

# Personal Health Tracker - Angular App

By  
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# Problem Statement

Develop a Personal Health Tracker application using Angular that allows users to log their health data, view insights, and track progress. The application must be built as a Single Page Application (SPA) with various Angular features.

# Project Overview

The Personal Health Tracker helps users log health-related data such as weight, calories, steps, and exercise. Users can view their history, trends, and insights. Key features include authentication, data visualization, and API integrations.

# Features Implemented

- User Authentication
- Health Data Logging (Weight, Calories, Steps, etc.)
- Dashboard with Data Visualization
- API Integration for Health Data
- Responsive UI and Theming
- Local Storage for User Preferences
- Routing & Navigation
- Form Handling with Validation



# Technologies Used

- Angular
- TypeScript
- HTML5, CSS3, SCSS
- Bootstrap for UI Styling
- RxJS (Reactive Extensions for JavaScript)
- Firebase for Authentication & Storage
- RESTful APIs
- Chart.js for Data Visualization

# Project Structure

1. **app** - Main Application Folder
2. **components** - UI Components (Dashboard, Health Logs, Charts)
3. **services**- API & Data Handling Services
4. **models** - Data Models for Health Tracking
5. **guards** - Route Guards for Authentication
6. **pipes** - Custom & Built-in Pipes
7. **assets** - Static Resources (Icons, Images, JSON)

# Angular Concepts Used

- Components
- Parent-Child Communication
- Directives
- Routing & Route Guards
- Local Storage
- Services & Observables
- HTTP Client
- Template-Driven & Reactive Forms
- Built-in & Custom Pipes

# API Integration

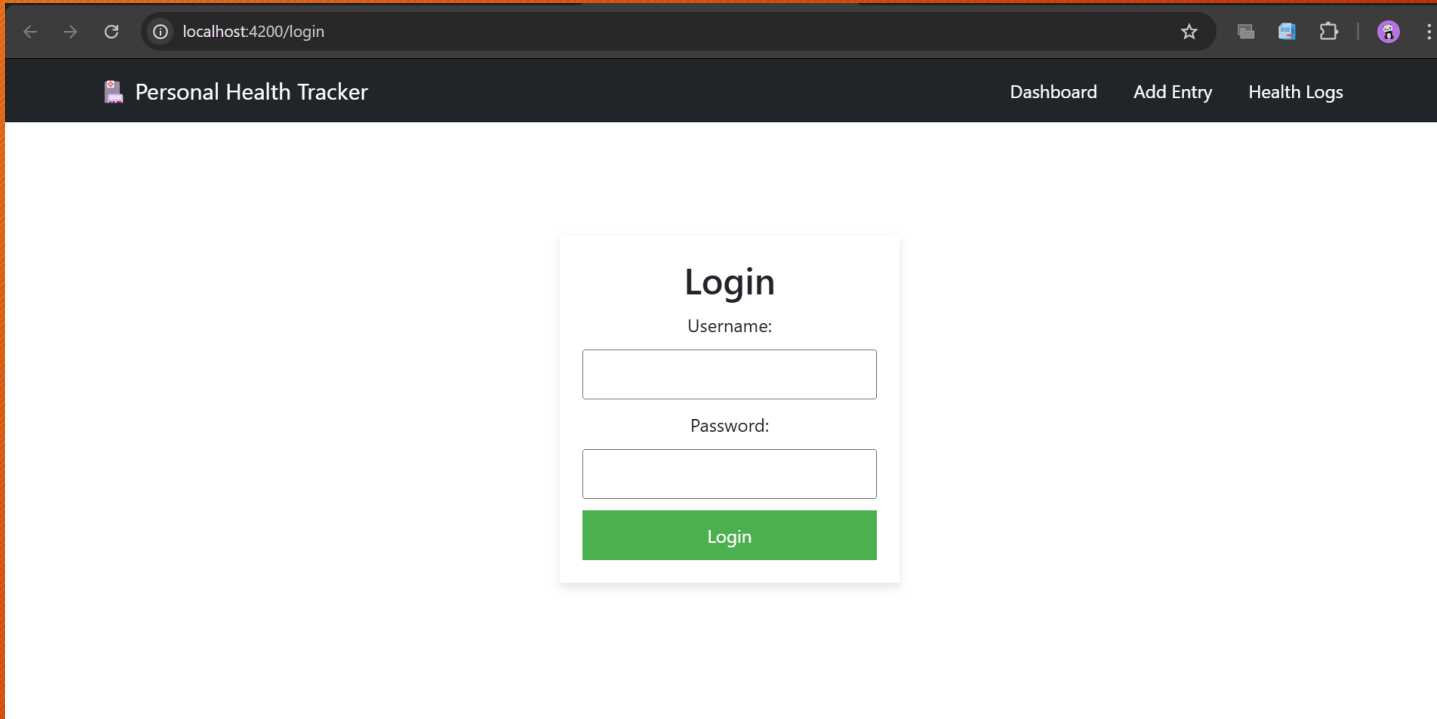
The application fetches real-time health data using API calls. It integrates with third-party services for retrieving exercise data, caloric information, and user activity logs.



