Gym Management System

Introduction / Background / Problem Statement

Gyms today face challenges in efficiently managing memberships, tracking attendance, and supporting members' health goals. Traditional manual systems are prone to errors, delays, and inefficiencies, leading to reduced member satisfaction. To address these limitations, this project proposes a Gym Management System that automates core processes such as member registration, membership management, attendance monitoring, and health tracking. The system also provides personalized healthcare tips, ensuring that members not only train but also maintain their overall well-being. By utilizing a web-based platform, the system aims to deliver scalability, accessibility, and a modern user experience.

Idea Description

The Gym Management System is a web-based platform designed to streamline gym operations while enhancing the member experience. Its key features include:

- **Member Registration & Profile Management**
    - Collect and store details such as name, contact information, age, and gender.
    - Allow members to update their profiles.
- **Membership Management**
    - Support customizable membership plans (weekly, monthly, annual, etc.).
    - Track membership status and send timely renewal reminders.

- **Attendance Tracking**
    - Generate attendance reports for both members and management.
    - Alert members about irregular attendance patterns.
- **Health Monitoring**
    - Track BMI, calorie intake, and heart rate.
    - Display progress through easy-to-understand charts and dashboards.
- **Healthcare Tips**
    - Offer personalized health and fitness recommendations.
    - Suggest diet and workout plans tailored to individual health data.

Workflow of the Project

- System Start:
    - Users access the platform via the web interface (with potential for mobile expansion).
    - Members log in to manage profiles, while administrators oversee gym operations.
- Member Registration & Profile:
    - New members create accounts and fill in personal and emergency details.
    - Members can update their profiles at any time.

- Membership Management:
    - Administrators set up membership plans.
    - Members receive automated renewal notifications before expiry.
- Attendance Tracking:
    - Members check in via QR, RFID, or biometric validation.
    - The system logs entries/exits and generates detailed reports.
- Health Monitoring:
    - Members input or sync health metrics (e.g., BMI, calorie intake, heart rate).
    - Progress is displayed visually with charts.
- Healthcare Tips:
    - Personalized recommendations are generated based on health metrics.
    - Tips range from dietary advice to workout suggestions.
- End of Cycle:
    - Members can view attendance history, health progress, and membership status.
    - Administrators can analyze reports to make data-driven decisions.

Platform

The Gym Management System will be built as a web-based application for scalability and accessibility. Development tools may include:

- Frontend: HTML, CSS, JavaScript (React/Angular)
- Backend: Node.js / Django / ASP.NET
- Database: MySQL or PostgreSQL
- Future expansion includes a mobile app (Android/iOS) for on-the-go access.

Project Timeline

- Week 1-2: Requirement Analysis
  - Collect input from gym staff and members.
- Week 3-6: System Design
  - Develop wireframes, database schema, and UI/UX design.
- Week 7-12: Development
  - Build and test modules iteratively (registration, membership, attendance, health tracking).
- Week 13-15: Testing & Deployment
  - Conduct functional and user testing.
  - Deploy system for live usage.

- Train staff and provide maintenance updates.

Target Population

- Gym Owners and Administrators – for efficient management.
- Gym Members – for personalized training and progress tracking.
- Trainers – for monitoring member performance and attendance.
- Health-Conscious Individuals – seeking a structured fitness experience.

Social and Economical Values / Benefits

- Social Value:
  - Promotes fitness and health awareness.
  - Provides personalized wellness support.
  - Encourages consistency through attendance tracking.
- Economic Value:
  - Reduces manual administrative costs.
  - Boosts revenue via timely renewals and improved retention.
  - Potential for monetization through premium plans or fitness consulting.

Conclusion

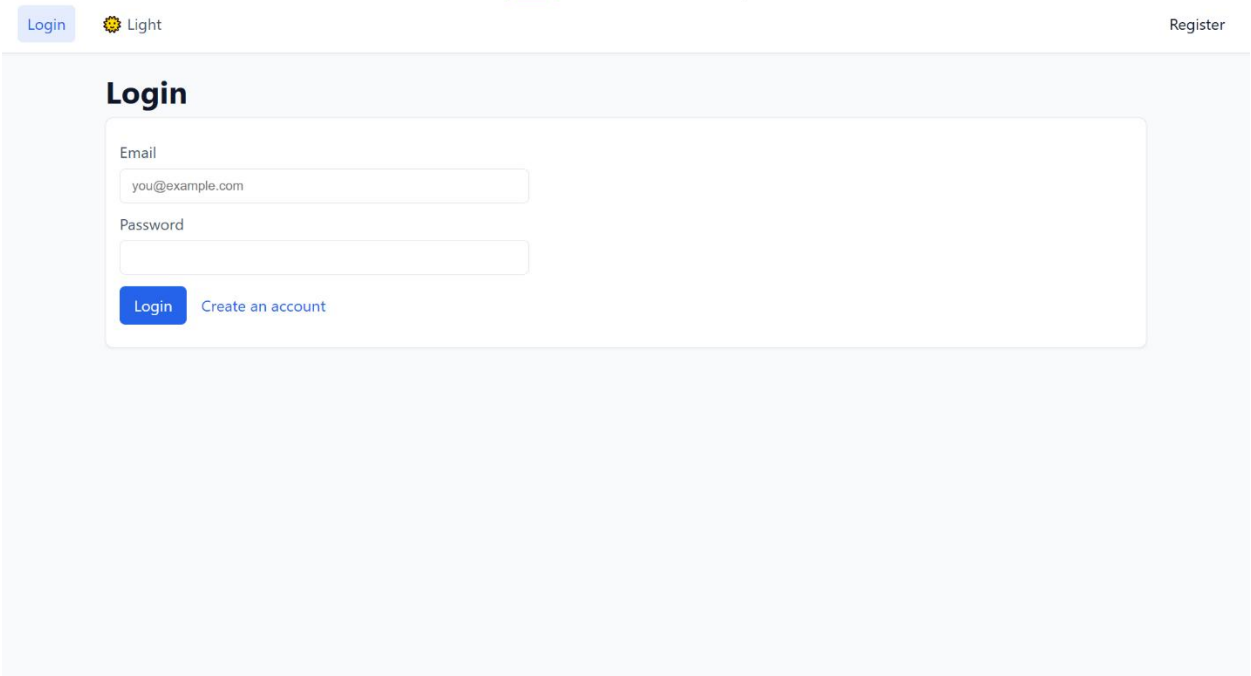
The Gym Management System is designed to automate and optimize gym operations, ensuring efficiency, accessibility, and enhanced member satisfaction. By combining operational management with health-focused features, it positions itself as more than a management tool — it becomes a fitness companion for members.

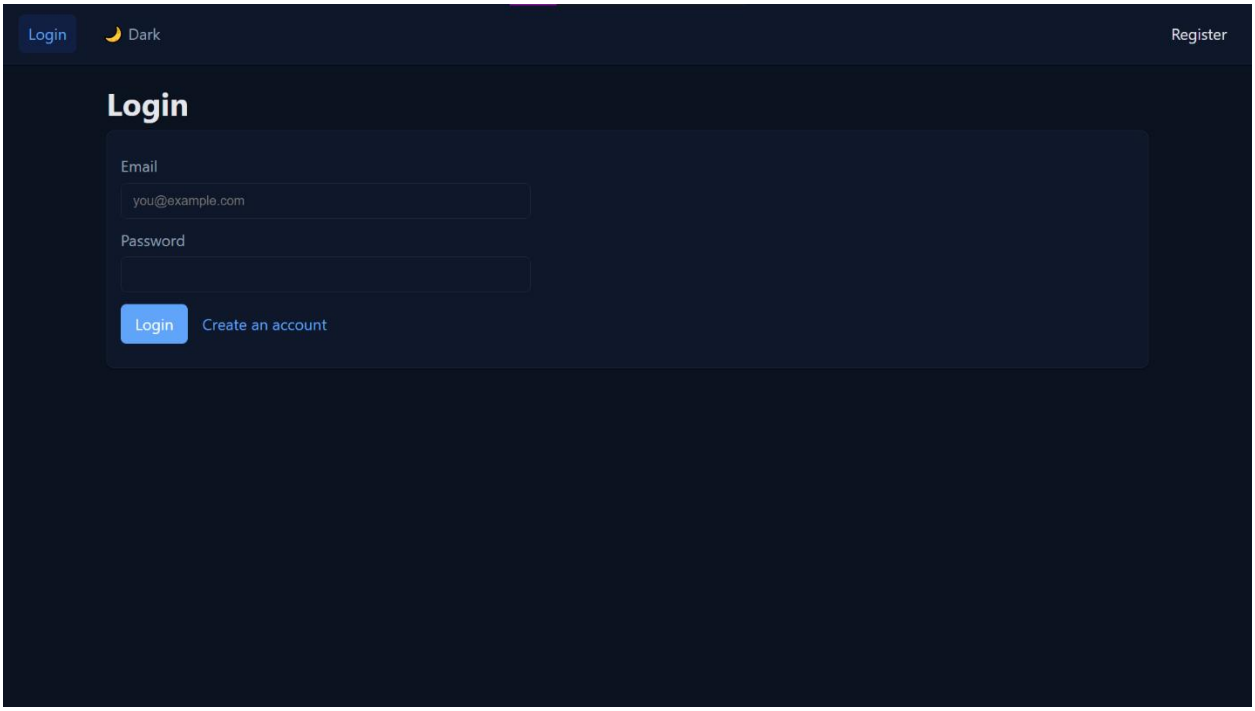
- **Limitations**
    - Health data depends on manual input unless integrated with wearables.
    - Initial release focuses on web; mobile app will be introduced later.
- **Future Works**
    - Integration with fitness wearables (e.g., smartwatches, fitness bands).
    - Mobile app for real-time access.

