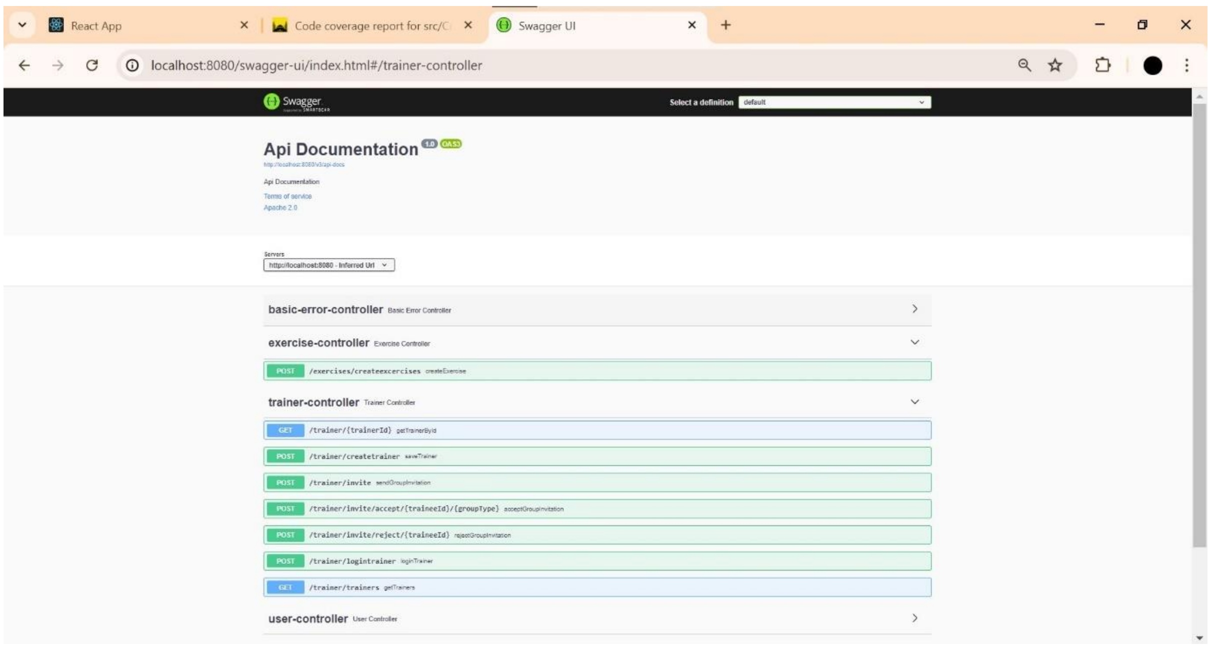
Group Invitation

You have joined the evening group.

Fig(xvi)

Backend Implementation

- Spring Boot is used to implement the backend.
- Swagger is used for API documentation, allowing you to view the controllers.
- MySQL is used for database.


React App
Code coverage report for src/C
Swagger UI
localhost:8080/swagger-ui/index.html#/trainer-controller
Swagger
Select a definition
default