# Firebase Integration

- User Authentication using Firebase Auth
- Cloud Firestore for Storing Health Data
- Firebase Hosting for Deployment

# Screenshots



The screenshot displays a web browser window with the address bar showing `localhost:4200/login`. The browser's address bar includes navigation icons (back, forward, refresh) and a search icon. The page title is "Personal Health Tracker". The navigation bar contains three links: "Dashboard", "Add Entry", and "Health Logs". The main content area is white and features a centered login form. The form has a title "Login", a "Username:" label, a text input field, a "Password:" label, another text input field, and a green "Login" button.

localhost:4200/login

Personal Health Tracker

Dashboard Add Entry Health Logs

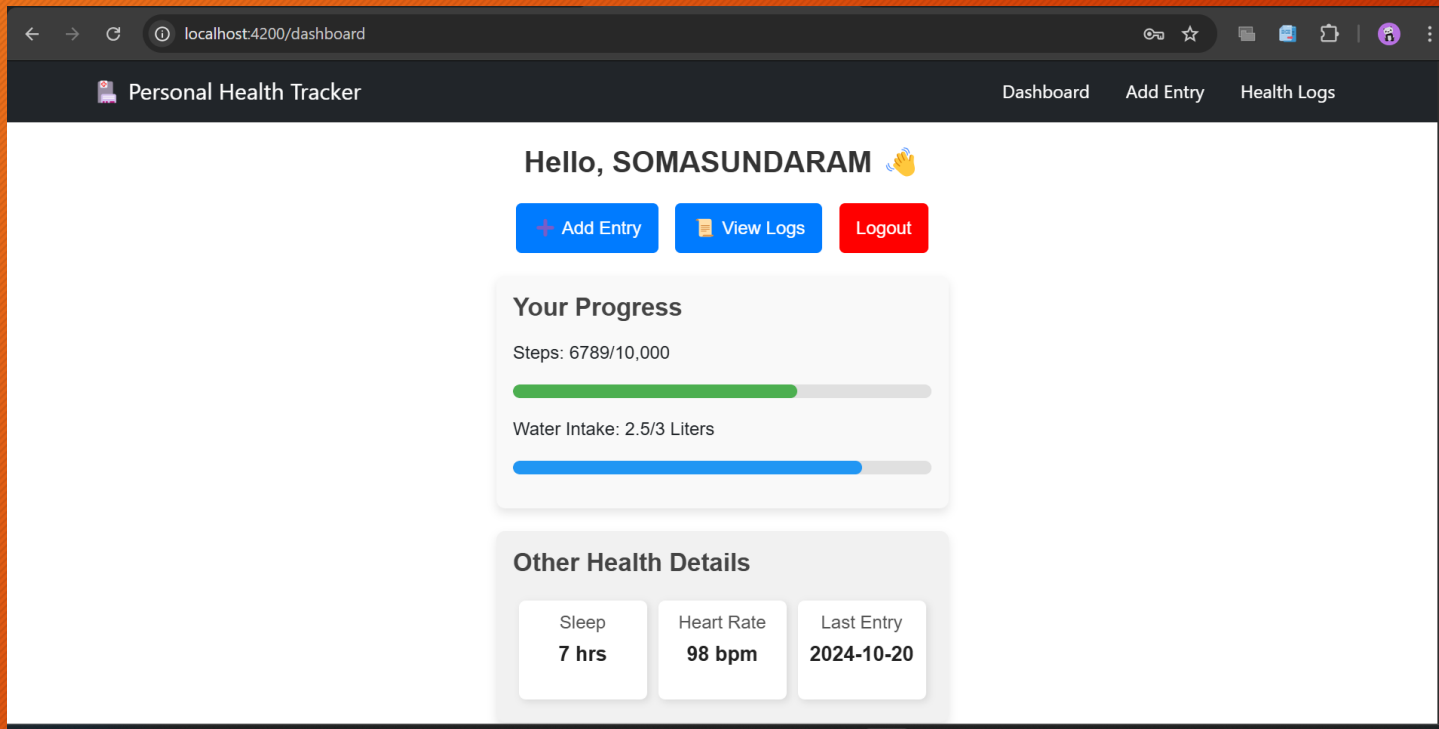
## Login

Username:


Password:

