



Smart Study Assistant

Demo Presentation
22/12/2025

Mentora – Emotion-Aware Study Planning Assistant

The Problem

- Students struggle to follow study plans under stress
- Students lose motivation during intensive academic periods
- Emotional state is rarely considered in study planning

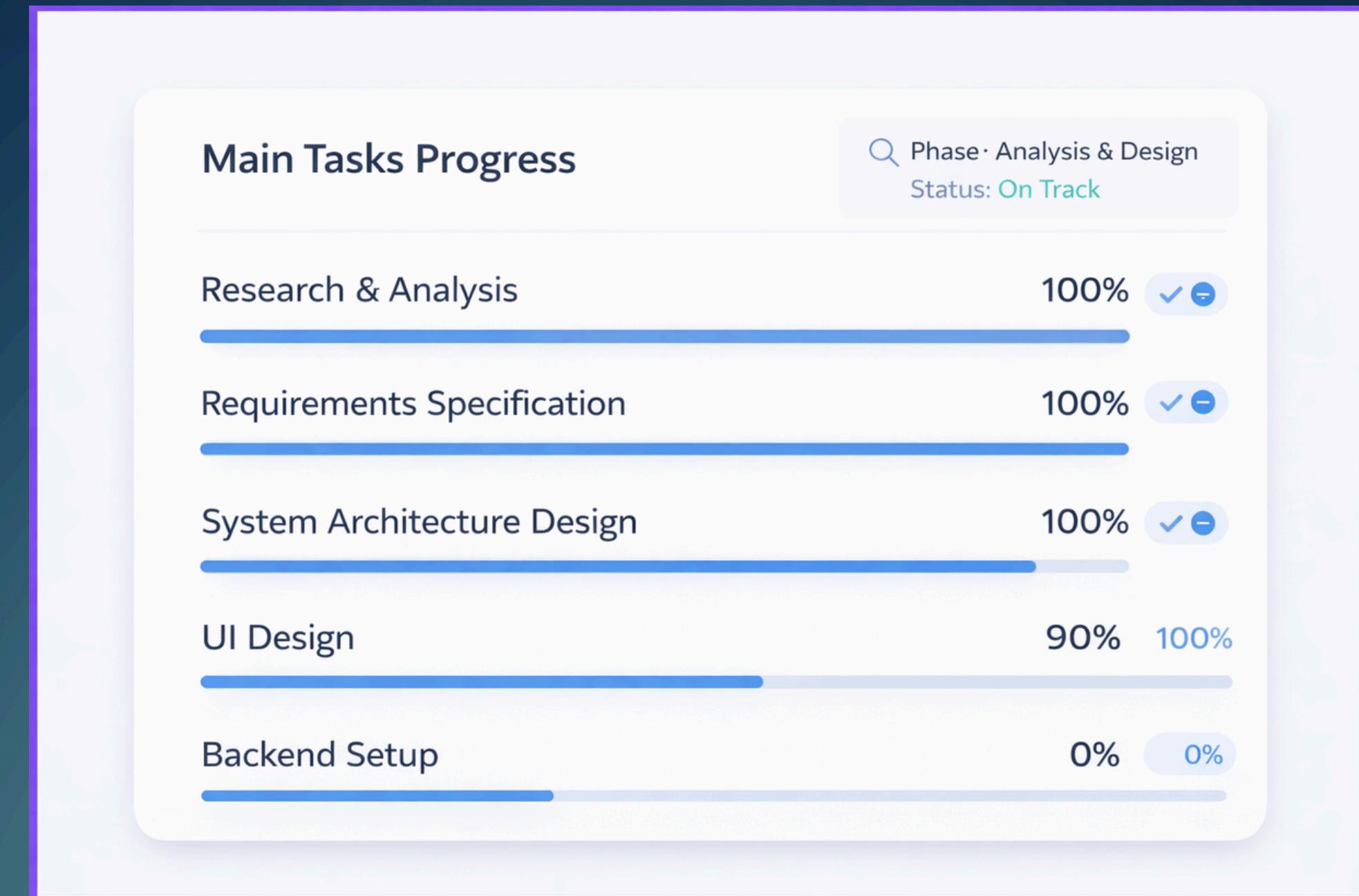
The Gap

- Planning apps organize tasks but do not adapt
- AI study tools generate content but do not manage time
- Emotional feedback is not systematically used in planning

Our Solution

- Structured academic study planning
- Emotional state used as supportive input
- Transparent and controlled plan adaptation

Current Status & Team Progress



Risks

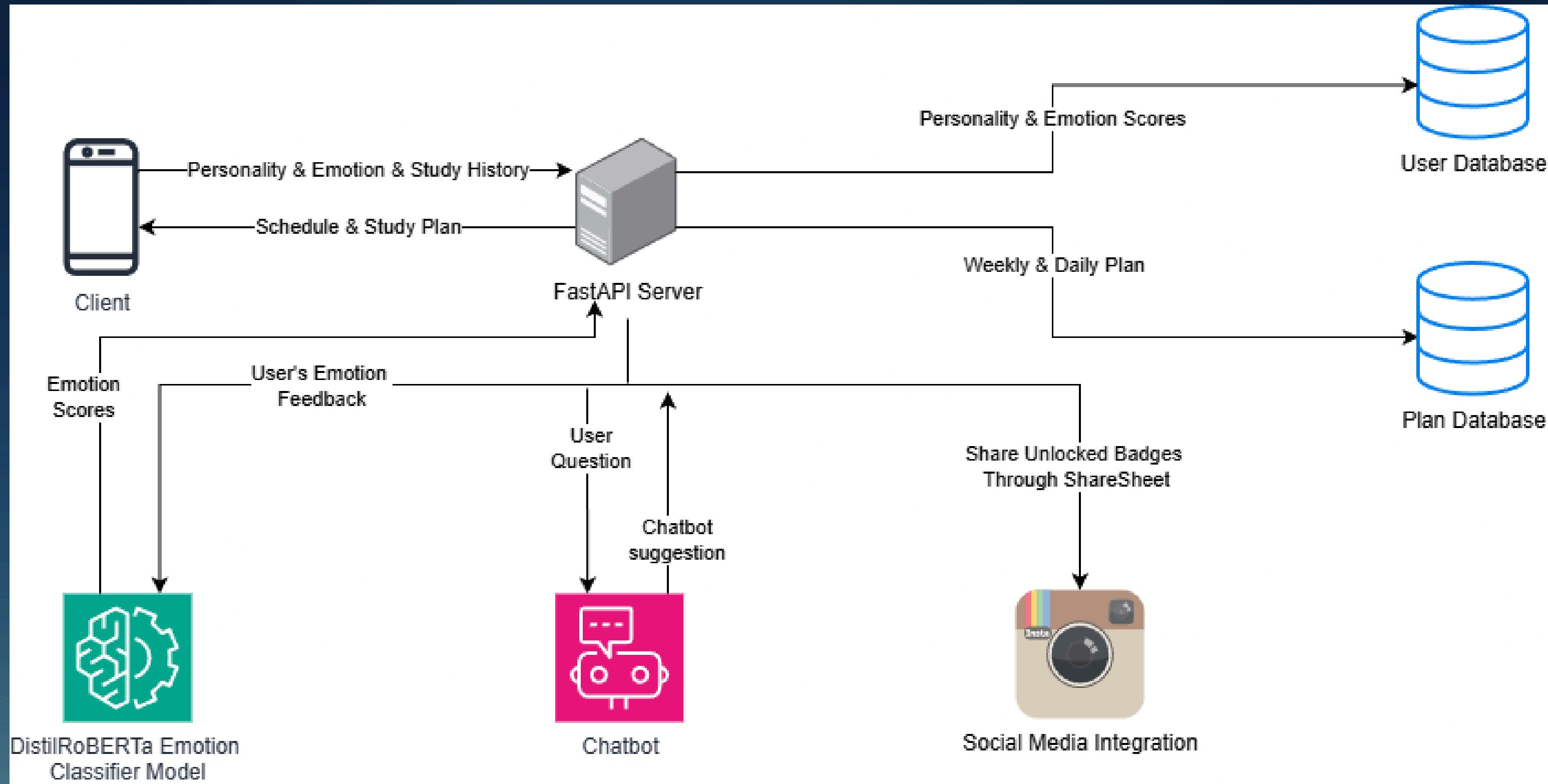
Threats

- Privacy & Data Protection
- Personality & Emotion Detection Accuracy
- Competitors