Api Documentation 1.0 OAS3

http://localhost:8080/v3/api-docs

Api Documentation

Terms of service

Apache 2.0

Servers

http://localhost:8080 - Inferred Url

basic-error-controller Basic Error Controller

exercise-controller Exercise Controller

POST /exercises/createexcercises createExercise

trainer-controller Trainer Controller

GET /trainer/{trainerId} getTrainerById

POST /trainer/createtrainer saveTrainer

POST /trainer/invite sendGroupInvitation

POST /trainer/invite/accept/{traineeId}/{groupType} acceptGroupInvitation

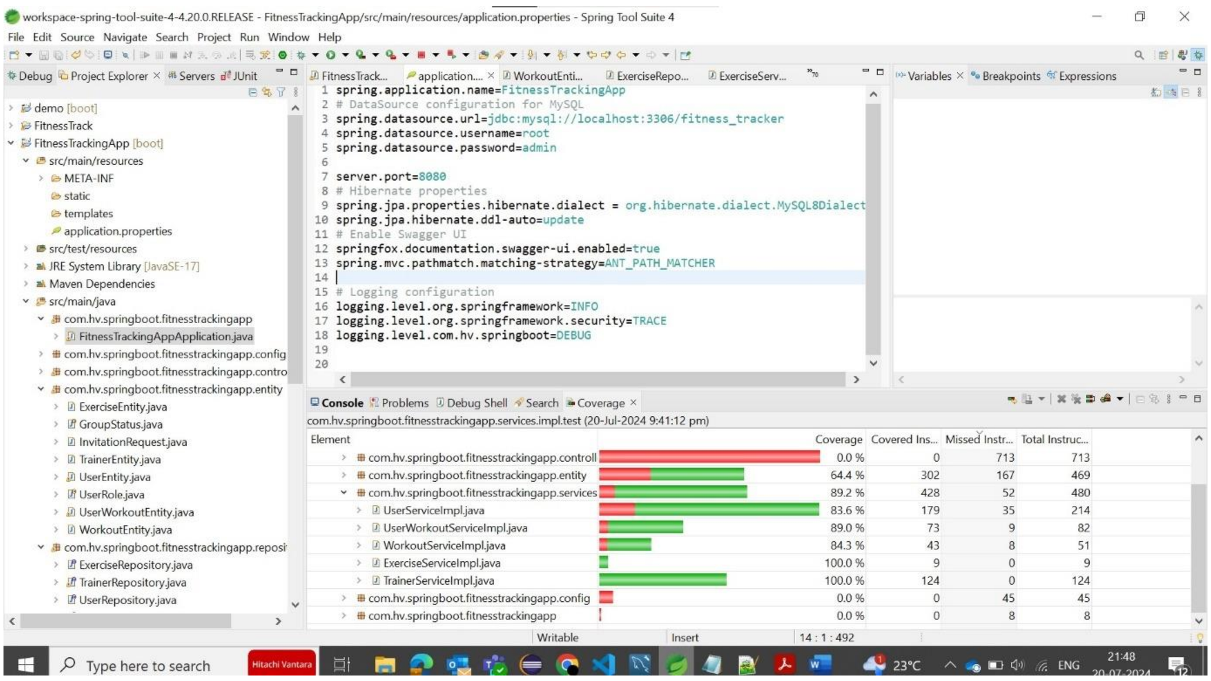
POST /trainer/invite/reject/{traineeId} rejectGroupInvitation

POST /trainer/logintrainer loginTrainer

GET /trainer/trainers getTrainers

user-controller User Controller

Fig(xvii)



workspace-spring-tool-suite-4-4.20.0.RELEASE - FitnessTrackingApp/src/main/resources/application.properties - Spring Tool Suite 4

