

# Front-End UI/UX Mini Project Fitness Tracker Dashboard

- Submitted By:
  - 2462060 Darain Brit A
     darain.brit@btech.christuniverityuniversity.in
  - 2463021 Gutha Nihitha
     gutha.nihitha@btech.christuniversity.in
  - 2462142 San Maria Joby
     san.maria@btech.christuniversity.in

• Course: UI/UX Design Fundamentals

• Instructor Name: Mr. Dhiraj

• **Institution**: Christ University

• **Date of Submission**: 26/09/2025



#### **Abstract**

- This project is a static Fitness Tracker Dashboard created for the UI and UX
   Design course at Christ University.
- It allows the user to create a new workout, track the calories burnt.
- Visualize workout data over time using charts
- Allow users to set weekly/monthly fitness goals and track their progress.
- There is **no backend**.

## **Objectives**

- Design a user-friendly interface using modern UI principles
- Develop a fully responsive layout using only HTML and CSS
- Implement structured HTML5 semantic elements
- Apply CSS styling for branding, layout, and responsive behavior
- Use of JavaScript to create a workout.
- Ensure accessibility and readability across devices using Bootstrap.

### 4. Scope of the Project

- Focused on front-end design only
- Intended for desktop, tablet, and mobile viewports
- Used only open-source tools and Chart.js(library) for charts



# **Tools & Technologies Used**

Tool/Technology	Purpose
HTML5	Markup and content structure
CSS3	Styling and layout management
VS Code	Code editor
Chrome DevTools	Testing and debugging
JavaScript	Event Handling and calendar logic
jQuery	DOM Manipulation and Event Handling
Bootstrap	Responsive grid system and components
Chart.js	For line and bar charts

## **HTML Structure Overview**

• Used semantic tags: <a href="header">, <nav>, <main>, <section>, <footer></a>

# **CSS Styling Strategy**

- Used external CSS file (style.css)
- Organized with comments and sections
- Techniques used:
  - o Flexbox and Grid for layout
  - o Media Queries for responsiveness
  - o CSS Variables for theme customization
  - Hover effects and transitions
  - o Mobile-first design approach



## **Key Features**

Feature	Description
Responsive Design	Adapts seamlessly to all screen sizes
Smooth Navigation	Fixed top nav with anchor links
Project Cards	Flex-based layout with hover effects
Accessible Fonts & Colors	High contrast and readable typography
Local Storage	Events persist between browser sessions

## **Multiple Interactive Charts**

- Calories Line Chart 14-day trend with smooth animations
- Workout Types Bar Chart Horizontal comparison with hover effects
- Distribution Pie Chart Interactive workout breakdown with animations
- Weekly Progress Chart Goal achievement tracking over time
- Activity Heatmap Calendar-style intensity visualization
- Monthly Summary Doughnuts Calories and minutes breakdown
- Real-time Streak Counter Visual workout streak with celebrations

## **Challenges Faced & Solutions**

Challenge	Solution
Overlapping elements on small screens	Used media queries to stack elements
Difficulty aligning items using float	Shifted to Flexbox and Grid
Typography scaling issue	Used relative units (em/rem) instead of px



#### Outcome

- Achieved a clean, consistent, and visually engaging front-end layout
- All key components function as intended using HTML, CSS, JavaScript, Bootstrap and jQuery.
- Learned about layout responsiveness and UI hierarchy in depth
- Mobile-optimized with adjusted grid sizes and touch-friendly interfaces
- Clean, minimal, and easy-to-read layout
- Styled using CSS for better visual appeal
- Collapsible navigation and modal dialogs
- Fully static works by just opening in a browser

#### **Future Enhancements**

- Integrate animations or transitions
- Theme toggler (light/dark mode)