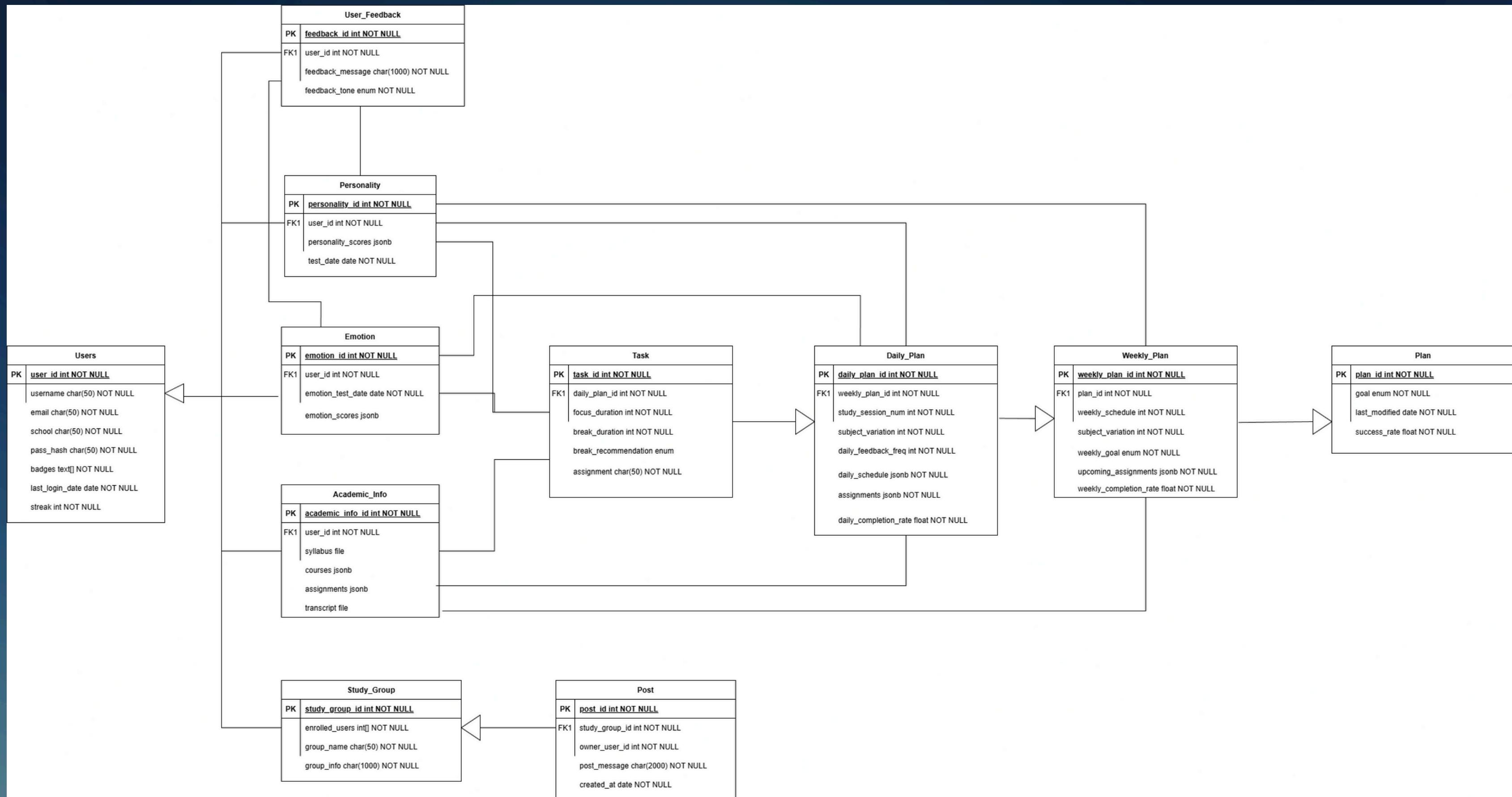
Opportunities

- Personality & Emotion-Based Innovation
- Supportive & Non-Diagnostic Positioning
- High Engagement Strategy With Gamification

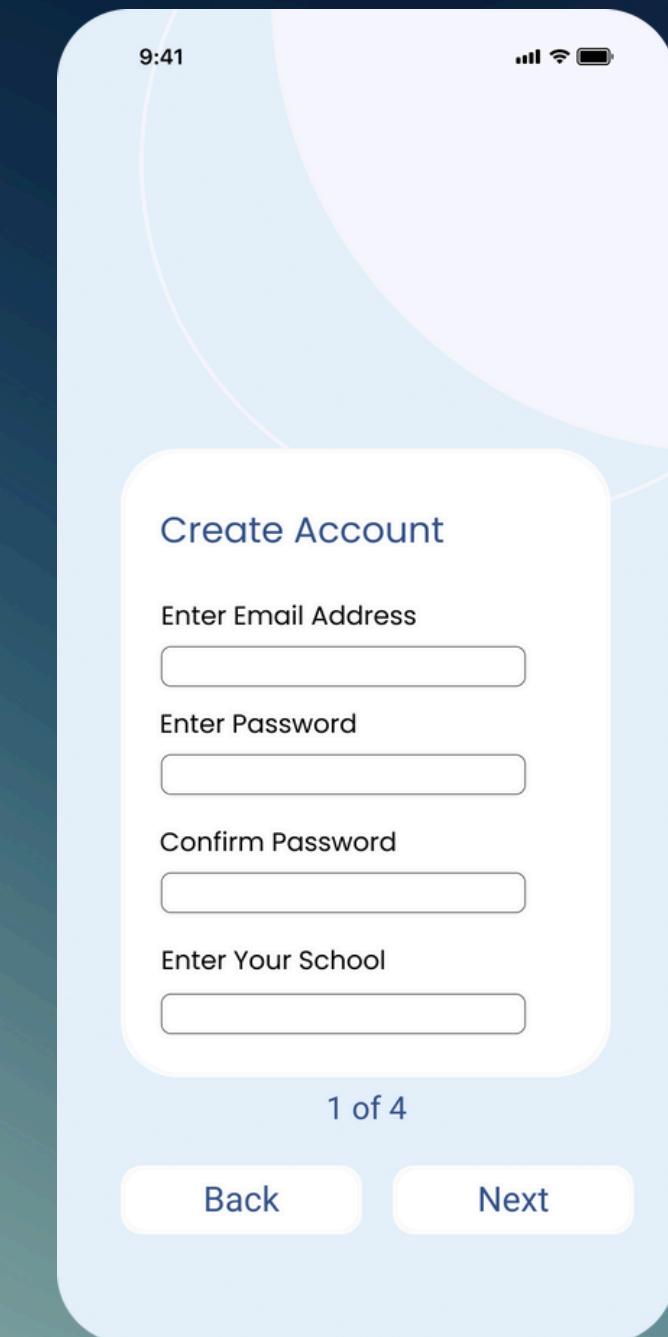
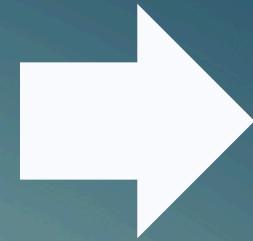
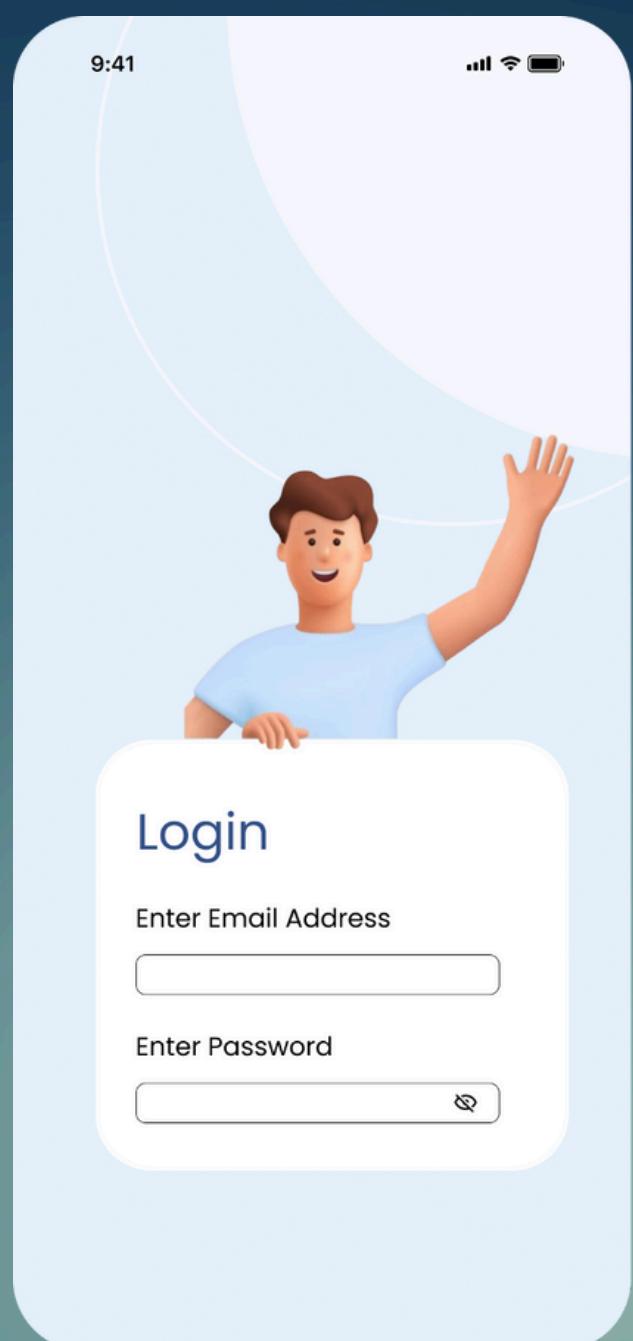
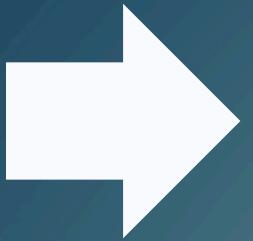
Architecture