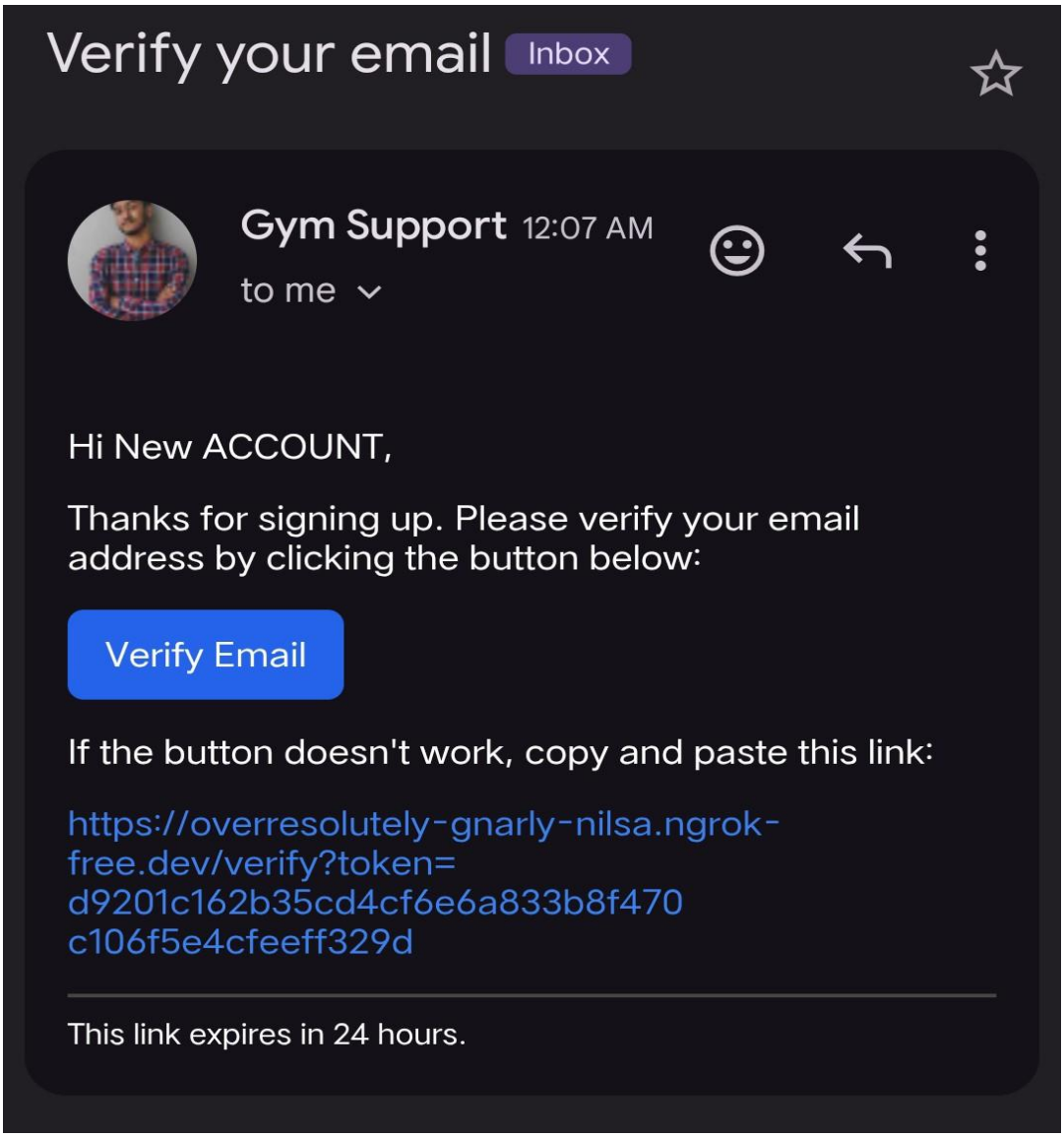
Summary

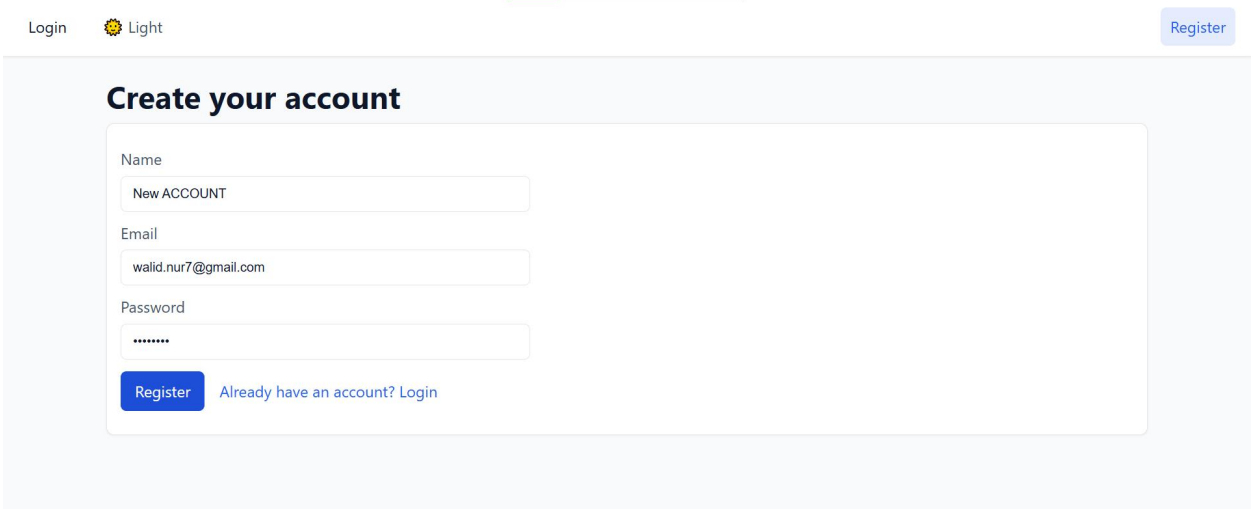
The Gym Management System enhances gym efficiency by automating routine tasks and personalizing the member experience. With features such as attendance tracking, health monitoring, and tailored healthcare tips, the system benefits both gym owners and members. Future enhancements like mobile apps, wearables, and AI support will expand its usability and appeal.

