PROJECT 3

PRESENTATION

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INTRODUCTION

Sleep is crucial for health and well-being, yet students often neglect it due to academic demands, social activities, and irregular schedules. This can lead to long-term health issues and reduced performance.

My project aims to design a sleep tracking application tailored to students, leveraging wearable devices to provide actionable insights and foster healthier sleep habits. By understanding students' challenges and perceptions, we seek to create a practical, engaging solution that improves both their sleep and overall quality of life.

Thank you

CURRENT SLEEP-TRACKING TECHNOLOGIES

01

02

03

01

Apple Watch

Tracks sleep duration and quality using the "Sleep" app, monitors heart rate variability, and integrates with the Apple Health app.

02

Fitbit

Fitbit devices (Charge series, Versa) offer detailed insights into sleep stages (Light, Deep, REM), sleep duration, and restlessness. The devices also provide a sleep score based on these metrics.

03

Garmin

Provides in-depth tracking of sleep stages (Light, Deep, REM), as well as pulse oximeter (oxygen saturation levels) and heart rate variability during sleep, which helps assess recovery.

MENTAL MODELS

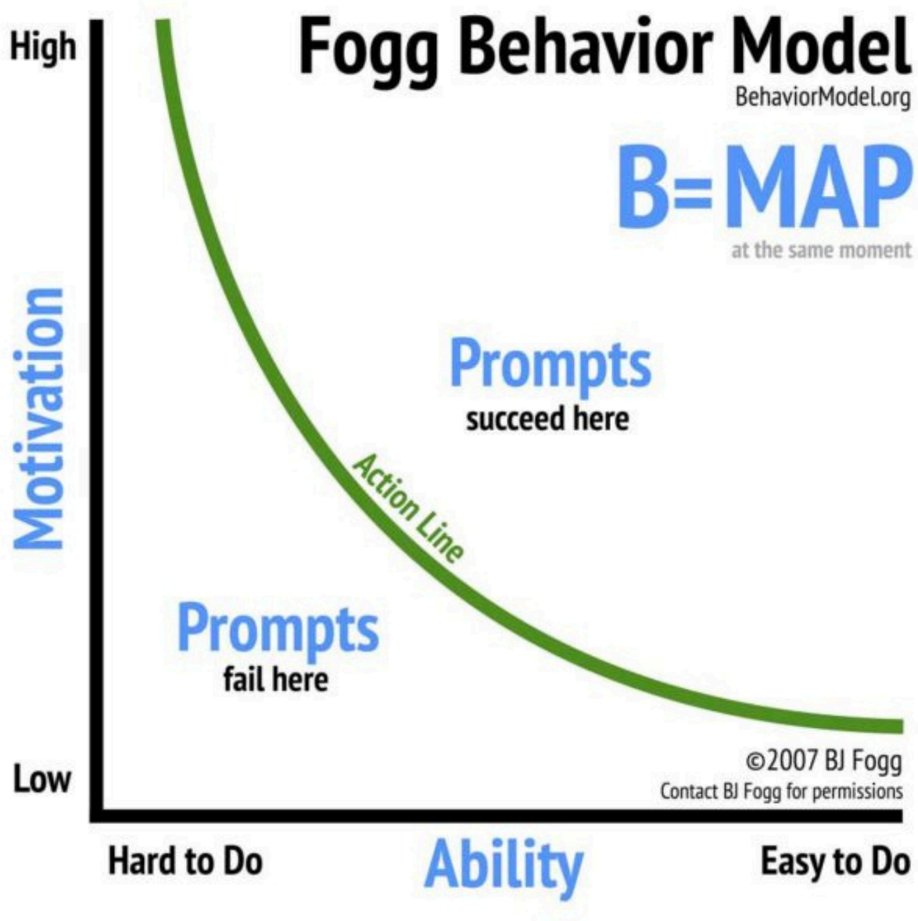
Common Misconceptions Among Students:

1. Sleep Deprivation is Acceptable
2. Focus on Sleep Duration, Not Quality
3. I Can Sleep When I’m Older

Technology’s Role in Shaping Mental Models:

1. Data Overload vs. Simplification
2. Educational Potential
3. Behavioral Shifts

BEHAVIOR CHANGE



1.BJ FOGG'S BEHAVIOR MODEL (BEHAVIOR = MOTIVATION × ABILITY × TRIGGER)

2.NUDGE THEORY

To encourage long-term behavior change, the app should:

- **Set Clear Goals**
- **Feedback Loops**
- **Continuous Motivation**
- **Personalization**