Database Schema



LOG IN / SIGN UP PAGE

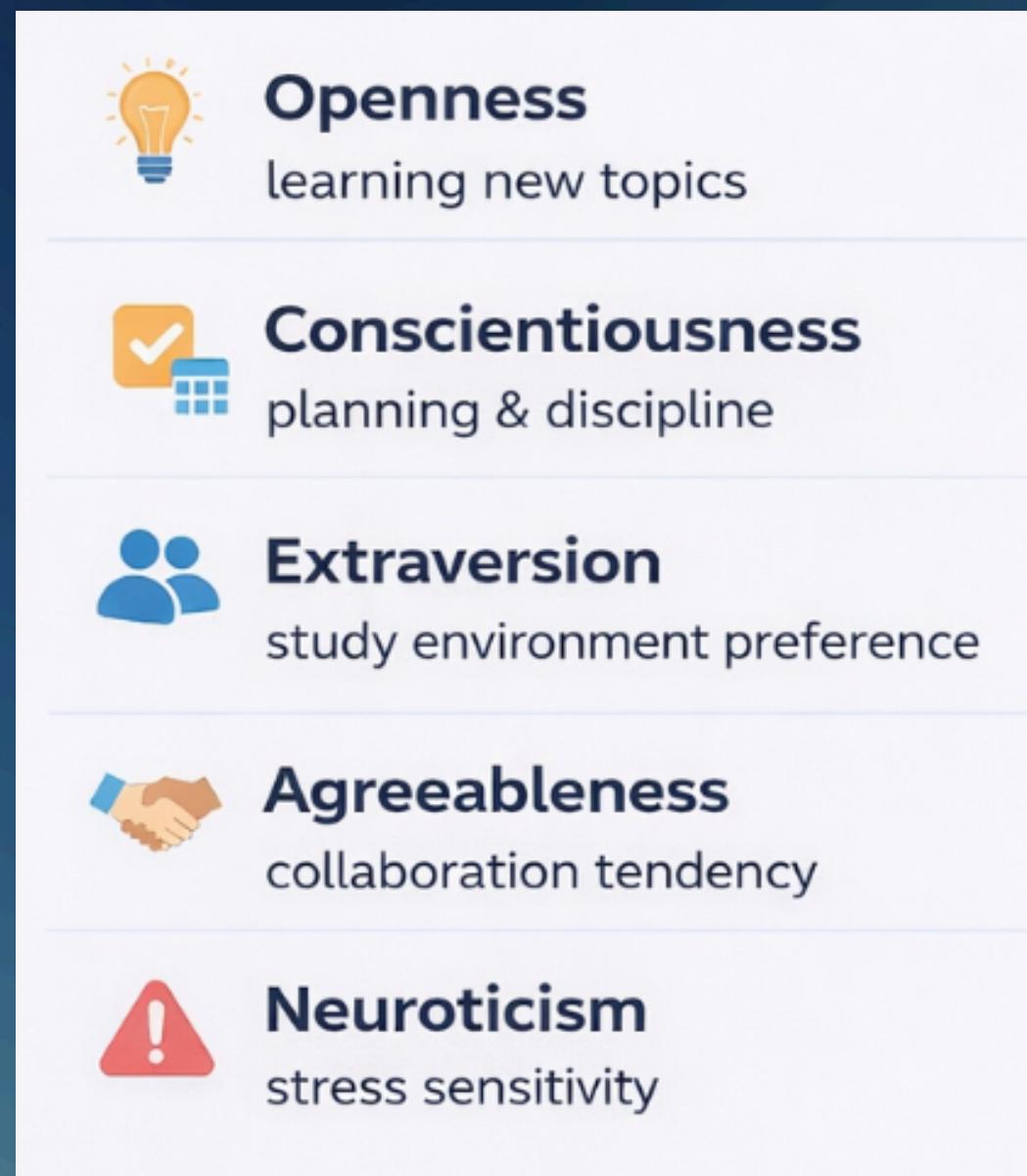


PERSONALITY TEST PAGE

The image displays a sequential user interface for a study personality test, consisting of four mobile phone screens arranged horizontally. Each screen features a large white arrow pointing right to its right, indicating the flow of the process.

- Screen 1: Discover Your Study Personality**
 - Header: 9:41, signal, battery.
 - Title: Discover Your Study Personality.
 - Text: We use a short personality test to build your personalized study plan. There is no right or wrong answers. Your answers help Mentora adapt to you.
 - Illustration: A person sitting at a desk with books, a laptop, and various study-related icons.
 - Button: Start Personality Test.
 - Status: 2 of 4.
 - Buttons: Back, Next.
- Screen 2: Personality Test**
 - Header: 9:41, signal, battery.
 - Title: Personality Test.
 - Text: 1/10.
 - Question: I am quick to understand things.
 - Options: Strongly disagree, Disagree, Neutral (selected), Agree, Strongly agree.
 - Status: 3 of 4.
 - Buttons: Back, Next.
- Screen 3: Upload Your Documents**
 - Header: 9:41, signal, battery.
 - Title: Upload Your Documents.
 - Text: 1/3.
 - Text: Share your transcript for a more personalized study plan.
 - Input: A dashed box for file upload with instructions: select your file or drag and drop, pdf accepted, choose file.
 - Status: 4 of 4.
 - Buttons: Back, Next.
- Screen 4: Upload Your Documents**
 - Header: 9:41, signal, battery.
 - Title: Upload Your Documents.
 - Text: 2/3.
 - Text: Provide your weekly schedule to help us tailor your study plan to your free time.
 - Section: Select the date. Tuesday is highlighted in blue.
 - Section: Select time. From 12.00 to 14.00.
 - Section: Category selection with color-coded options: Meeting (orange), Hangout (purple), Cooking (red), Other (black), Weekend (green).
 - Status: 4 of 4.
 - Buttons: Back, Next.

PERSONALITY TEST FRAMEWORK : OCEAN Model



I see myself as someone who...