Project Screenshots






Verify your email
Inbox
Gym Support 12:07 AM
to me
Hi New ACCOUNT,
Thanks for signing up. Please verify your email address by clicking the button below:
Verify Email
If the button doesn't work, copy and paste this link:
https://overresolutely-gnarly-nilsa.ngrok-free.dev/verify?token=d9201c162b35cd4cf6e6a833b8f470c106f5e4cfeeff329d
This link expires in 24 hours.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Register
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New ACCOUNT
Email
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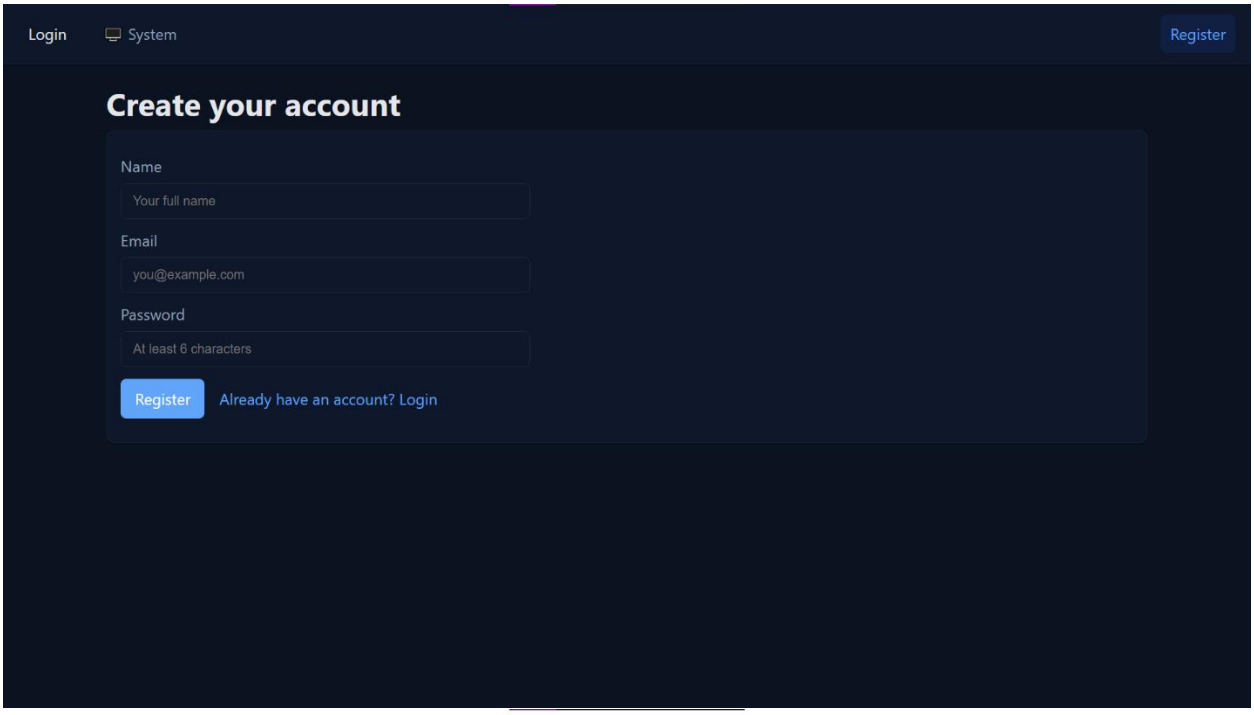
Password
Register
Already have an account? Login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Email
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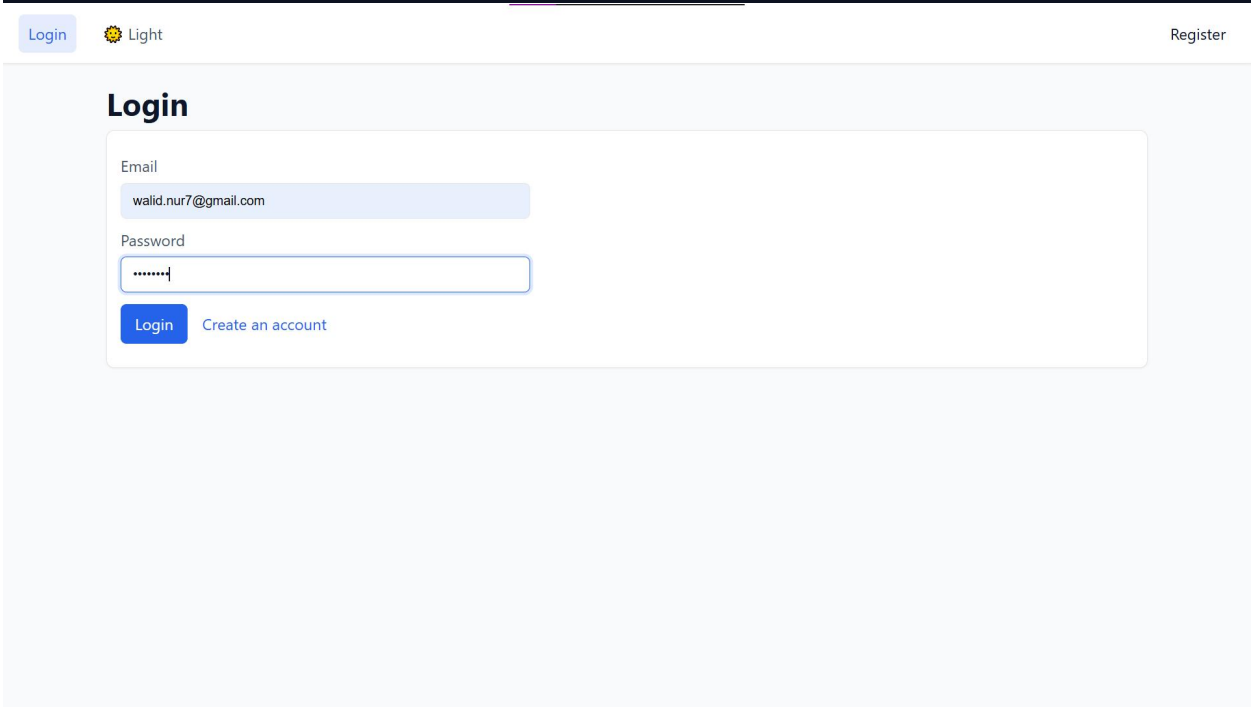
Password
At least 6 characters
Register
Already have an account? Login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Register
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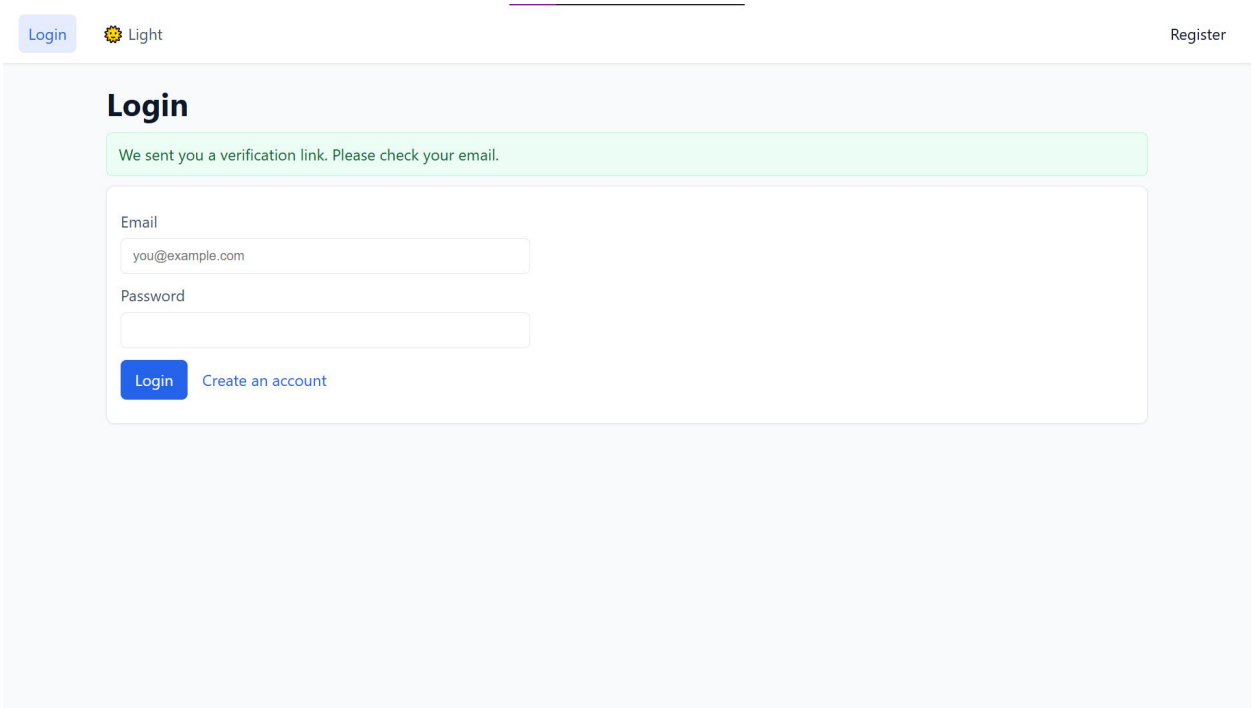
Password
Login
Create an account


