The Wellness Journey

Software Engineering Project Presentation

Mood Tracking   Nutrition Log   Hydration   Progress

Empowering healthier lifestyles through technology

Project Overview & Objectives

The Wellness Journey

A comprehensive wellness tracking application designed to help users monitor their daily health activities including mood, nutrition, hydration, and progress tracking.

Track Daily Metrics

Monitor mood, nutrition, hydration, and other wellness metrics with ease.

Monitor Nutrition

Track food intake and calories with a comprehensive journal system.

Ensure Hydration

Track water intake with visual indicators and quick increment buttons.

Visualize Progress

Interactive charts and progress tracking to stay motivated on your wellness journey.

Personalized Profiles

User-specific settings and data persistence for personalized wellness tracking.

Target Users

Health-conscious individuals   Fitness enthusiasts   Anyone looking to improve wellness

Core Features & Functionality

The Wellness Journey offers five comprehensive features designed to cover all aspects of personal wellness tracking.

Mood Tracking

Daily mood selection (Energized, Neutral, Sluggish)

Personalized greeting

Food Journal

Add food items with calorie tracking

View complete food history

Hydration Tracker

Visual water bottle representation

Track water intake in milliliters

Journey Progress

SVG-based progress chart

Day streak tracking

User Authentication

Secure login/signup system
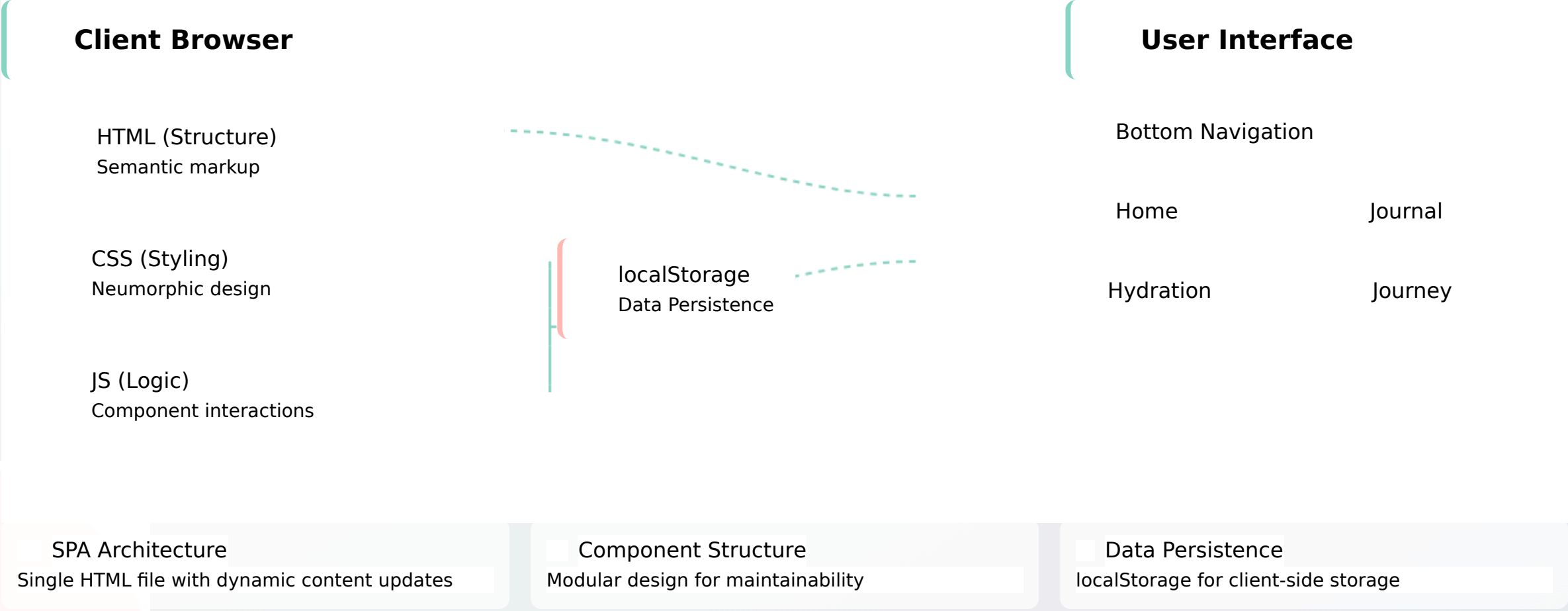
User profile management

Why These Features?