Tends to be lazy

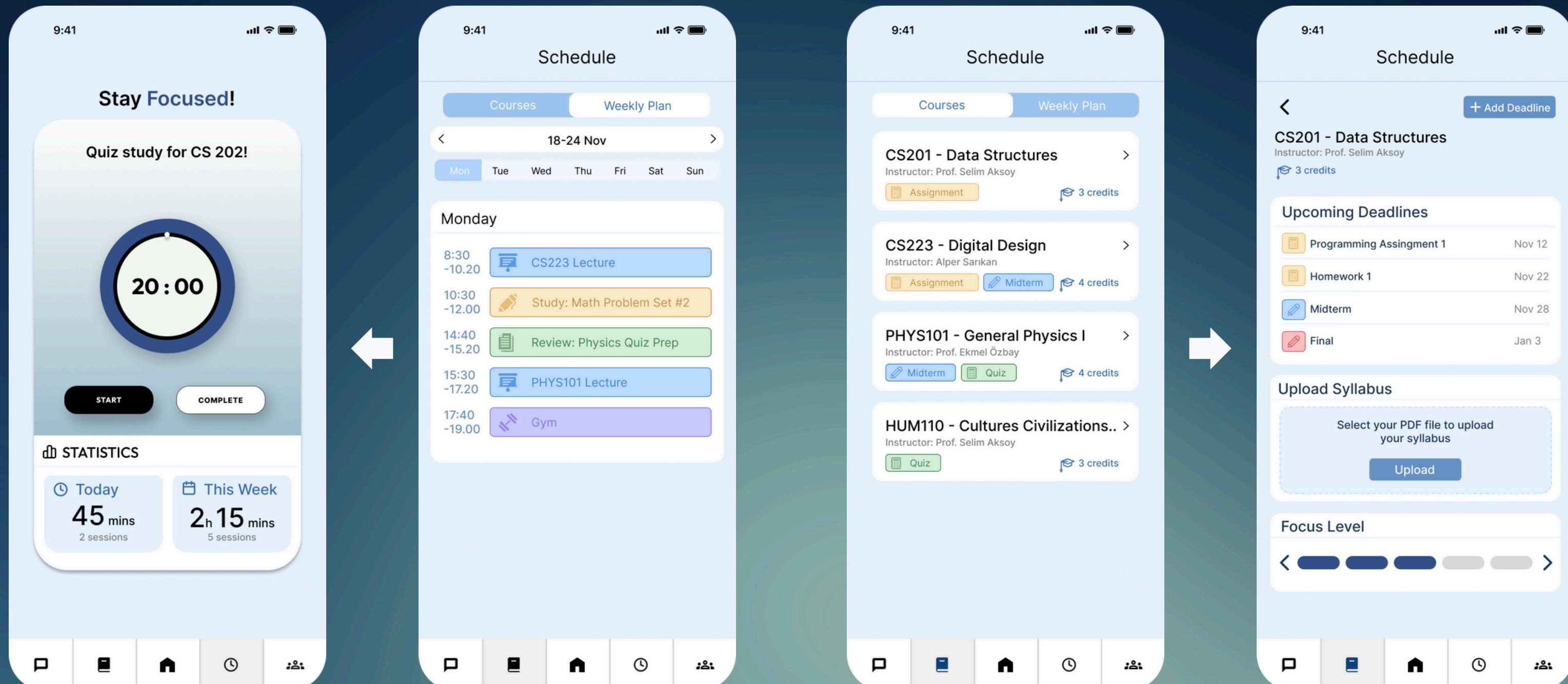
Disagree



Agree

<https://www.truity.com/test/big-five-personality-test>

Study Pages Overview



Study Scheduling System

Study Schedule

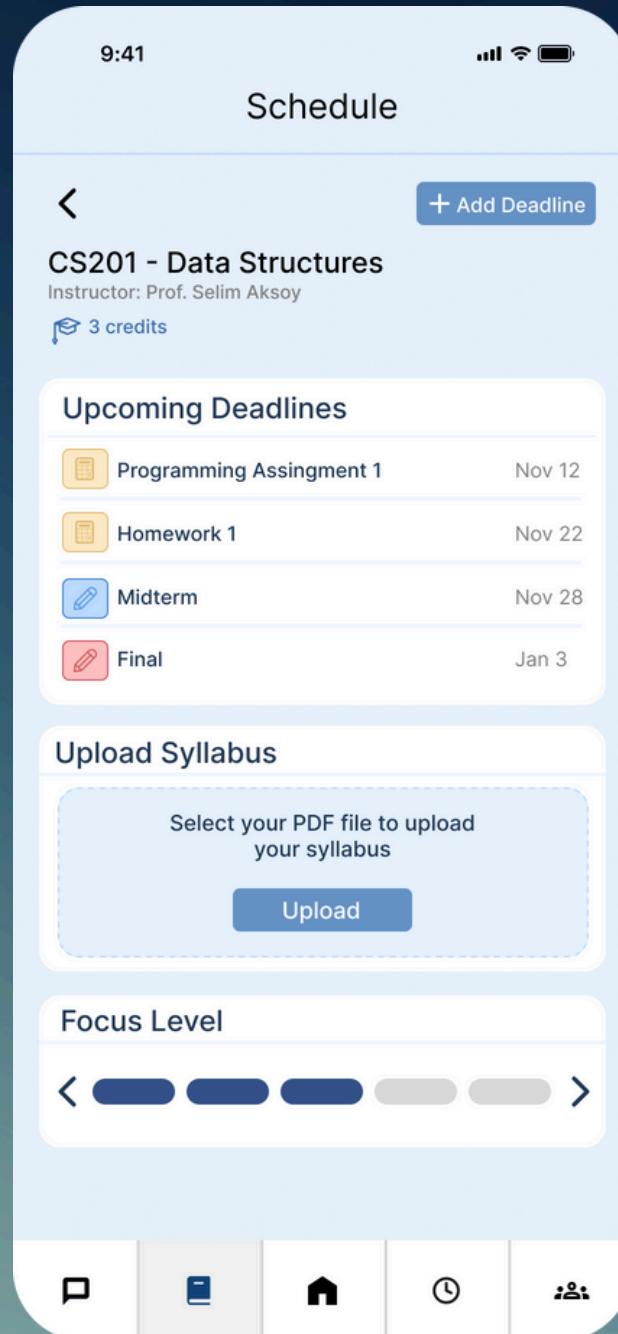
Academic
Constraints

Personality
Parameters

Daily
Emotion Check

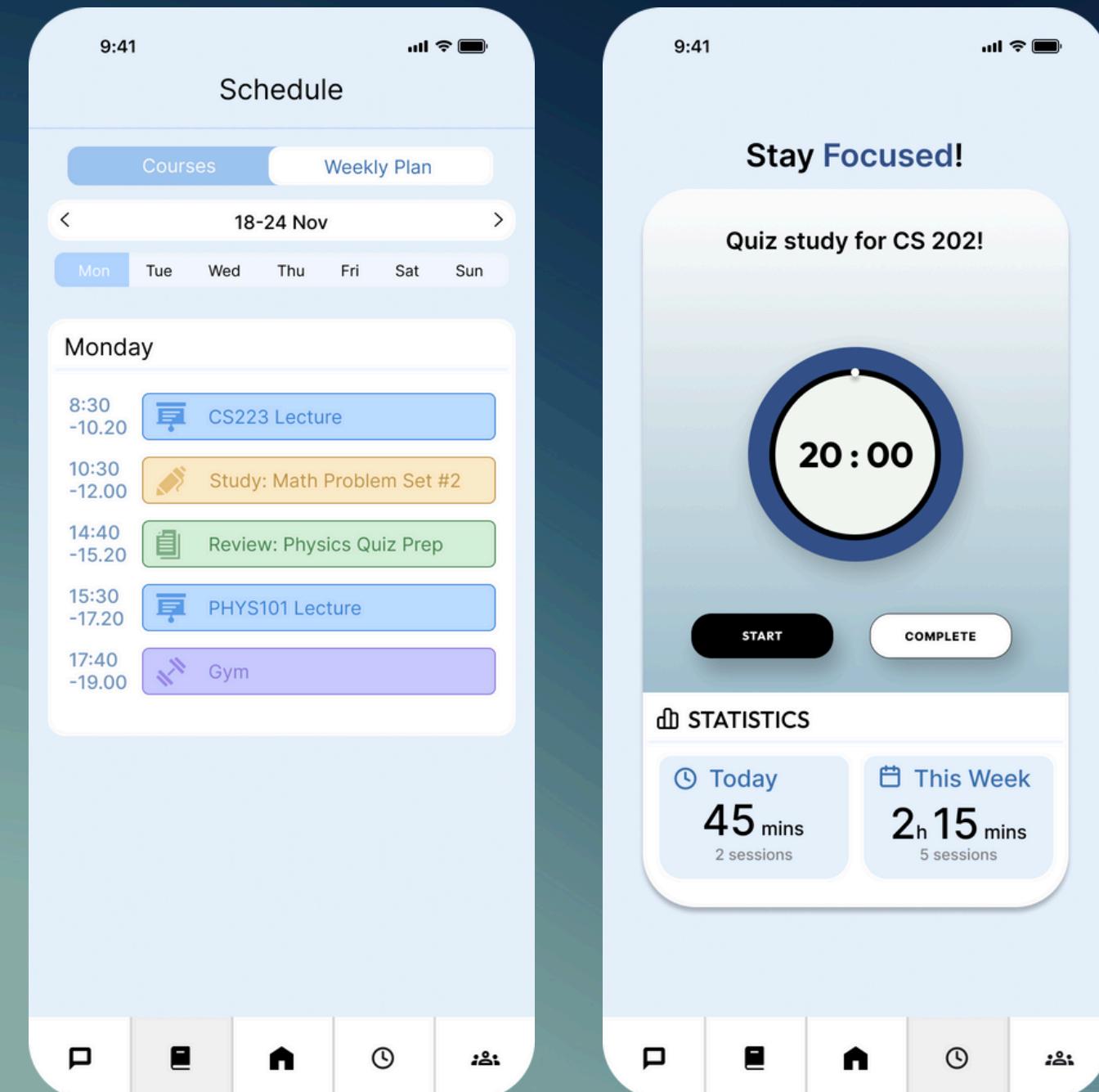
Academic Constraints