Login
Light
Register
Login
We sent you a verification link. Please check your email.
Email
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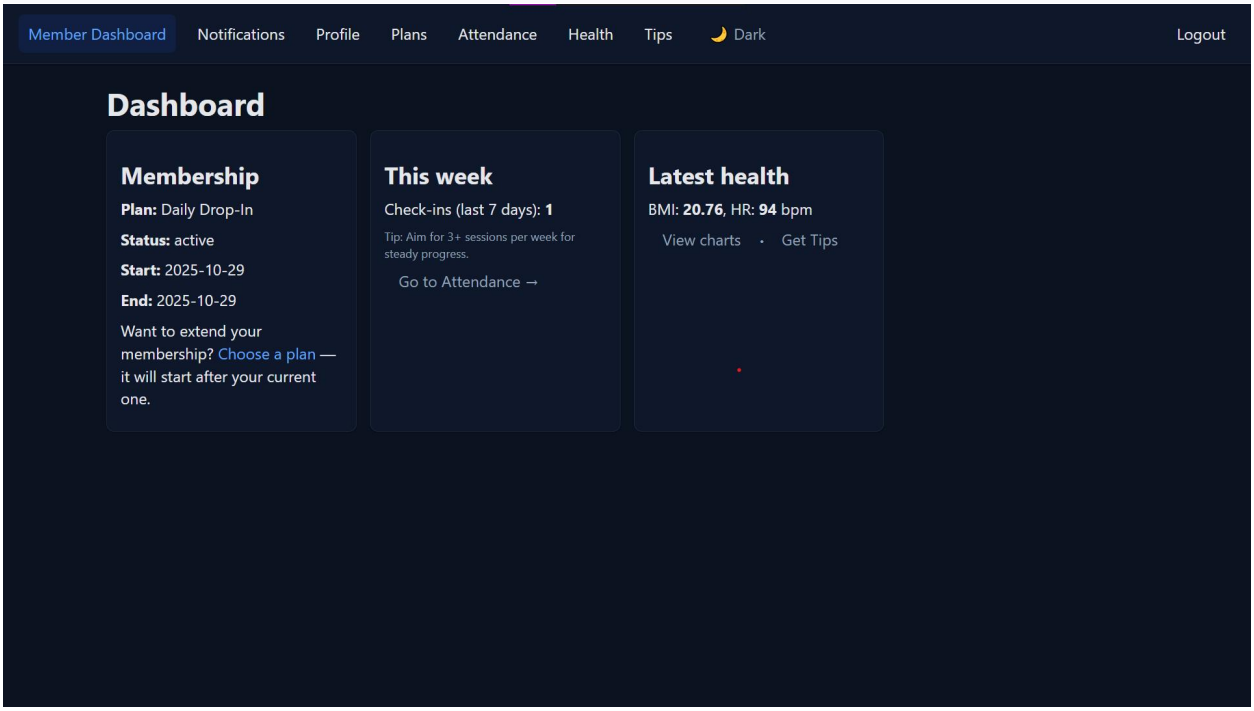
Password
Login
Create an account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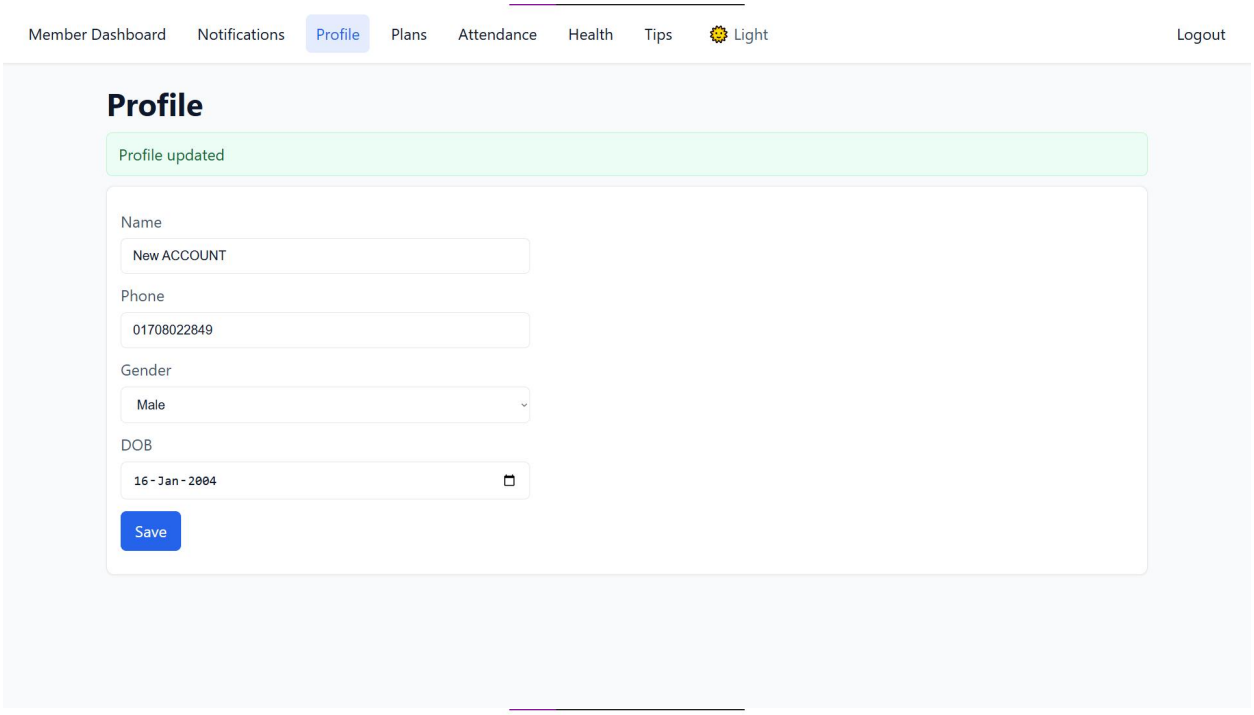
Notifications
Profile
Plans
Attendance
Health
Tips
Dark
Logout
Dashboard
Membership
Plan: Daily Drop-In
Status: active
Start: 2025-10-29
End: 2025-10-29
Want to extend your membership? Choose a plan — it will start after your current one.
This week
Check-ins (last 7 days): 1
Tip: Aim for 3+ sessions per week for steady progress.
Go to Attendance →
Latest health
BMI: 20.76, HR: 94 bpm
View charts • Get Tips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Notifications
Profile
Plans
Attendance
Health
Tips
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Logout
Profile
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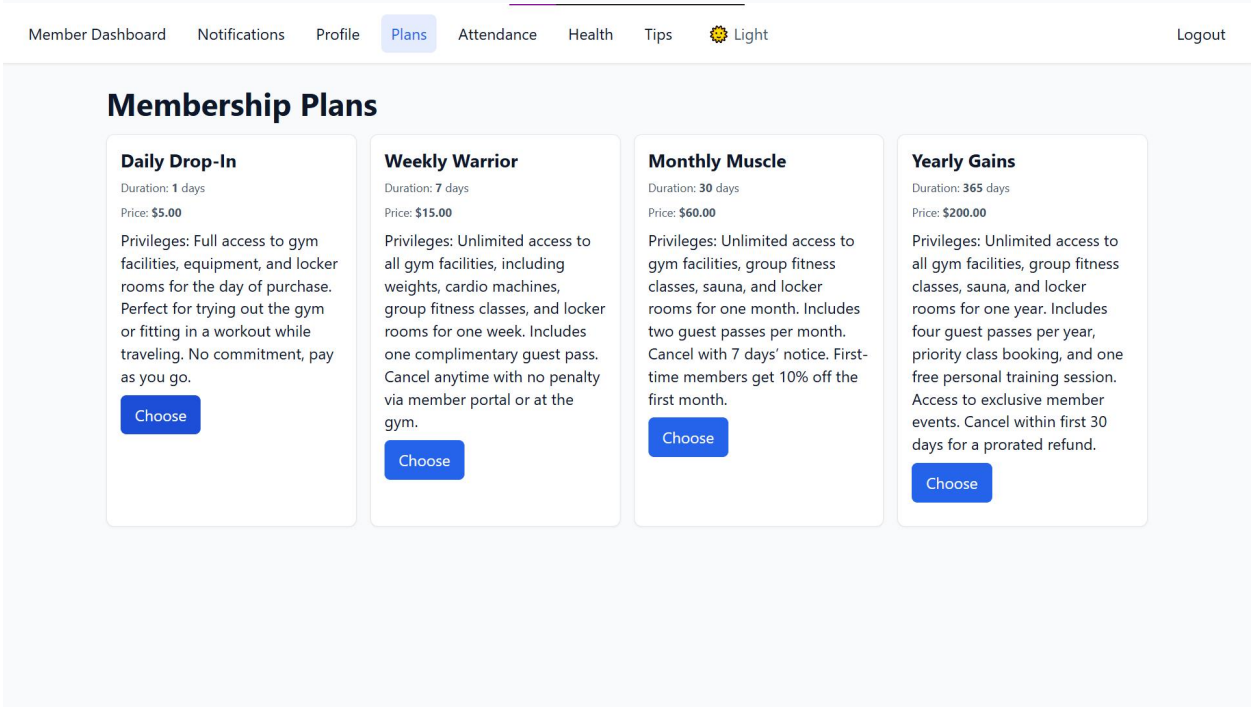
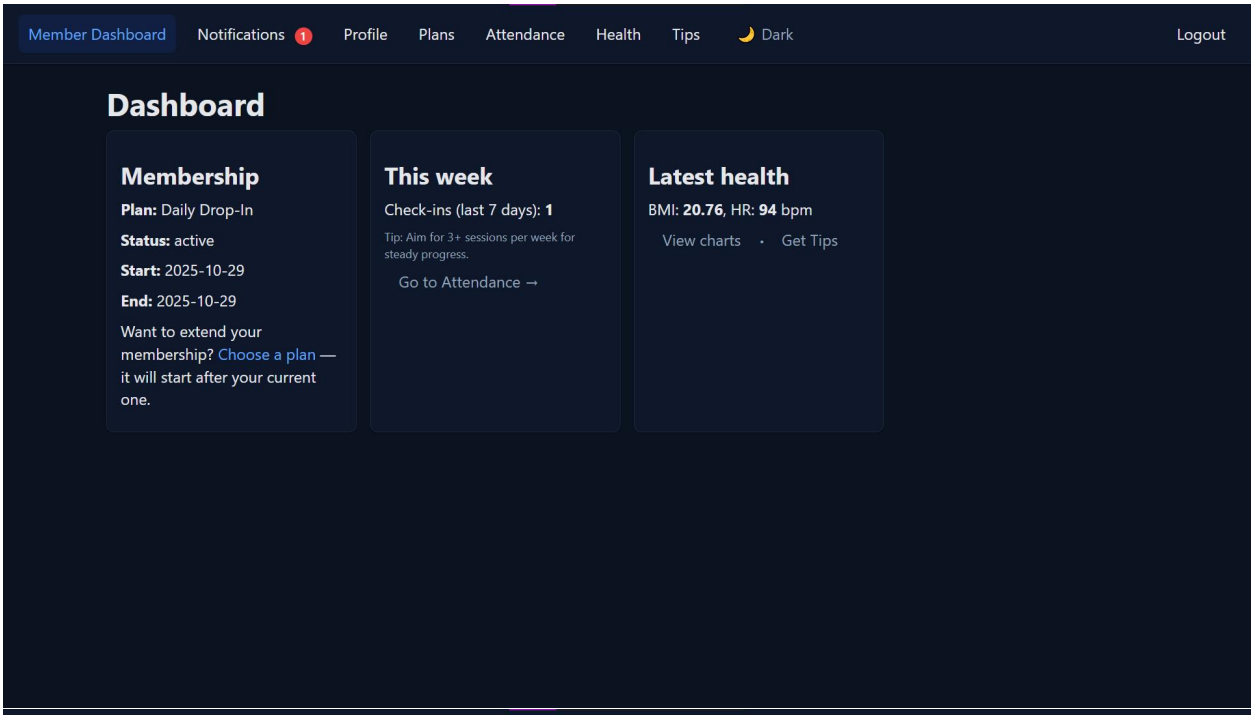
Save