## **Sample Code**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Advanced Fitness Tracker</title>
   <link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0/css/all.min.css" rel="stylesheet">
    <link href="style.css" rel="stylesheet">
</head>
<body>
    <div class="app-container">
        <nav class="sidebar">
            <div class="sidebar-header">
                <h2><i class="fas fa-dumbbell"></i> FitTracker</h2>
            </div>
            <div class="sidebar-menu">
                <div class="menu-section">
                    <h3>Main</h3>
                    <a href="#dashboard" class="menu-item active" data-section="dashboard">
                        <i class="fas fa-chart-line"></i> Dashboard
                    </a>
                    <a href="#workouts" class="menu-item" data-section="workouts">
                        <i class="fas fa-dumbbell"></i> Workouts
                    </a>
                    <a href="#analytics" class="menu-item" data-section="analytics">
                        <i class="fas fa-chart-bar"></i> Analytics
                    </a>
             <div class="menu-section">
                 <h3>Health</h3>
                 <a href="#body-metrics" class="menu-item" data-section="body-metrics">
                    <i class="fas fa-weight"></i> Body Metrics
                 </a>
                 <a href="#nutrition" class="menu-item" data-section="nutrition">
                    <i class="fas fa-apple-alt"></i> Nutrition
                 </a>
                 <a href="#sleep" class="menu-item" data-section="sleep">
                    <i class="fas fa-bed"></i> Sleep
                </a>
             </div>
     </nav>
     <main class="main-content">
         <!-- Dashboard Section -->
         <section id="dashboard" class="content-section active">
            <div class="section-header">
                <h1>Dashboard</h1>
                <div class="header-actions">
                    <button class="btn btn--primary" data-section="workouts">
                        <i class="fas fa-plus"></i> Add Workout
                    </button>
                </div>
             </div>
             <div class="stats-grid">
                <div class="stat-card">
                    <div class="stat-icon">
                        <i class="fas fa-dumbbell"></i></i>
```

</div>



```
<div class="stat-content">
              <h3 id="total-workouts">0</h3>
              Total Workouts
          </div>
             <i class="fas fa-clock"></i></i>
          <div class="stat-content">
              <h3 id="week-minutes">0</h3>
              This Week (min)
       </div>
       <div class="stat-card">
          <div class="stat-icon">
             <h3 id="week-calories">0</h3>
              This Week (cal)
       <div class="stat-card">
          <div class="stat-icon">
             <i class="fas fa-calendar-week"></i></i>
          <div class="stat-content">
              <h3 id="week-workouts">0</h3>
              This Week
          </div>
   <div class="dashboard-grid">
       <div class="card">
           <div class="card_body">
              <h4>Recent Workouts</h4>
               <div class="recent-workouts" id="recent-workouts">
                  <!-- Recent workouts will be populated here -->
               </div>
       <div class="card">
           <div class="card body">
              <h4>Weekly Progress</h4>
               <div class="progress-item">
                   <span>Minutes Goal</span>
                   <div class="progress">
                      <div class="progress-bar" id="minutes-progress-bar"></div>
                   <span id="minutes-progress-text">0/300</span>
               <div class="progress-item">
                  <span>Calories Goal</span>
                   <div class="progress">
                      <div class="progress-bar" id="calories-progress-bar"></div>
                   <span id="calories-progress-text">0/2000</span>
           </div>
   </div>
```



```
<section id="workouts" class="content-section">
   <div class="section-header">
      <h1>Workouts</h1>
      <div class="header-actions">
          <button class="btn btn--primary" id="add-workout-btn">
            <i class="fas fa-plus"></i> Add Workout
          </button>
   </div>
   <div class="workout-content">
      <div class="card">
          <div class="card_body">
             <div class="workout-filters">
                 <select class="form-control" id="workout-filter">
                    <option value="all">All Workouts
                    <option value="Running">Running</option>
                    <option value="Weightlifting">Weightlifting</option>
                    <option value="Cycling">Cycling</option>
                    <option value="Yoga">Yoga</option>
                    <option value="Swimming">Swimming</option>
                    <option value="HIIT">HIIT</option>
             <div class="workout-table-container">
                 <thead>
                           Date
                           Type
                           Duration
                           Calories
                           Intensity
```



```
Actions
                         </thead>
                     <!-- Workouts will be populated here -->
                     </div>
          </div>
       </div>
   </div>
</section>
<!-- Analytics Section -->
<section id="analytics" class="content-section">
   <div class="section-header">
       <h1>Analytics</h1>
   </div>
   <div class="analytics-grid">
       <div class="card">
          <div class="card_body">
              <h4>Weekly Calories</h4>
              <div class="chart-container" style="position: relative; height: 300px;">
                  <canvas id="calories-chart"></canvas>
              </div>
          </div>
       </div>
       <div class="card">
          <div class="card_body">
              <h4>Workout Types</h4>
              <div class="chart-container" style="position: relative; height: 300px;">
                  <canvas id="types-chart"></canvas>
              </div>
          </div>
```