Comprehensive wellness tracking covers all aspects of health.

Complete overview of your wellness journey

Personalized experience

System Architecture

The Wellness Journey follows a Single Page Application architecture with a component-based structure, utilizing web technologies for a seamless user experience.

Client Browser

HTML (Structure)
Semantic markup

CSS (Styling)
Neumorphic design

JS (Logic)
Component interactions

localStorage
Data Persistence

User Interface

Bottom Navigation

Home   Journal

Hydration   Journey

SPA Architecture
Single HTML file with dynamic content updates

Component Structure
Modular design for maintainability

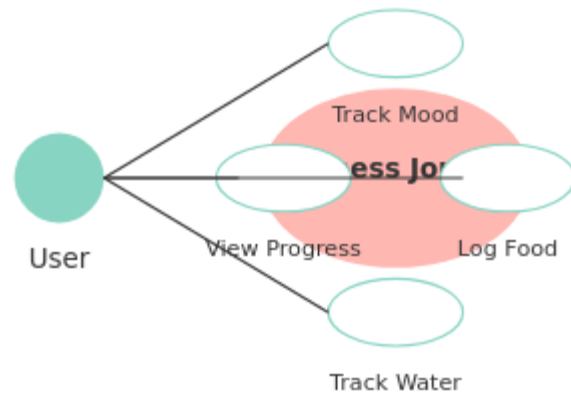**Data Persistence**
localStorage for client-side storage

UML Diagrams & Design

Complete software engineering documentation including use case diagrams, class diagrams, and context diagrams showing system interactions and data flow.

Use Case Diagram

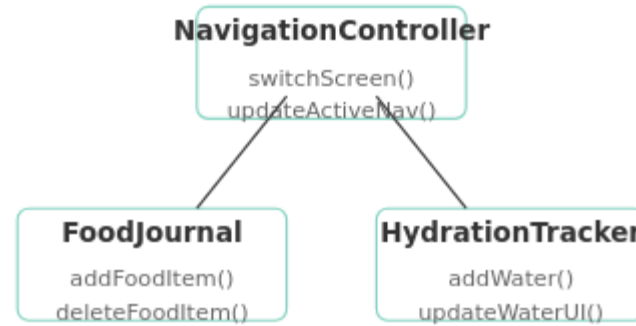Visual representation of system features and user interactions

Features: Track Mood, Log Food, Track Water, View Progress

Includes relationships: User → Features

Class Diagram

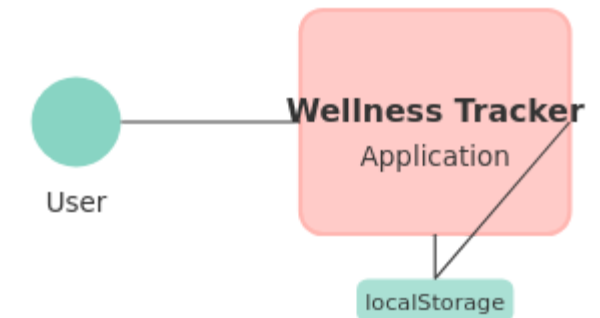Structure of the application showing classes and relationships

Main Classes: NavigationController, FoodJournal, HydrationTracker

Relationships: Composition, Association

Context Diagram

System boundaries and external interactions

External Entity: User

System: Wellness Tracker Application

User Interface Design

Neumorphic Design System

Soft UI design approach with subtle shadows to create a gentle, modern aesthetic that feels both sophisticated and approachable.
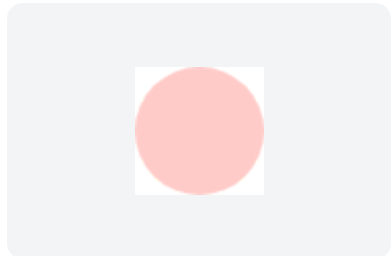
Soft Mint   Soft Coral
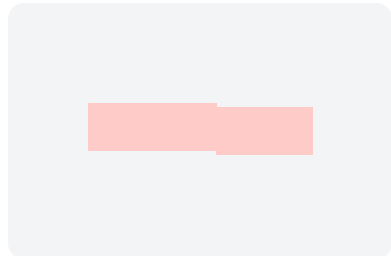
Mobile-First Approach

Responsive design optimized for mobile devices with adaptive layouts that scale beautifully to larger screens.