Member Dashboard
Notifications
Profile
Plans
Attendance
Health
Tips
Light
Logout
Membership Plans
Daily Drop-In
Duration: 1 days
Price: $5.00
Privileges: Full access to gym facilities, equipment, and locker rooms for the day of purchase. Perfect for trying out the gym or fitting in a workout while traveling. No commitment, pay as you go.
Choose
Weekly Warrior
Duration: 7 days
Price: $15.00
Privileges: Unlimited access to all gym facilities, including weights, cardio machines, group fitness classes, and locker rooms for one week. Includes one complimentary guest pass. Cancel anytime with no penalty via member portal or at the gym.
Choose
Monthly Muscle
Duration: 30 days
Price: $60.00
Privileges: Unlimited access to gym facilities, group fitness classes, sauna, and locker rooms for one month. Includes two guest passes per month. Cancel with 7 days' notice. First-time members get 10% off the first month.
Choose
Yearly Gains
Duration: 365 days
Price: $200.00
Privileges: Unlimited access to all gym facilities, group fitness classes, sauna, and locker rooms for one year. Includes four guest passes per year, priority class booking, and one free personal training session. Access to exclusive member events. Cancel within first 30 days for a prorated refund.
Choose


Member Dashboard
Notifications 1
Profile
Plans
Attendance
Health
Tips
Dark
Logout
Dashboard
Membership
Plan: Daily Drop-In
Status: active
Start: 2025-10-29
End: 2025-10-29
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This week
Check-ins (last 7 days): 1
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BMI: 20.76, HR: 94 bpm
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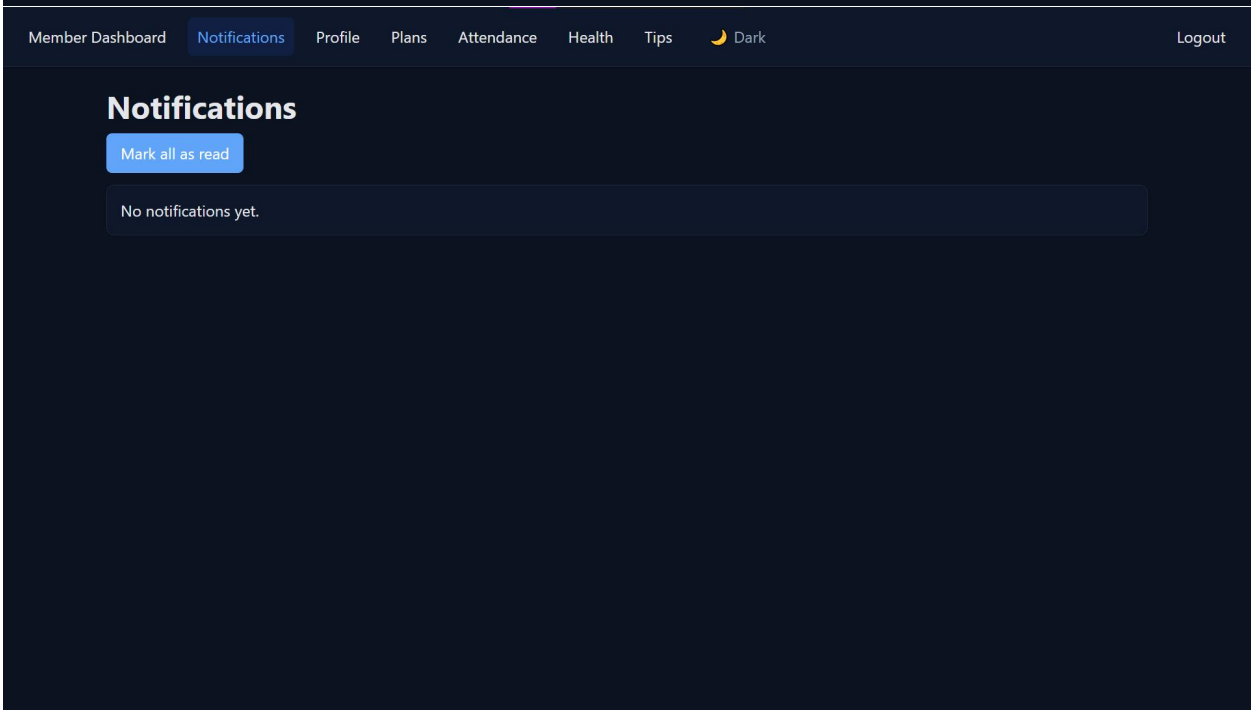

Member Dashboard
Notifications
Profile
Plans
Attendance
Health
Tips
Dark
Logout
Notifications
Mark all as read
No notifications yet.

Member Dashboard Notifications Profile Plans Attendance Health Tips Light Logout

Health Metrics

Date dd----yyyy

Weight (kg)

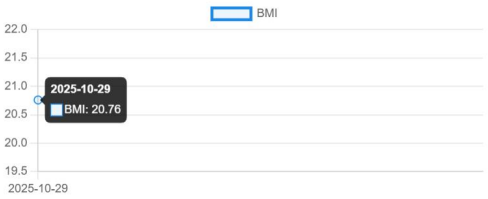
Height (cm) Only needed once

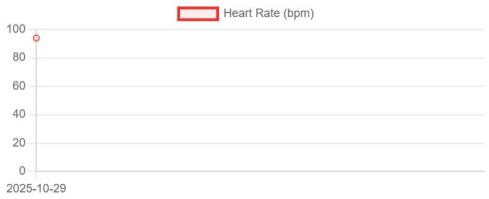
Heart rate (bpm)

Calories intake

Save

Progress





Member Dashboard Notifications Profile Plans Attendance Health Tips Light Logout

Health Metrics

Date dd----yyyy

Weight (kg)

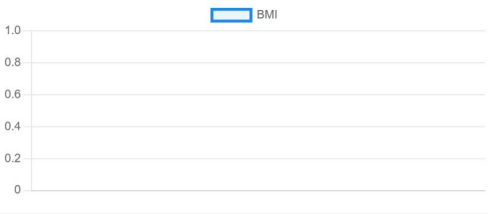
Height (cm) Only needed once

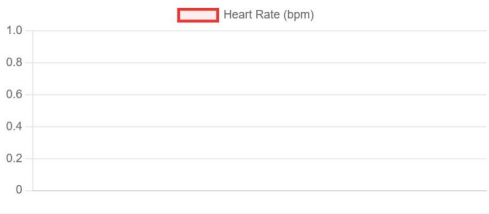
Heart rate (bpm)