```
</div>
                            <div class="card">
                               <div class="card_body">
                                   <h4>Monthly Progress</h4>
206
                                    <div class="chart-container" style="position: relative; height: 300px;">
                                        <canvas id="monthly-chart"></canvas>
                               </div>
                           </div>
                            <div class="card">
                               <div class="card_body">
                                   <h4>Intensity Distribution</h4>
                                   <div class="chart-container" style="position: relative; height: 300px;">
                                        <canvas id="intensity-chart"></canvas>
                                   </div>
                               </div>
                           </div>
                        </div>
                    </section>
                    <section id="body-metrics" class="content-section">
                        <div class="section-header">
                            <h1>Body Metrics</h1>
                            <button class="btn btn--primary" id="add-metric-btn">
                               <i class="fas fa-plus"></i> Add Metric
                            </button>
                        </div>
                        <div class="metrics-grid">
                           <div class="card">
                               <div class="card_body">
                                    <h4>Weight Tracking</h4>
                                   <div class="chart-container" style="position: relative; height: 250px;">
```



```
</div>
        </div>
     </div>
     <div class="card">
        <div class="card_body">
          h4>Body Composition</h4>
          <div class="metrics-display" id="body-composition">
          </div>
        </div>
     </div>
     <div class="card">
        <div class="card_body">
           <h4>Recent Entries</h4>
          <div class="metrics-table-container">
             <thead>
                   Date
                      Weight
                      Muscle Mass
                      BMI
                   </thead>
                </div>
        </div>
     </div>
  </div>
</section>
```



```
276
                    <!-- Nutrition Section -->
                    <section id="nutrition" class="content-section">
                        <div class="section-header">
                            <h1>Nutrition</h1>
280
                            <button class="btn btn--primary" id="add-meal-btn">
                                <i class="fas fa-plus"></i> Add Meal
                            </button>
                        </div>
                        <div class="nutrition-grid">
                            <div class="card">
                                <div class="card body">
                                    <h4>Daily Intake</h4>
                                    <div class="nutrition-stats" id="nutrition-stats">
                                        <div class="nutrition-item">
                                            <span>Calories</span>
                                            <span id="daily-calories">0 cal</span>
                                        </div>
                                        <div class="nutrition-item">
                                            <span>Protein
                                            <span id="daily-protein">0g</span>
                                        </div>
                                        <div class="nutrition-item">
                                            <span>Carbs</span>
300
                                            <span id="daily-carbs">0g</span>
                                        </div>
                                        <div class="nutrition-item">
                                            <span>Fat</span>
                                            <span id="daily-fat">0g</span>
                                        </div>
                                    </div>
                                </div>
                            </div>
                            <div class="card">
                                <div class="card body">
```



```
<h4>Recent Meals</h4>
            <div class="nutrition-table-container">
               <thead>
                        Time
                        Meal
                        Calories
                        Protein
                        Carbs
                        Fat
                     </thead>
                  <!-- Nutrition entries will be populated here -->
                  </div>
         </div>
      </div>
   </div>
</section>
<section id="sleep" class="content-section">
   <div class="section-header">
      <h1>Sleep</h1>
      <button class="btn btn--primary" id="add-sleep-btn">
         <i class="fas fa-plus"></i> Log Sleep
      </button>
   </div>
   <div class="sleep-grid">
      <div class="card">
         <div class="card_body">
            <h4>Sleep Summary</h4>
```



```
348
                            <div class="sleep-stats" id="sleep-stats">
                               <div class="sleep-item">
                                  <span>Last Night</span>
                                  <span id="last-night-sleep">-- hours</span>
                               </div>
                               <div class="sleep-item">
                                  <span>Average</span>
                                  <span id="avg-sleep">-- hours</span>
                               </div>
                               <div class="sleep-item">
                                  <span>Quality</span>
                                  <span id="avg-quality">--</span>
                               </div>
360
                            </div>
                         </div>
                      </div>
                      <div class="card">
                         <div class="card_body">
                            <h4>Recent Sleep Logs</h4>
                            <div class="sleep-table-container">
                               <thead>
                                     Date
                                         Bedtime
                                        Wake Time
                                        Duration
                                        Quality
                                        Efficiency
                                     </thead>
```