- Upcoming Deadlines
- Course credits and workload
- Transcript
- Focus Level



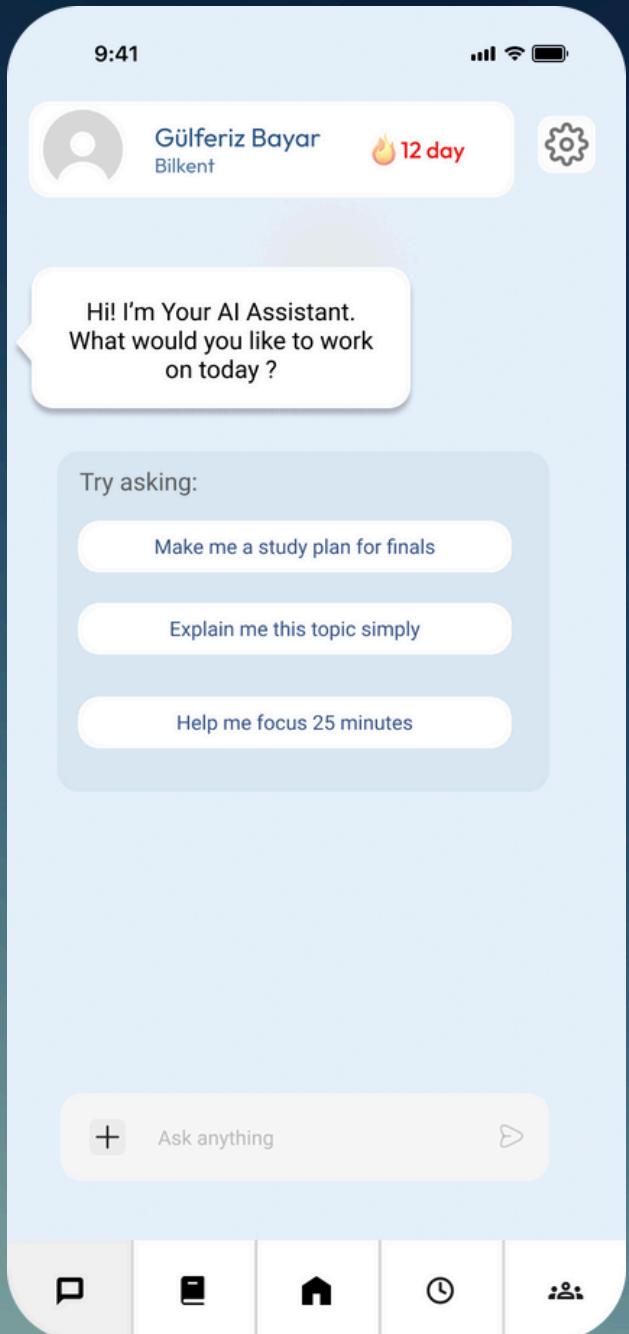
Personality Parameters

- Openness
- Conscientiousness
- Extraversion
- Agreeableness
- Neuroticism

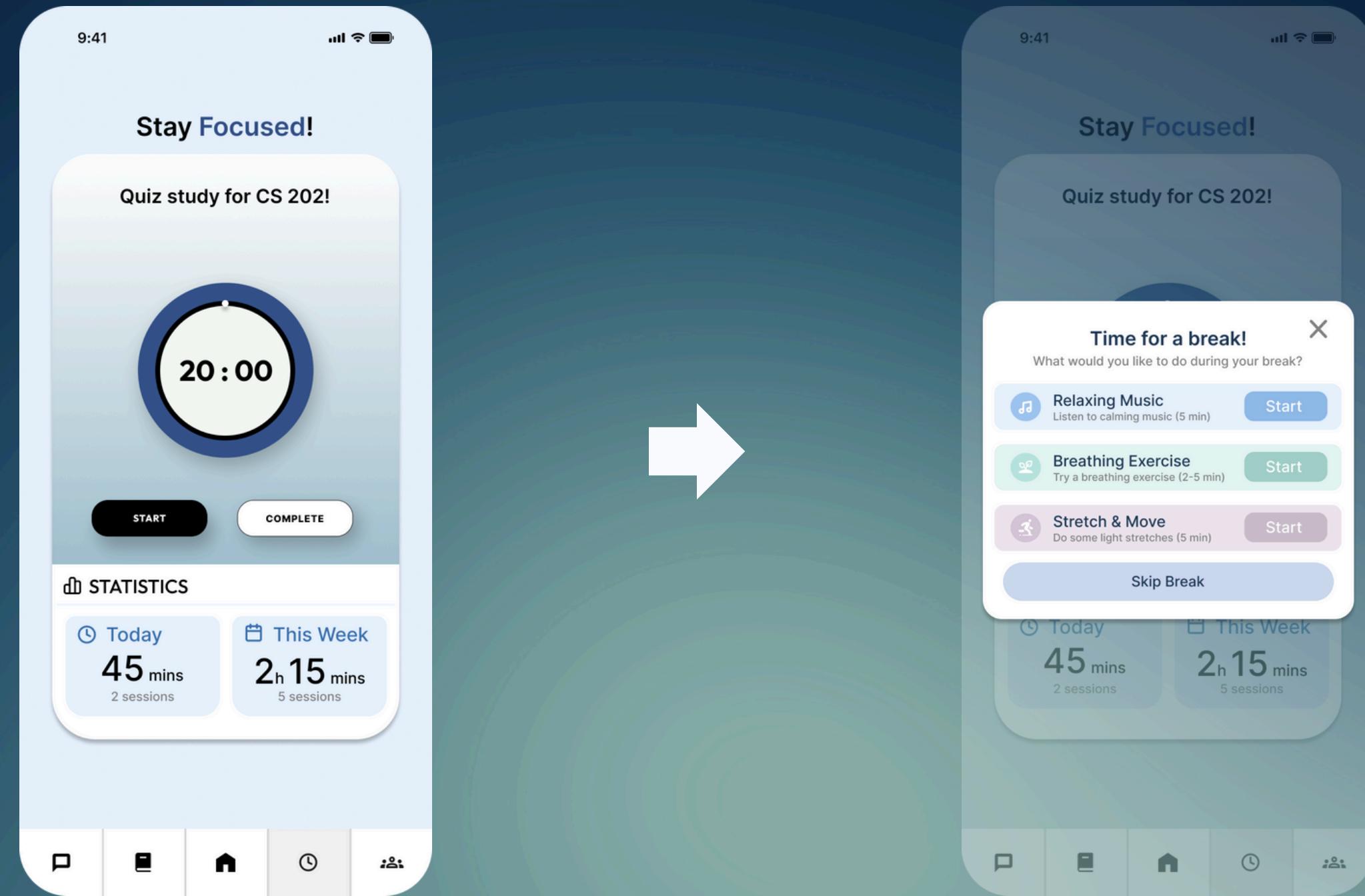


Daily Emotion Check

- Joy
- Sadness
- Anger
- Fear
- Disgust
- Neutral
- Stressed