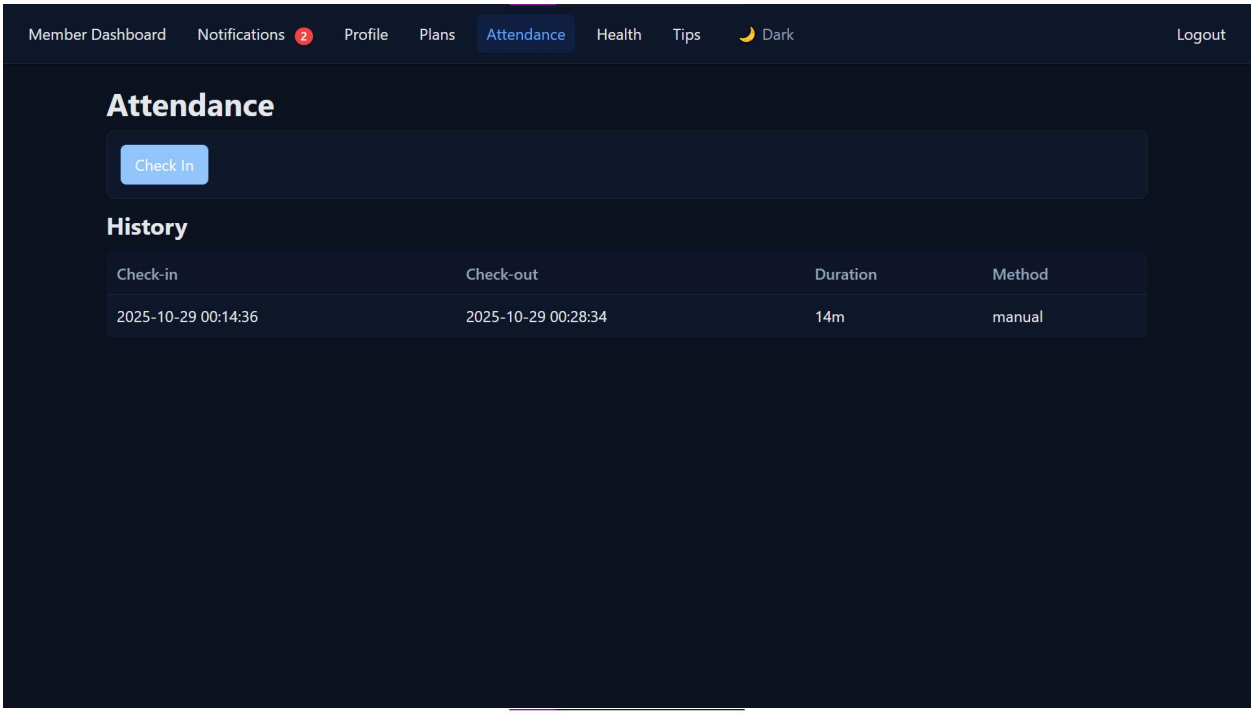
Calories intake

Save

Progress






Member Dashboard
Notifications 2
Profile
Plans
Attendance
Health
Tips
Dark
Logout
Attendance
Check In
History
Check-in
Check-out
Duration
Method
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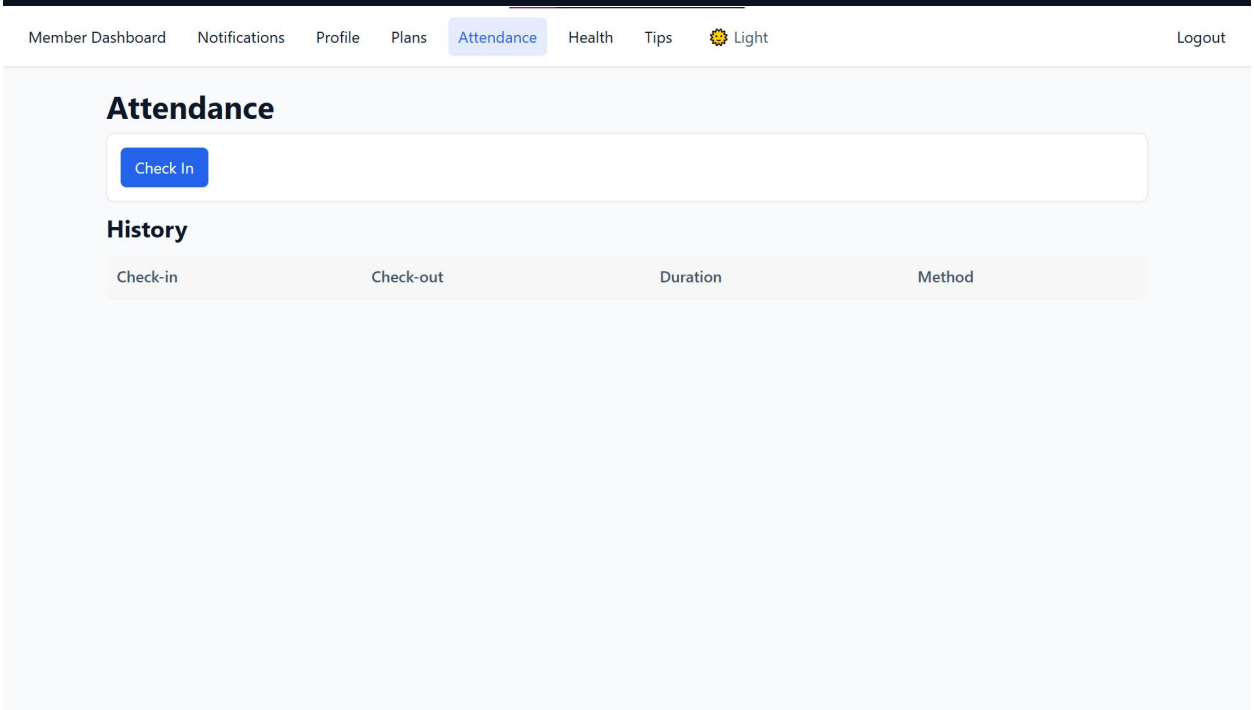
2025-10-29 00:28:34
14m
manual