```
</div>
                                 </div>
                             </div>
                         </div>
387
                    </section>
                </main>
            </div>
            <!-- Add Workout Modal -->
            <div class="modal hidden" id="add-workout-modal">
                <div class="modal-overlay" id="modal-overlay"></div>
                <div class="modal-content">
                     <div class="modal-header">
396
                        <h3>Add Workout</h3>
                         <button class="modal-close" id="close-workout-modal">
                             <i class="fas fa-times"></i></i>
                         </button>
400
                    </div>
                    <div class="modal-body">
                         <form id="workout-form">
                             <div class="form-group">
404
                                 <label for="workout-date" class="form-label">Date</label>
                                 <input type="date" class="form-control" id="workout-date" required>
                            </div>
                             <div class="form-group">
                                 <label for="workout-type" class="form-label">Type</label>
409
                                 <select class="form-control" id="workout-type" required>
                                     <option value="">Select workout type</option>
                                     <option value="Running">Running</option>
                                     <option value="Weightlifting">Weightlifting</option>
                                     <option value="Cycling">Cycling</option>
                                     <option value="Yoga">Yoga</option>
                                     <option value="Swimming">Swimming</option>
                                     <option value="HIIT">HIIT</option>
                                 </select>
                            </div>
```



```
<div class="form-group">
                                <label for="workout-duration" class="form-label">Duration (minutes)</label>
                                <input type="number" class="form-control" id="workout-duration" min="1" required>
                            </div>
424
                            <div class="form-group">
                                <label for="workout-calories" class="form-label">Calories Burned</label>
                                <input type="number" class="form-control" id="workout-calories" min="1" required>
                            </div>
                            <div class="form-group">
                                <label for="workout-intensity" class="form-label">Intensity (1-10)</label>
                                <input type="number" class="form-control" id="workout-intensity" min="1" max="10" required>
                            </div>
                            <div class="form-group">
                                <label for="workout-notes" class="form-label">Notes</label>
                                <textarea class="form-control" id="workout-notes" rows="3"></textarea>
                            </div>
                        </form>
                    </div>
                    <div class="modal-footer">
                        <button type="button" class="btn btn--secondary" id="cancel-workout">Cancel/button>
                        <button type="submit" form="workout-form" class="btn btn--primary">Add Workout</button>
440
                    </div>
                </div>
            </div>
            <!-- Add Body Metrics Modal -->
            <div class="modal hidden" id="add-metric-modal">
                <div class="modal-overlay"></div>
                <div class="modal-content">
448
                    <div class="modal-header">
449
                        <h3>Add Body Metrics</h3>
450
                        <button class="modal-close" id="close-metric-modal">
                            <i class="fas fa-times"></i></i>
                        </button>
                    </div>
                    <div class="modal-body">
```



```
<form id="bodyMetricsForm">
                            <div class="form-group">
                                <label for="metric-date" class="form-label">Date</label>
                                <input type="date" class="form-control" id="metric-date" required>
                            </div>
                            <div class="form-group">
                                <label for="metric-weight" class="form-label">Weight (kg)</label>
                                <input type="number" class="form-control" id="metric-weight" step="0.1" min="0" required>
                            <div class="form-group">
                                <label for="metric-body-fat" class="form-label">Body Fat (%)</label>
                                 <input type="number" class="form-control" id="metric-body-fat" step="0.1" min="0" max="100">
                            <div class="form-group">
                                <label for="metric-muscle-mass" class="form-label">Muscle Mass (kg)</label>
                                <input type="number" class="form-control" id="metric-muscle-mass" step="0.1" min="0">
                            </div>
                        </form>
                    </div>
                    <div class="modal-footer">
                        <button type="button" class="btn btn--secondary" id="cancel-metric">Cancel</button>
                        <button type="submit" form="bodyMetricsForm" class="btn btn--primary">Add Metrics</button>
                    </div>
                </div>
480
            </div>
            <!-- Add Nutrition Modal -->
            <div class="modal hidden" id="add-meal-modal">
                <div class="modal-overlay"></div>
                <div class="modal-content">
                    <div class="modal-header">
                        <h3>Add Meal</h3>
                        <button class="modal-close" id="close-meal-modal">
                            <i class="fas fa-times"></i></i>
                        </button>
                    </div>
```