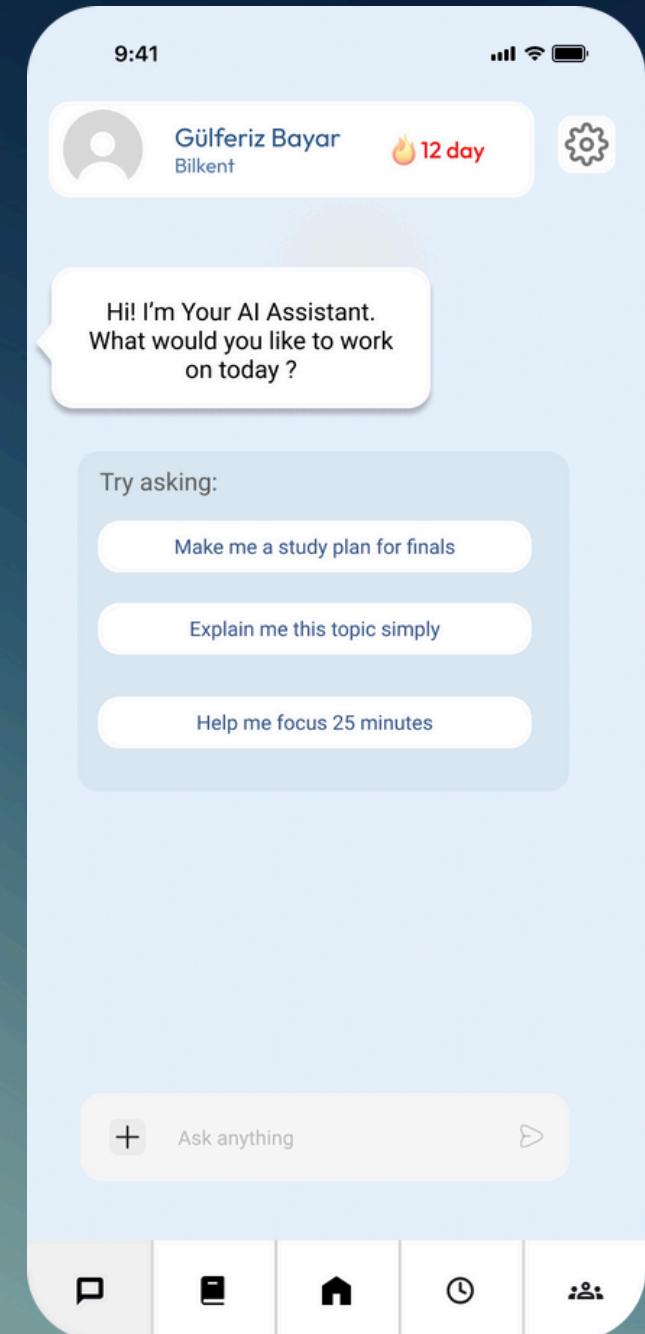


Pomodoro

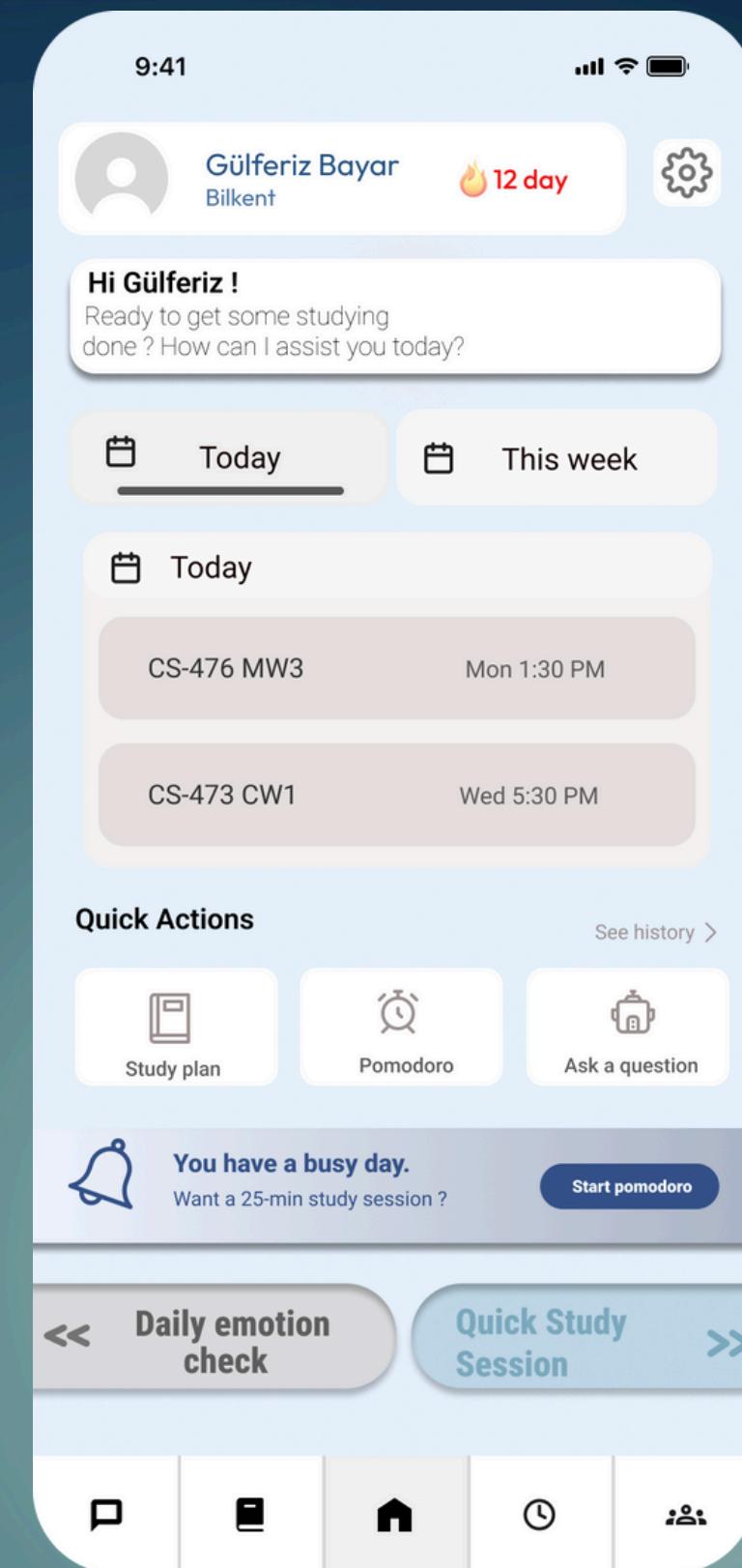


AI Assistant

Updating the schedule
through AI assistant with
casual conversations.



Main Page



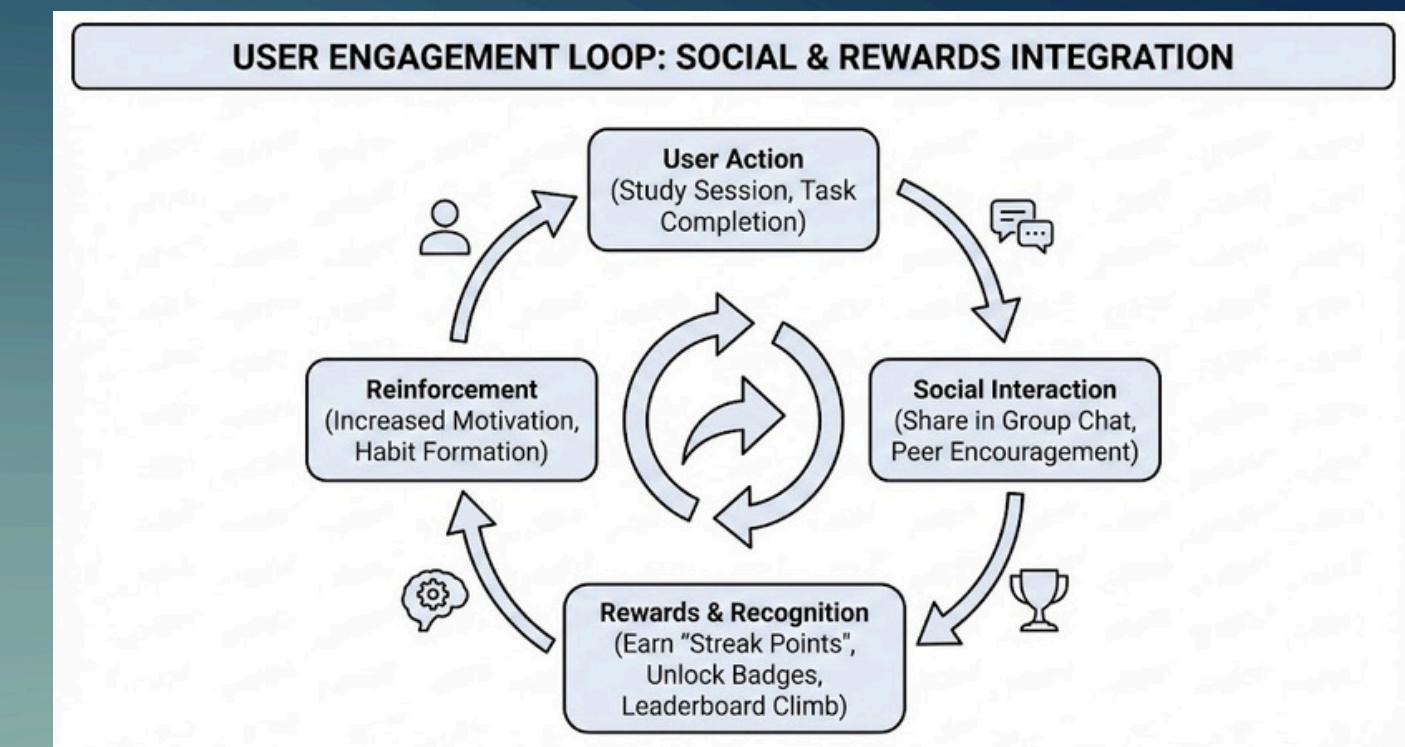
Strategic Approach: Gamification & Socialization

Engagement Strategy: Socialization & Gamification

Goal: Maximize User Retention and Session Duration.