Member Dashboard
Notifications
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Plans
Attendance
Health
Tips
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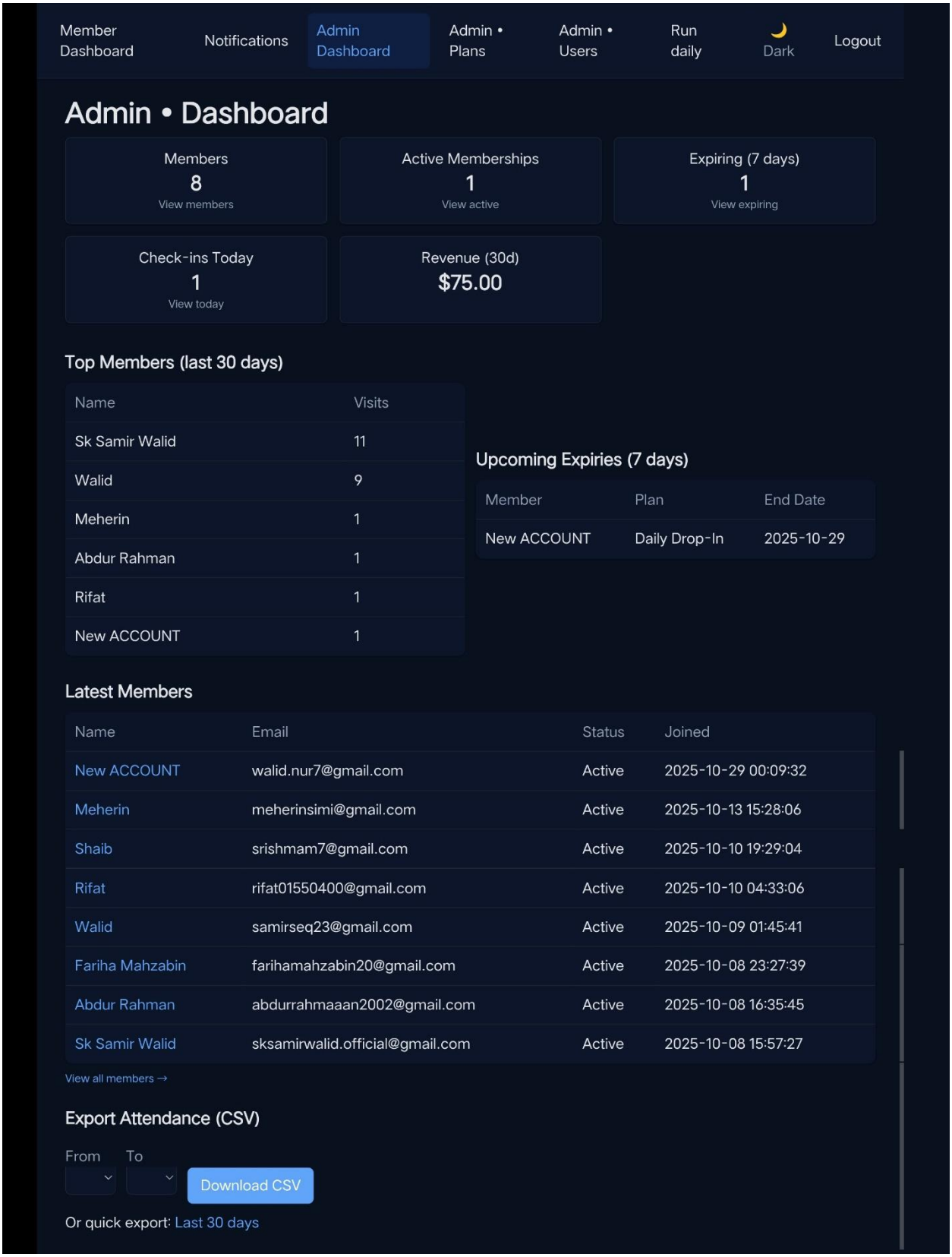
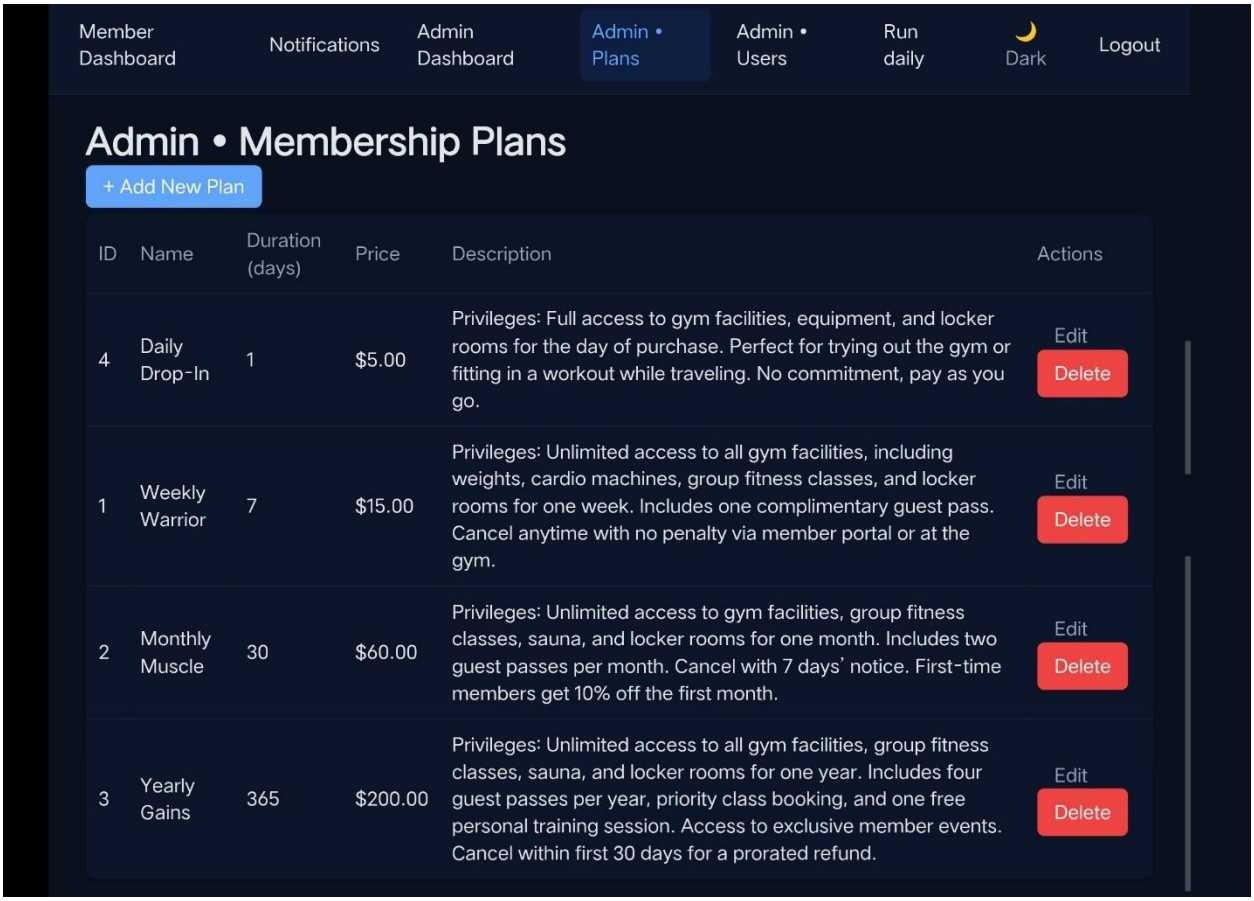
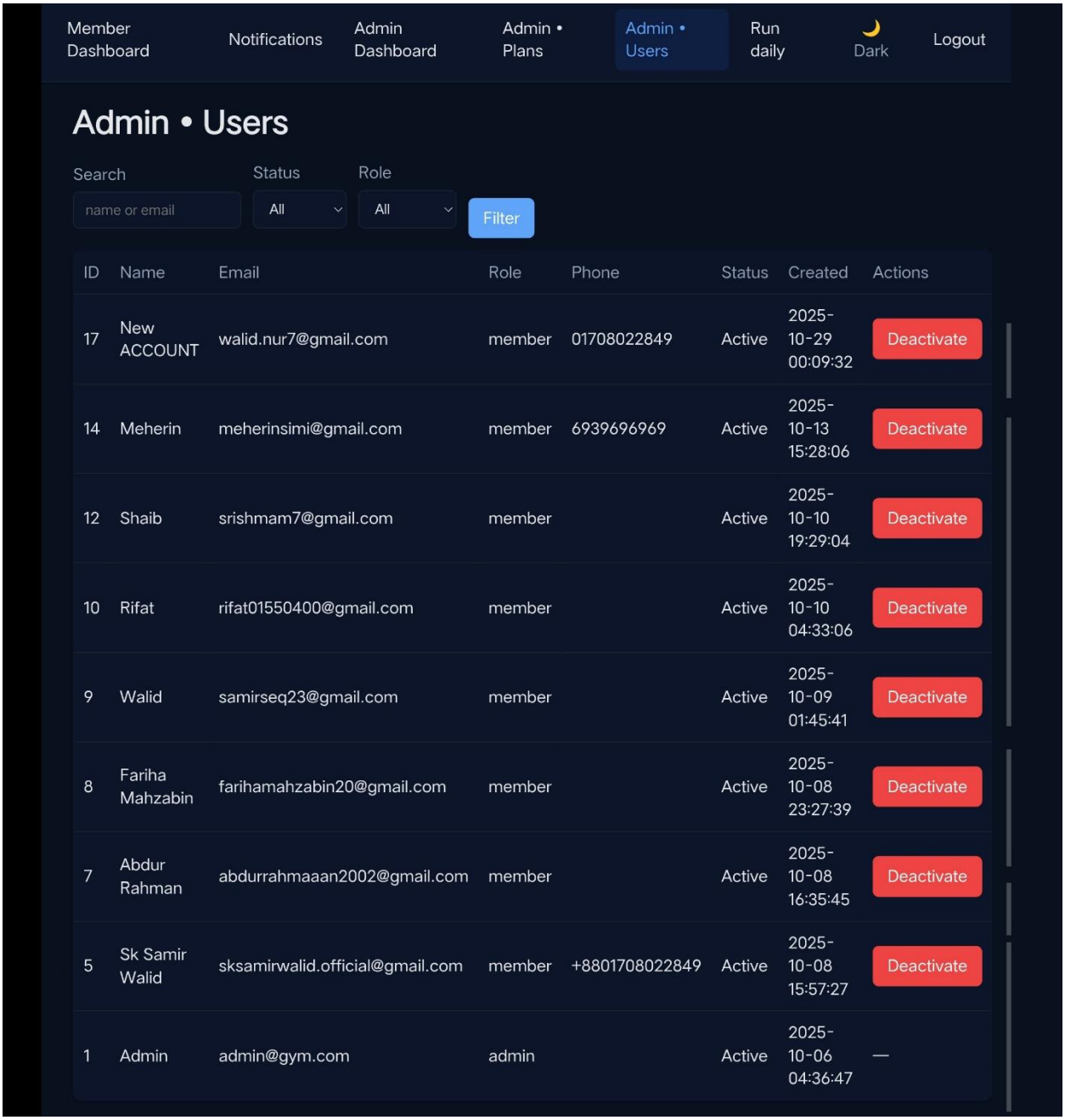
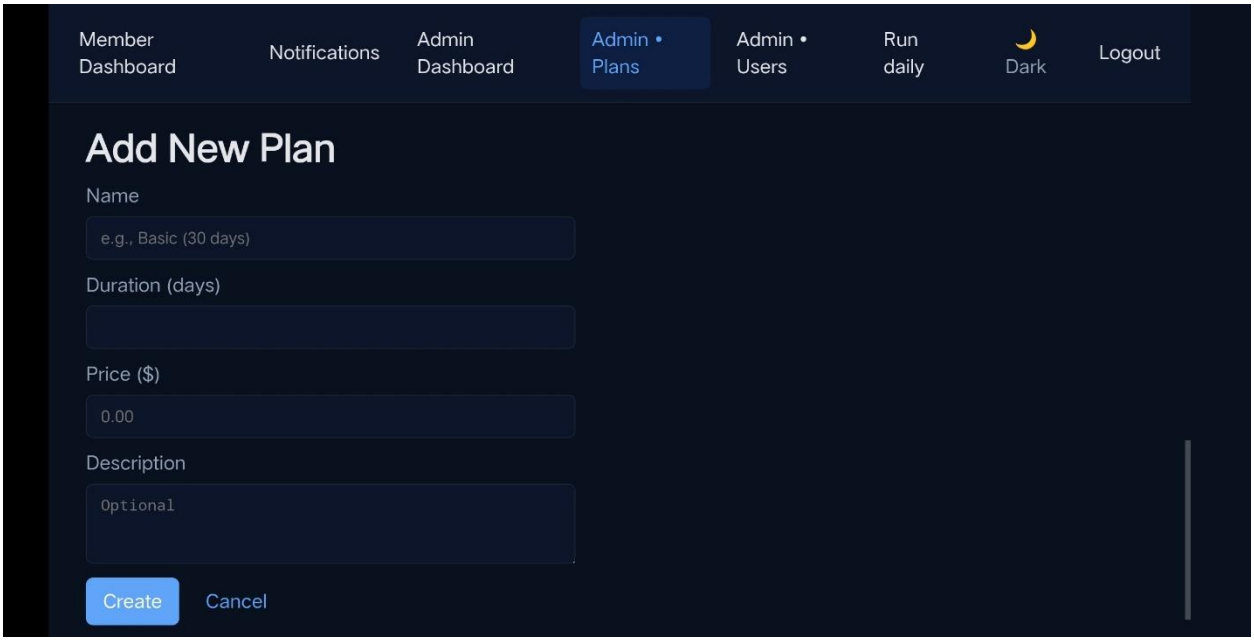
Logout
Attendance
Check In
History
Check-in
Check-out
Duration
Method