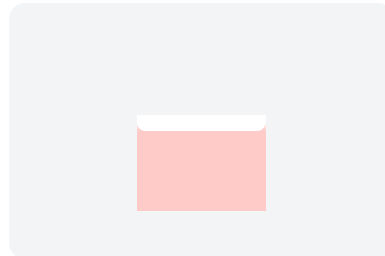Touch-friendly interfaces   Efficient information hierarchy

Application Wireframes

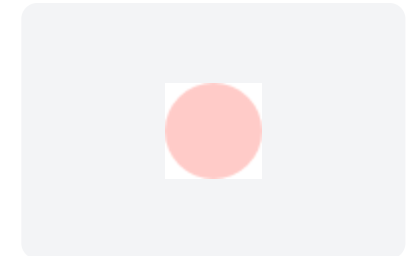**Home Screen**
Mood tracking & quick access

Food Journal
Calorie tracking & history

Hydration
Water intake tracking

Journey Stats
Progress visualization

Profile/Auth
User management & settings

Color Palette: Soft Mint (#88d4c3) & Soft Coral (#ffb7b2)

Built with HTML5, CSS3, and Vanilla JavaScript

Technology Stack & Implementation

Frontend Technologies

HTML5
Semantic markup structure

CSS3
Neumorphic (Soft UI) design system

Vanilla JavaScript
No framework dependencies

Google Fonts
Outfit font family

Data Management

localStorage
Client-side data persistence

JSON
Data serialization format

Design System

Color Palette
Soft Mint (#88d4c3), Soft Coral (#ffb7b2)

Typography
Outfit font family

UI Style
Neumorphic with soft shadows

Architecture Pattern

Single Page Application

SPA architecture for seamless user experience without page reloads

Component-based Structure

Modular components for reusable and maintainable code

Event-driven Interactions

Responsive UI with interactive elements and state management

Live Demo & Key Features

Experience the working prototype of The Wellness Journey application, showcasing seamless user experience and core functionalities.

| Profile Login | Home Screen | Food Journal | Journey Stats |

Smooth Transitions

Seamless navigation between screens with animated transitions.

Form Validation

Robust form validation for login, signup, and food entry forms.

Real-time Updates

Dynamic UI updates as you track food, water intake, and mood.

Data Persistence

Data saved to localStorage and persists across browser sessions.

Responsive Design

Optimized layout that works on mobile, tablet, and desktop.

Future Enhancements & Security

Planned Features

Backend Integration
Server-side authentication, cloud data synchronization, multi-device support

Advanced Analytics
Weekly/monthly reports, trend analysis, goal recommendations

Social Features
Share progress with friends, community challenges, leaderboards

Mobile Apps
Native iOS, native Android, Progressive Web App (PWA)

Security Improvements

Current Implementation
- Client-side only authentication
- Passwords stored in localStorage (not hashed)
- No server-side validation

Production Requirements
- Server-side authentication with JWT
- Password hashing (bcrypt)
- HTTPS encryption
- Input sanitization
- CSRF protection

Security improvements are critical before deploying to production environments

Project Outcomes & Success

Achievements

Modern web application development with clean architecture

User-friendly interface design with neumorphic elements

Comprehensive feature set covering wellness tracking needs

Proper documentation with UML diagrams and wireframes

Scalable architecture for future enhancements

Project Success Metrics

- [ ] All features implemented
- [ ] Responsive design
- [ ] Complete documentation
- [ ] UML diagrams created
- [ ] Wireframes developed
- [ ] Working prototype

Learning Outcomes

Technical Skills

- [ ] SPA architecture
- [ ] State management
- [ ] Form validation
- [ ] Neumorphic UI

Engineering Practices

- [ ] UML creation
- [ ] Wireframing
- [ ] Component design
- [ ] Code organization

Thank You!

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