```
<div class="modal-body">
                        <form id="nutritionForm">
                            <div class="form-group">
494
                                <label for="meal-name" class="form-label">Meal Name</label>
                                <input type="text" class="form-control" id="meal-name" required>
                            </div>
                            <div class="form-group">
                                <label for="meal-time" class="form-label">Time</label>
                                <select class="form-control" id="meal-time" required>
                                    <option value="">Select time</option>
                                    <option value="Breakfast">Breakfast</option>
                                    <option value="Lunch">Lunch</option>
                                    <option value="Dinner">Dinner</option>
504
                                    <option value="Snack">Snack</option>
                                </select>
                            </div>
                            <div class="form-group">
                                <label for="meal-calories" class="form-label">Calories</label>
                                <input type="number" class="form-control" id="meal-calories" min="0" required>
                            </div>
                            <div class="form-group">
                                <label for="meal-protein" class="form-label">Protein (g)</label>
                                <input type="number" class="form-control" id="meal-protein" step="0.1" min="0" required>
                            <div class="form-group">
                                <label for="meal-carbs" class="form-label">Carbs (g)</label>
                                <input type="number" class="form-control" id="meal-carbs" step="0.1" min="0" required>
                            <div class="form-group">
                                <label for="meal-fat" class="form-label">Fat (g)</label>
                                <input type="number" class="form-control" id="meal-fat" step="0.1" min="0" required>
                            </div>
                        </form>
                    </div>
                    <div class="modal-footer">
                       <button type="button" class="btn btn--secondary" id="cancel-meal">Cancel</button>
```



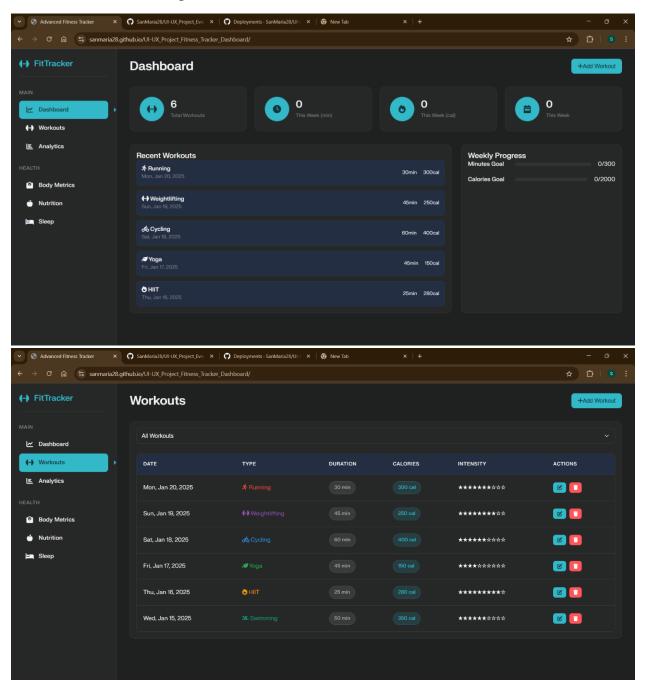
```
<button type="submit" form="nutritionForm" class="btn btn--primary">Add Meal</button>
    </div>
</div>
<div class="modal hidden" id="add-sleep-modal">
    <div class="modal-overlay"></div>
    <div class="modal-content">
        <div class="modal-header">
            <h3>Log Sleep</h3>
            <button class="modal-close" id="close-sleep-modal">
                <i class="fas fa-times"></i></i>
            </hutton>
       </div>
        <div class="modal-body">
           <form id="sleepForm">
                <div class="form-group">
                   <label for="sleep-date" class="form-label">Date</label>
                    <input type="date" class="form-control" id="sleep-date" required>
                </div>
                <div class="form-group">
                   <label for="sleep-bedtime" class="form-label">Bedtime</label>
                    <input type="time" class="form-control" id="sleep-bedtime" required>
                </div>
                <div class="form-group">
                    <label for="sleep-wake-time" class="form-label">Wake Time</label>
                    <input type="time" class="form-control" id="sleep-wake-time" required>
                </div>
                <div class="form-group">
                    <label for="sleep-quality" class="form-label">Quality</label>