Method: Transforming isolated study into a social ecosystem.

Core Concept: Triggering the "Habit Formation" loop.



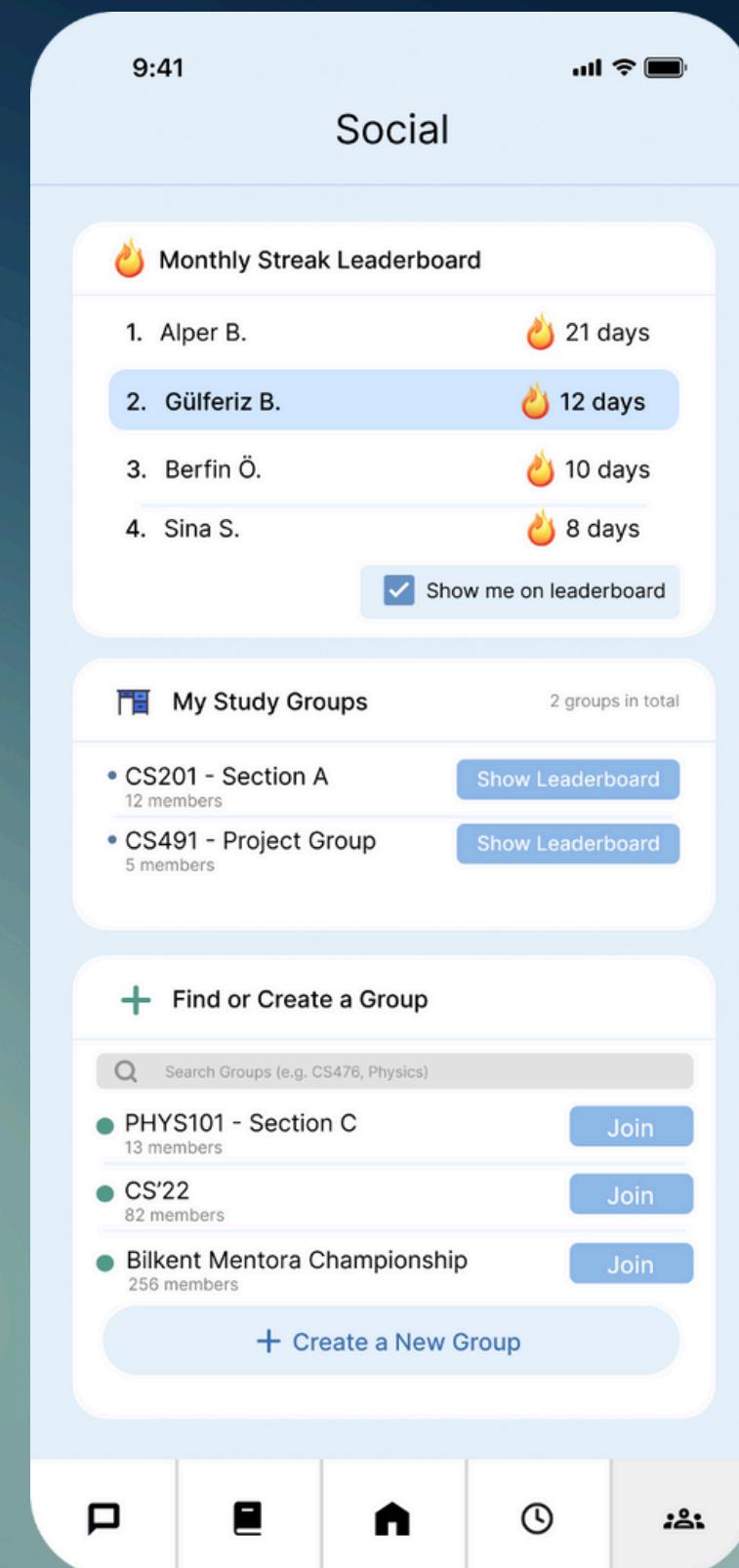
Peer-to-Peer Learning: Study Groups

Social Learning: Dynamic Study Groups

Goal: Dynamic matching based on courses or specific topics.

Method: "Study Buddy" system to prevent isolation.

Core Concept: Collective success through knowledge exchange.



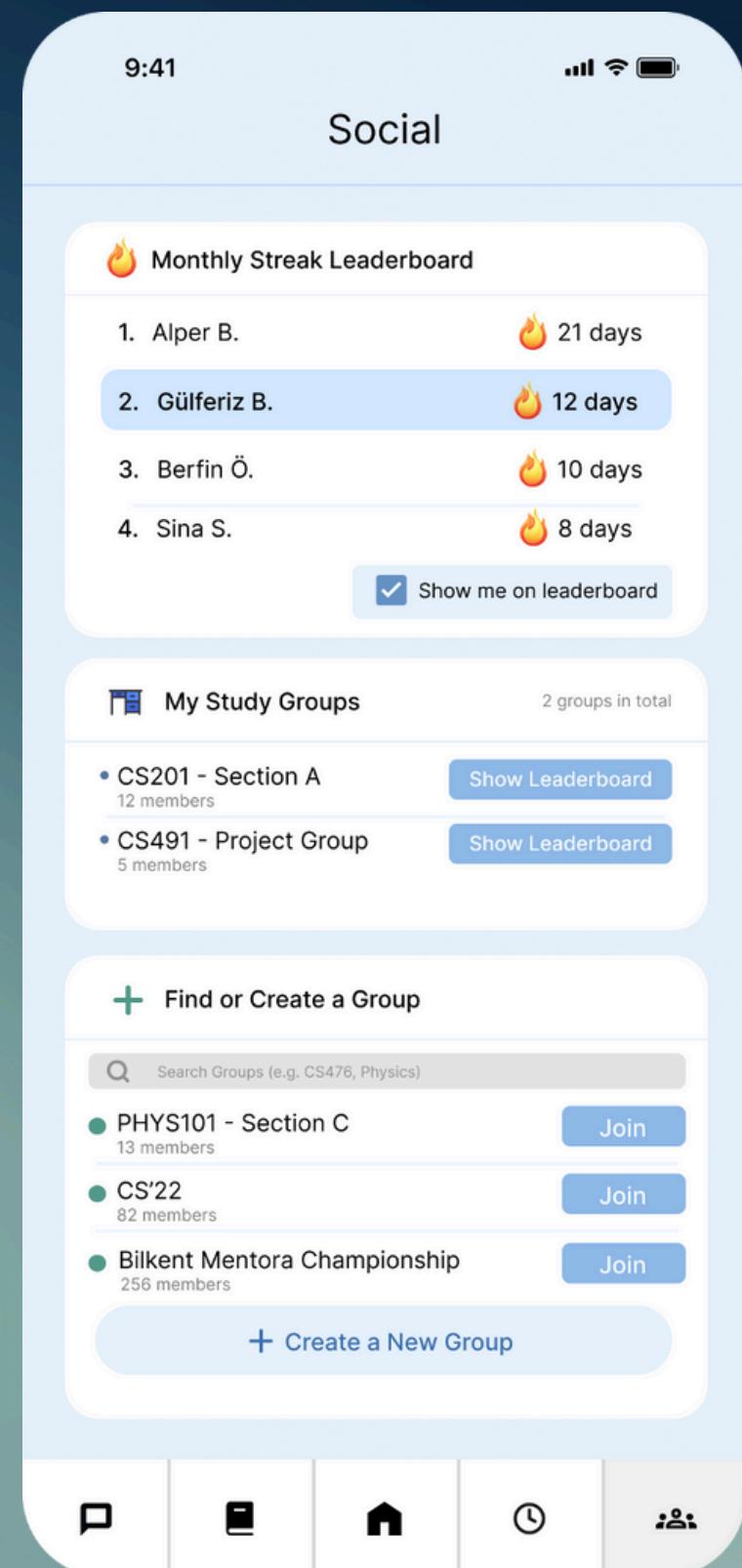
Habit Loop: The Streak Mechanism

Habit Management: Streak Tracking

Increasing "Streak Score" for daily continuity.