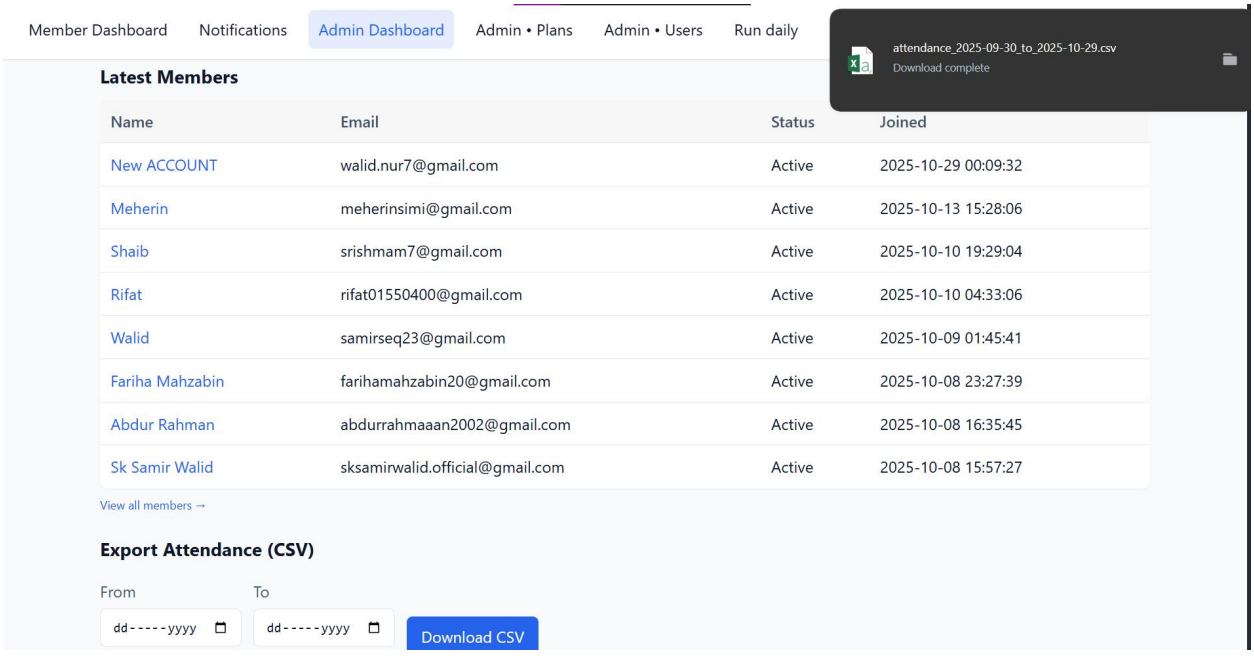

Member Dashboard
Notifications
Admin Dashboard
Admin • Plans
Admin • Users
Run daily
Dark
Logout
Admin • Dashboard
Members
8
View members
Active Memberships
1
View active
Expiring (7 days)
1
View expiring
Check-ins Today
1
View today
Revenue (30d)
$75.00
Top Members (last 30 days)
Name Visits
Sk Samir Walid 11
Walid 9
Meherin 1
Abdur Rahman 1
Rifat 1
New ACCOUNT 1
Upcoming Expiries (7 days)
Member Plan End Date
New ACCOUNT Daily Drop-In 2025-10-29
Latest Members
Name Email Status Joined
New ACCOUNT walid.nur7@gmail.com Active 2025-10-29 00:09:32
Meherin meherinsimi@gmail.com Active 2025-10-13 15:28:06
Shaib srishmam7@gmail.com Active 2025-10-10 19:29:04
Rifat rifat01550400@gmail.com Active 2025-10-10 04:33:06
Walid samirseq23@gmail.com Active 2025-10-09 01:45:41
Fariha Mahzabin farihamahzabin20@gmail.com Active 2025-10-08 23:27:39
Abdur Rahman abdurrahmaaan2002@gmail.com Active 2025-10-08 16:35:45
Sk Samir Walid sksamirwalid.official@gmail.com Active 2025-10-08 15:57:27
View all members →
Export Attendance (CSV)
From
To
Download CSV
Or quick export: Last 30 days


Member Dashboard
Notifications
Admin Dashboard
Admin • Plans
Admin • Users
Run daily
Dark
Logout
Admin • Membership Plans
+ Add New Plan
ID
Name
Duration (days)
Price
Description
Actions
4
Daily Drop-In
1
$5.00
Privileges: Full access to gym facilities, equipment, and locker rooms for the day of purchase. Perfect for trying out the gym or fitting in a workout while traveling. No commitment, pay as you go.
Edit
Delete
1
Weekly Warrior
7
$15.00
Privileges: Unlimited access to all gym facilities, including weights, cardio machines, group fitness classes, and locker rooms for one week. Includes one complimentary guest pass. Cancel anytime with no penalty via member portal or at the gym.
Edit
Delete
2
Monthly Muscle
30
$60.00
Privileges: Unlimited access to gym facilities, group fitness classes, sauna, and locker rooms for one month. Includes two guest passes per month. Cancel with 7 days' notice. First-time members get 10% off the first month.
Edit
Delete
3
Yearly Gains
365
$200.00
Privileges: Unlimited access to all gym facilities, group fitness classes, sauna, and locker rooms for one year. Includes four guest passes per year, priority class booking, and one free personal training session. Access to exclusive member events. Cancel within first 30 days for a prorated refund.
Edit
Delete


Member Dashboard
Notifications
Admin Dashboard
Admin • Plans
Admin • Users
Run daily
Dark
Logout
Admin • Users
Search
name or email
Status
All
Role
All
Filter
ID Name Email Role Phone Status Created Actions
17 New ACCOUNT walid.nur7@gmail.com member 01708022849 Active 2025-10-29 00:09:32 Deactivate
14 Meherin meherinsimi@gmail.com member 6939696969 Active 2025-10-13 15:28:06 Deactivate
12 Shaib srishmam7@gmail.com member Active 2025-10-10 19:29:04 Deactivate
10 Rifat rifat01550400@gmail.com member Active 2025-10-10 04:33:06 Deactivate
9 Walid samirseq23@gmail.com member Active 2025-10-09 01:45:41 Deactivate
8 Fariha Mahzabin farihamahzabin20@gmail.com member Active 2025-10-08 23:27:39 Deactivate
7 Abdur Rahman abdurrahmaaan2002@gmail.com member Active 2025-10-08 16:35:45 Deactivate
5 Sk Samir Walid sksamirwalid.official@gmail.com member +8801708022849 Active 2025-10-08 15:57:27 Deactivate
1 Admin admin@gym.com admin Active 2025-10-06 04:36:47 —


Member Dashboard
Notifications
Admin Dashboard
Admin • Plans
Admin • Users
Run daily
Dark
Logout
Add New Plan
Name
e.g., Basic (30 days)
Duration (days)
Price ($)
0.00
Description
Optional
Create
Cancel

attendance_2025-09-30_to_2025-10-29 - Notepad

File Edit Format View Help

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Member,Check In,Check Out,Method
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"Abdur Rahman","2025-10-08 16:37:09","","manual"
"Sk Samir Walid ","2025-10-08 22:22:08","2025-10-09 00:51:41","manual"
"Walid","2025-10-09 01:52:15","2025-10-09 02:21:25","manual"
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"Sk Samir Walid ","2025-10-13 01:29:45","2025-10-13 03:53:05","manual"
"Walid","2025-10-13 01:29:49","2025-10-13 03:57:37","manual"
"Meherin","2025-10-13 15:31:20","","manual"
"Walid","2025-10-14 15:41:34","","manual"
"New ACCOUNT","2025-10-29 00:14:36","2025-10-29 00:28:34","manual"
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