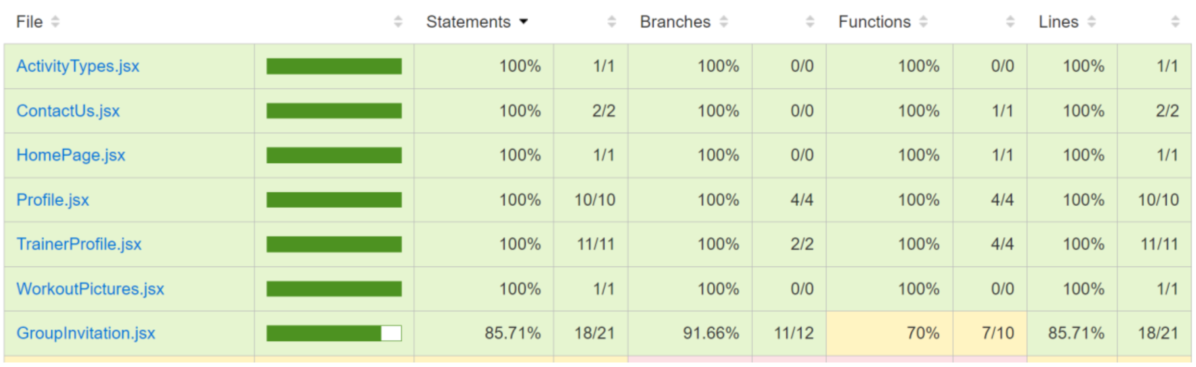
```
demo [boot]
FitnessTrack
FitnessTrackingApp [boot]
  src/main/resources
    META-INF
    static
    templates
    application.properties
  src/test/resources
  JRE System Library [JavaSE-17]
  Maven Dependencies
  src/main/java
    com.hv.springboot.fitnesstrackingapp
      FitnessTrackingAppApplication.java
    com.hv.springboot.fitnesstrackingapp.config
    com.hv.springboot.fitnesstrackingapp.contro
    com.hv.springboot.fitnesstrackingapp.entity
      ExerciseEntity.java
      GroupStatus.java
      InvitationRequest.java
      TrainerEntity.java
      UserEntity.java
      UserRole.java
      UserWorkoutEntity.java
      WorkoutEntity.java
    com.hv.springboot.fitnesstrackingapp.reposi
      ExerciseRepository.java
      TrainerRepository.java
      UserRepository.java
```

```
spring.application.name=FitnessTrackingApp
# DataSource configuration for MySQL
spring.datasource.url=jdbc:mysql://localhost:3306/fitness_tracker
spring.datasource.username=root
spring.datasource.password=admin

server.port=8080
# Hibernate properties
spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MySQL8Dialect
spring.jpa.hibernate.ddl-auto=update
# Enable Swagger UI
springfox.documentation.swagger-ui.enabled=true
spring.mvc.pathmatch.matching-strategy=ANT_PATH_MATCHER

# Logging configuration
logging.level.org.springframework=INFO
logging.level.org.springframework.security=TRACE
logging.level.com.hv.springboot=DEBUG


```

```
com.hv.springboot.fitnesstrackingapp.services.impl.test (20-Jul-2024 9:41:12 pm)
Element                                          Coverage  Covered Ins...  Missed Instr...  Total Instruc...
  com.hv.springboot.fitnesstrackingapp.controll     0.0 %               0              713              713
  com.hv.springboot.fitnesstrackingapp.entity      64.4 %             302              167              469
  com.hv.springboot.fitnesstrackingapp.services    89.2 %             428               52              480
    UserServiceImpl.java                           83.6 %             179               35              214
    UserWorkoutServiceImpl.java                    89.0 %              73                9               82
    WorkoutServiceImpl.java                        84.3 %              43                8               51
    ExerciseServiceImpl.java                      100.0 %               9                0                9
    TrainerServiceImpl.java                       100.0 %             124                0              124
  com.hv.springboot.fitnesstrackingapp.config       0.0 %               0               45               45
  com.hv.springboot.fitnesstrackingapp              0.0 %               0                8                8
Writable    Insert    14 : 1 : 492
```

Fig(xviii)

The above figure illustrates JUnit test cases for the **services.impl** package. JUnit test cases have also been written for the **controllers** package.



File		Statements		Branches		Functions		Lines	
ActivityTypes.jsx	🟩	100%	1/1	100%	0/0	100%	0/0	100%	1/1
ContactUs.jsx	🟩	100%	2/2	100%	0/0	100%	1/1	100%	2/2
HomePage.jsx	🟩	100%	1/1	100%	0/0	100%	1/1	100%	1/1
Profile.jsx	🟩	100%	10/10	100%	4/4	100%	4/4	100%	10/10
TrainerProfile.jsx	🟩	100%	11/11	100%	2/2	100%	4/4	100%	11/11
WorkoutPictures.jsx	🟩	100%	1/1	100%	0/0	100%	0/0	100%	1/1
GroupInvitation.jsx	🟩	85.71%	18/21	91.66%	11/12	70%	7/10	85.71%	18/21

Fig(xix)

The above picture illustrates the test coverage of the components.