Login

# Screenshots




# Screenshots

 Personal Health Tracker

DashboardAdd EntryHealth Logs

## Log Your Daily Health

dd-mm-yyyy

Weight (kg)

Steps walked

Sleep (hours)

Water intake (liters)


Heart Rate (bpm)

Submit


localhost:4200/add-entry




# Screenshots

 Personal Health Tracker

DashboardAdd EntryHealth Logs

Log Your Daily Health 


29-03-2025

62

8901

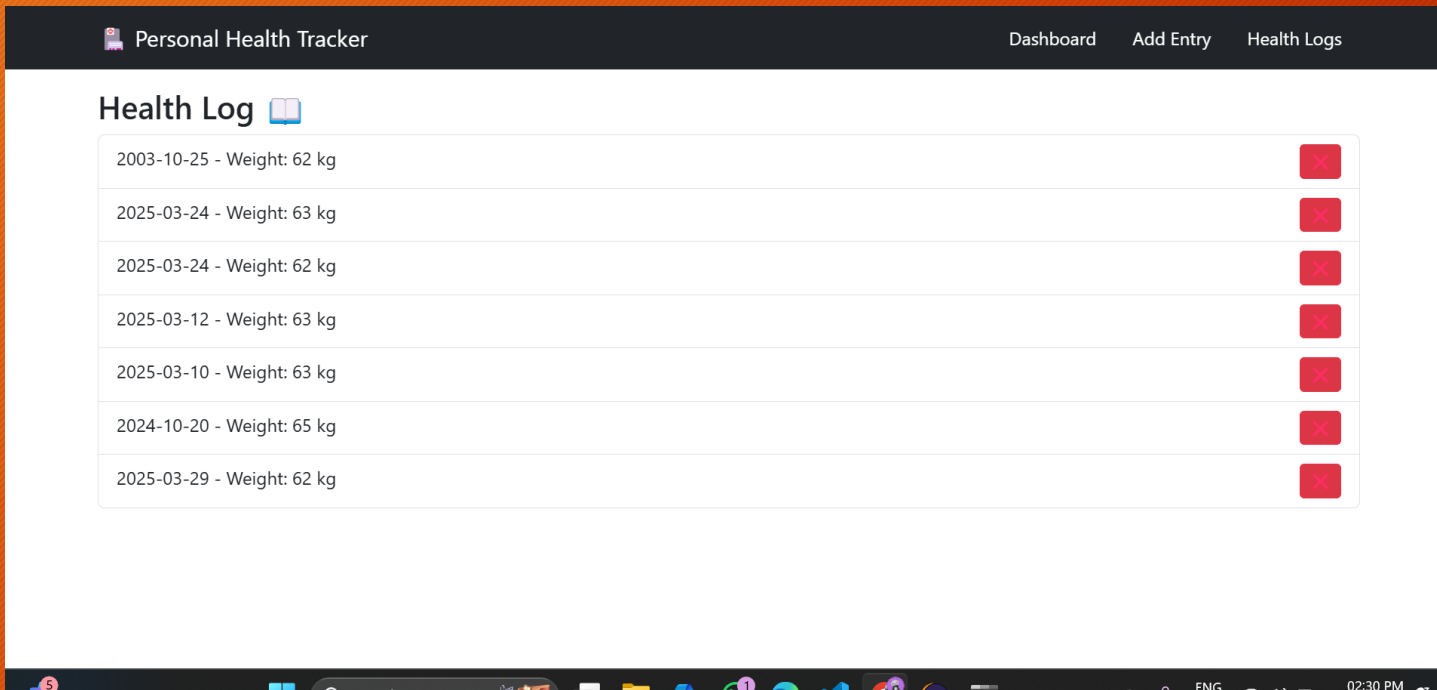
7

2








98

Submit

# Screenshots



The screenshot displays a web application titled "Personal Health Tracker". The navigation bar includes links for "Dashboard", "Add Entry", and "Health Logs". The main content area is titled "Health Log" with a book icon. It contains a table with seven rows of health log entries, each showing a date, weight, and a delete button (a red square with a white 'X').

Date	Weight	Action
2003-10-25	Weight: 62 kg	
2025-03-24	Weight: 63 kg	
2025-03-24	Weight: 62 kg	
2025-03-12	Weight: 63 kg	
2025-03-10	Weight: 63 kg	
2024-10-20	Weight: 65 kg	
2025-03-29	Weight: 62 kg	

The bottom of the screenshot shows a Windows taskbar with various application icons and a system clock displaying "02:30 PM".

# Conclusion & Future Enhancements

- The Personal Health Tracker is a feature-rich Angular application that enables users to monitor their health data effectively. Future enhancements include:
  - AI-based Health Recommendations
  - Integration with Wearable Devices
  - More Data Visualization Features