                    <select class="form-control" id="sleep-quality" required>
                        <option value="">Select quality</option>
                        <option value="Excellent">Excellent</option>
                       <option value="Good">Good</option>
```



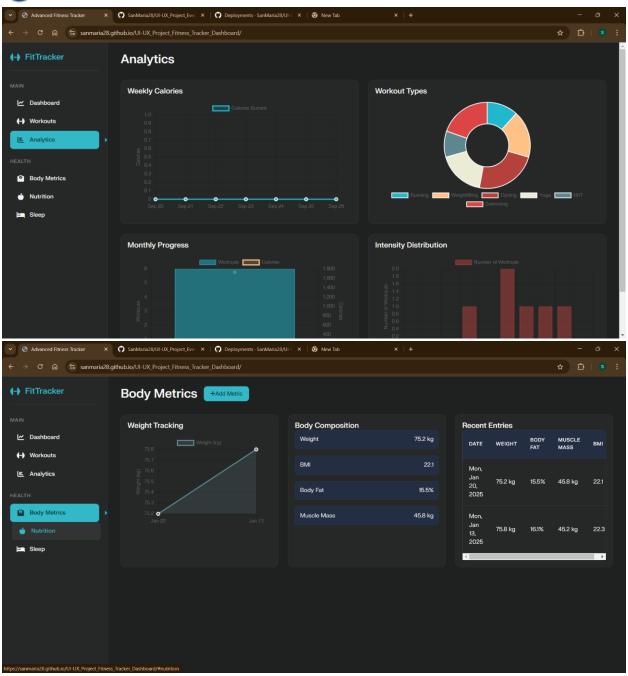
```
<option value="Fair">Fair</option>
                                     <option value="Poor">Poor</option>
564
                                 </select>
                            </div>
                             <div class="form-group">
                                 <label for="sleep-efficiency" class="form-label">Efficiency (%)</label>
                                 <input type="number" class="form-control" id="sleep-efficiency" min="0" max="100" step="1">
                         </form>
                    </div>
                    <div class="modal-footer">
                        ⟨button type="button" class="btn btn--secondary" id="cancel-sleep"⟩Cancel⟨/button⟩
                         ⟨button type="submit" form="sleepForm" class="btn btn--primary">Log Sleep⟨/button⟩
                     </div>
                </div>
            </div>
            <!-- Delete Confirmation Modal -->
            <div class="modal hidden" id="delete-modal">
                <div class="modal-overlay"></div>
                <div class="modal-content">
                    <div class="modal-header">
                        <h3>Confirm Delete</h3>
                        <button class="modal-close" id="close-delete-modal">
                             <i class="fas fa-times"></i></i>
                         </button>
                    </div>
                    <div class="modal-body">
                         <div class="delete-confirmation">
                             <i class="fas fa-exclamation-triangle"></i></i></or>
                             Are you sure you want to delete this workout?
                             This action cannot be undone.
                         </div>
                    </div>
                    <div class="modal-footer">
                        <button type="button" class="btn btn--secondary" id="cancel-delete">Cancel</button>
                      <button type="button" class="btn btn--danger" id="confirm-delete">Delete Workout</button>
                  </div>
              </div>
           </div>
604
           <!-- Toast Notification -->
           <div class="toast hidden" id="toast">
               <div class="toast-content">
                  <i class="toast-icon"></i></i></or>
                  <span class="toast-message"></span>
608
               </div>
           </div>
610
           <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
           <script src="app.js"></script>
       </body>
       </html>
```



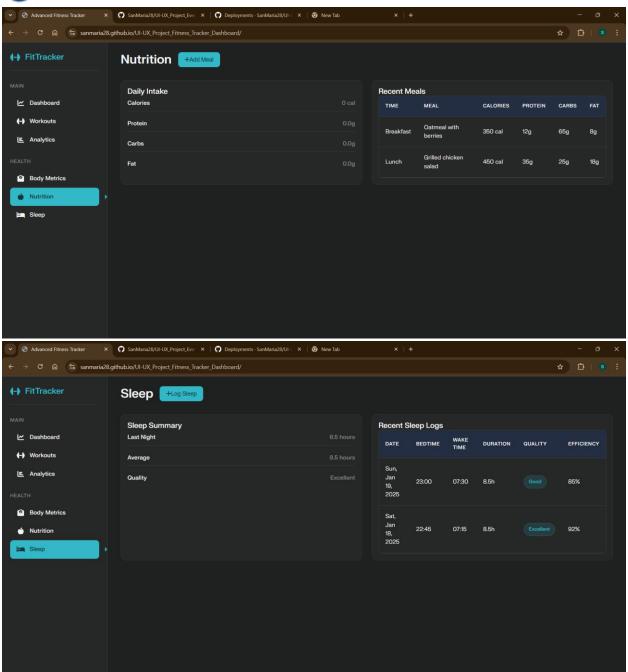
# **Screenshots of Final Output**













#### **Conclusion**

This dashboard boasts a sleek dark theme with glass-morphism, animated charts, interactive counters, and particle effects. It features multiple chart types, interactive elements, touch-optimized navigation, real-time data updates, mobile responsiveness, and visually engaging celebration animations for achievements, all designed for an immersive and motivating fitness tracking experience. This fitness dashboard features a beautiful dark theme, glass-morphism cards, animated charts, interactive elements, real-time data updates, smooth transitions, and celebration effects. It's designed for engaging, responsive, and intuitive fitness progress tracking, optimizing both mobile and desktop user experiences.

#### 12. References

• L&T LMS: https://learn.lntedutech.com/Landing/MyCourse