Leveraging "Don't Break the Chain" psychology.

Visual feedback to encourage consistency.



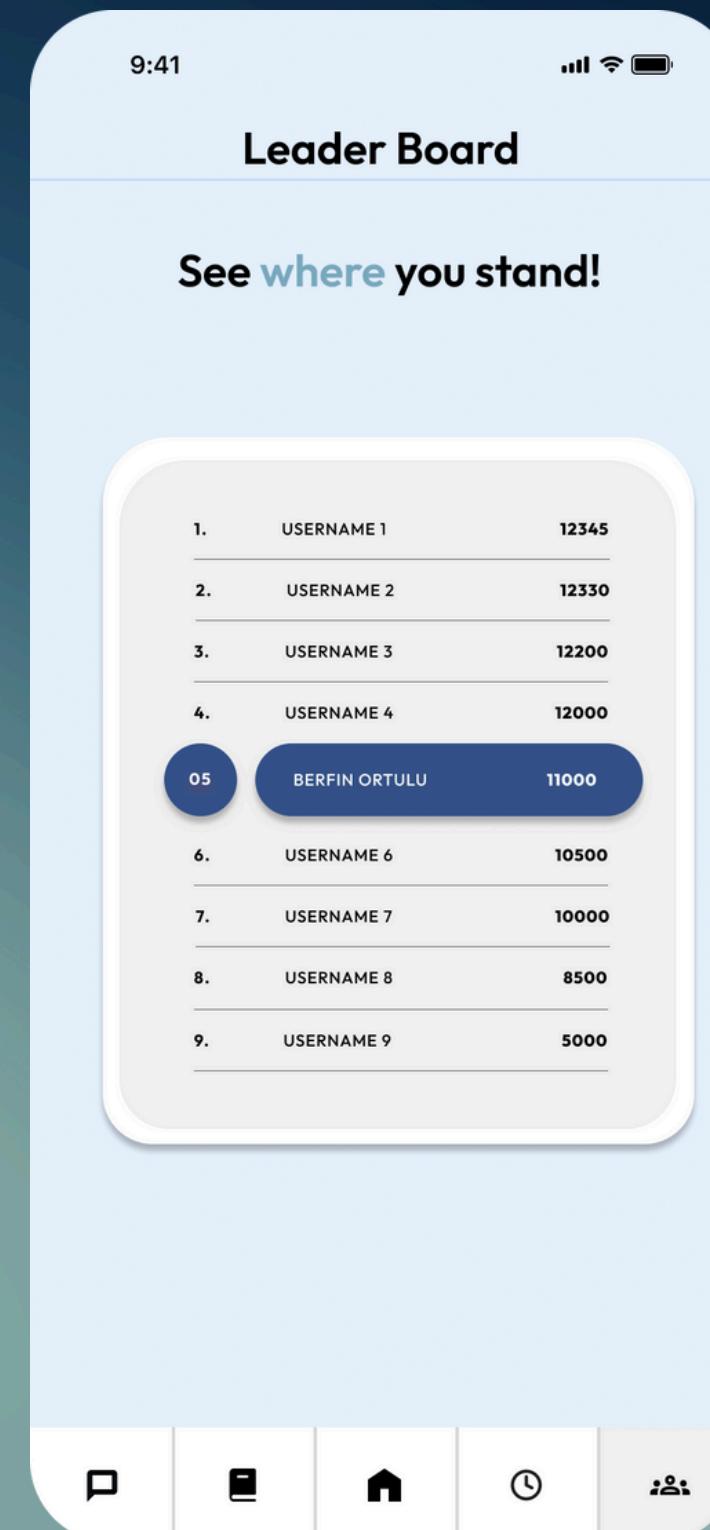
Competition & Motivation: Leaderboards

Leaderboards & Competitive Drive

Rankings based on Weekly Study Hours and Streaks.

Global vs. Friend Group classifications.

Social Proof: Motivating users to study more by seeing peers' progress.



Smart Re-engagement: Notification System

Triggers: Smart Notification System

FOMO: "Your friend just passed your score!"

Loss Aversion: "Your streak is about to reset!"

Personalized Push Notification strategy to drive app launches.



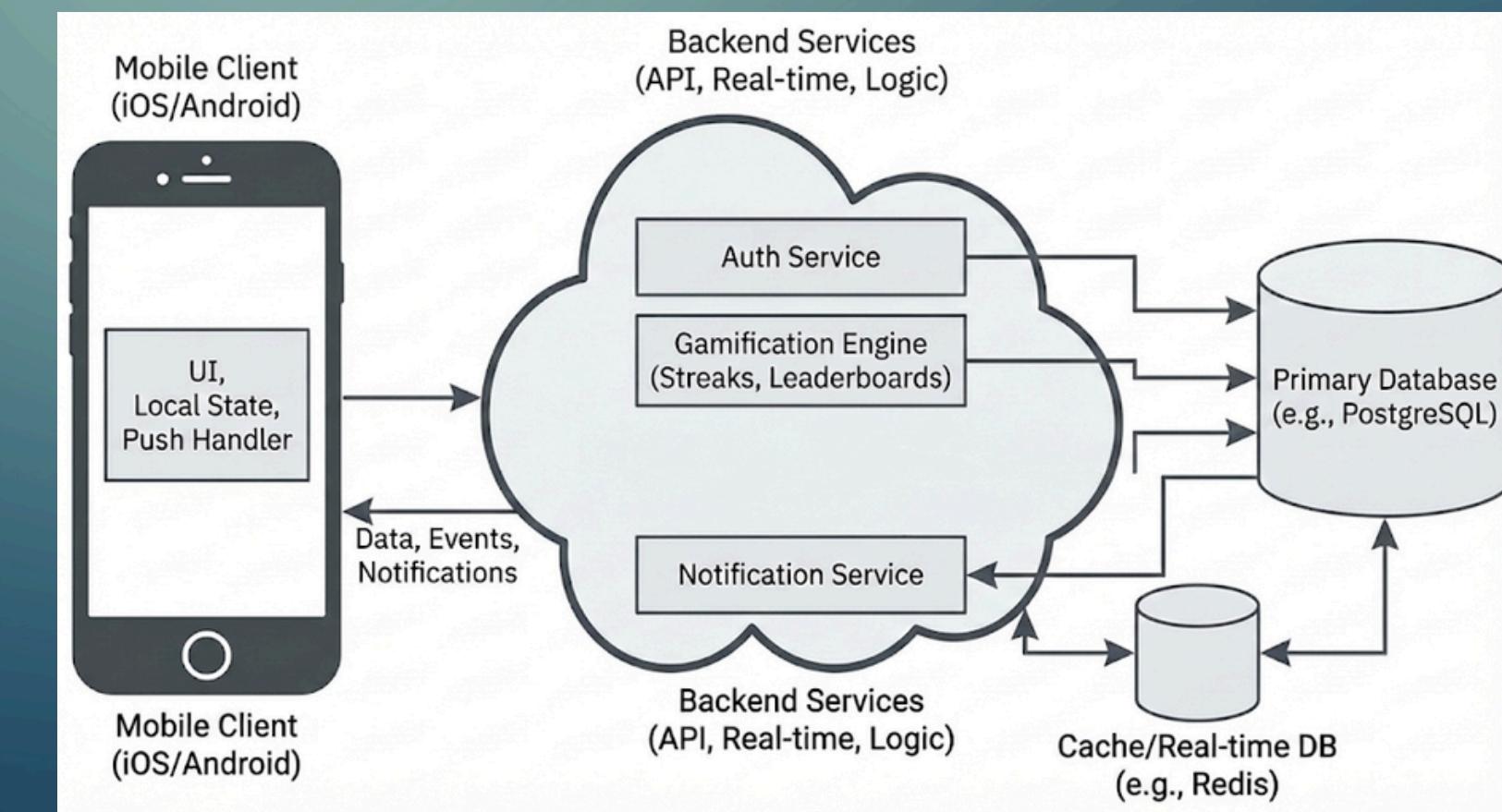
Technical Architecture

Infrastructure & Data Flow

FAST API based architecture.

Redis Sorted Sets for high-performance ranking algorithms.

Scalable notification microservices.



Thank you for listening