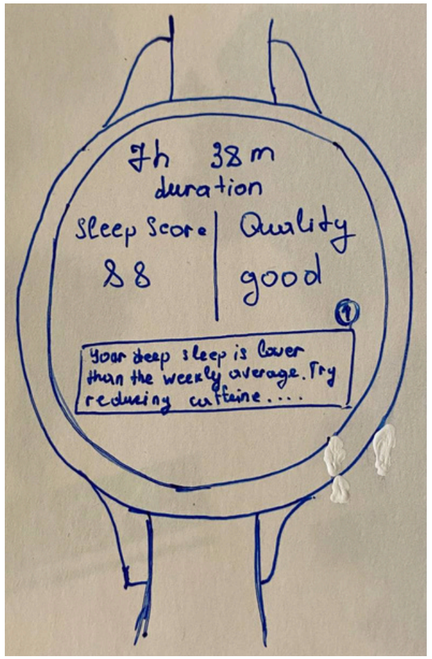
INTERVIEW AND OBSERVE STAKEHOLDERS

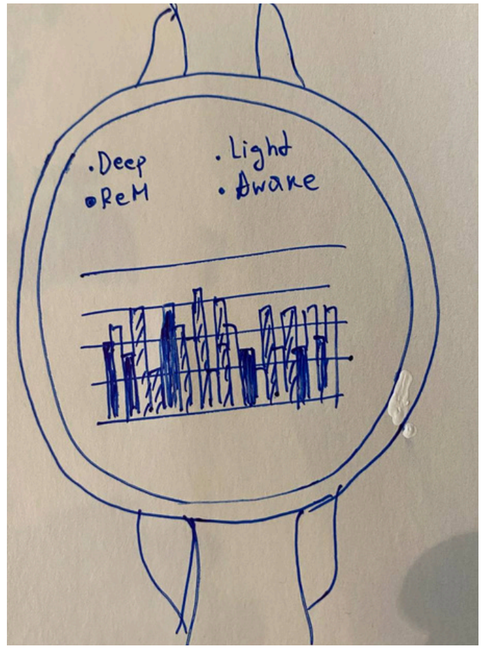
This section provides an in-depth analysis of the interviews and observations conducted with two groups:

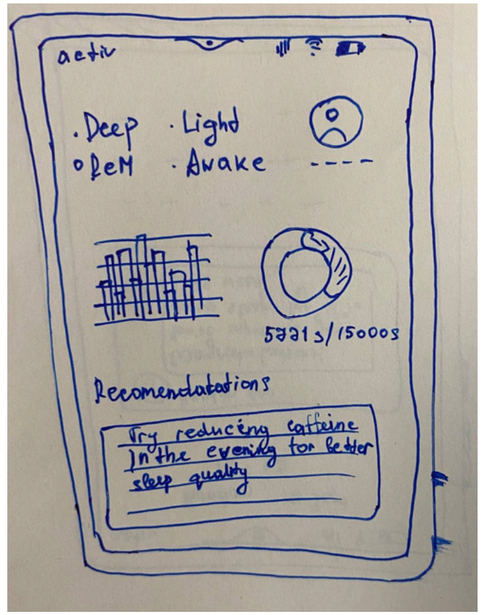
Students without trackers (Group A)

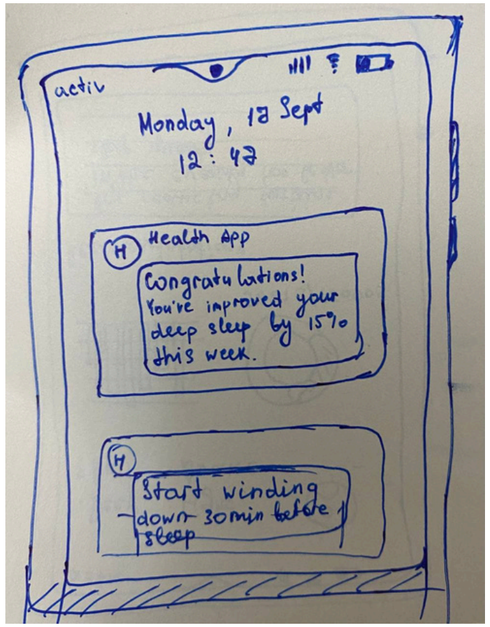
Students with trackers (Group B)

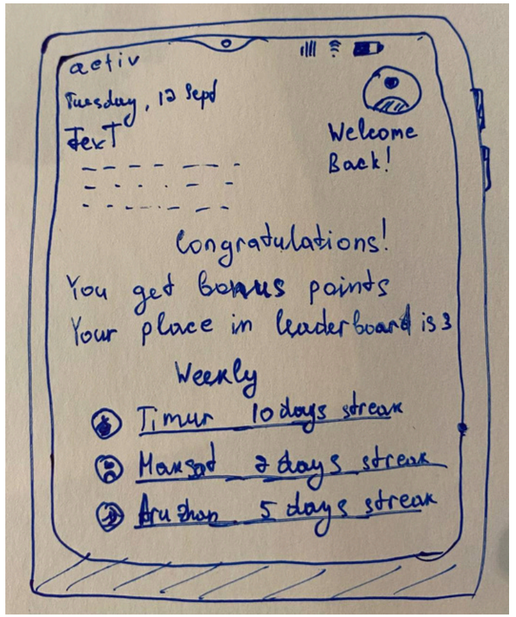
Observations highlight a need for solutions that simplify sleep tracking, educate users about sleep hygiene, and provide clear, personalized recommendations. Both groups could benefit from tools that integrate seamlessly into their routines and address practical challenges.

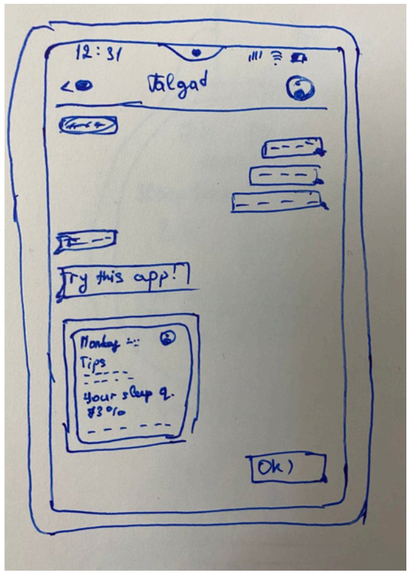

7h 38m
duration
Sleep Score
88
Quality
good
Your deep sleep is lower than the weekly average. Try reducing caffeine....

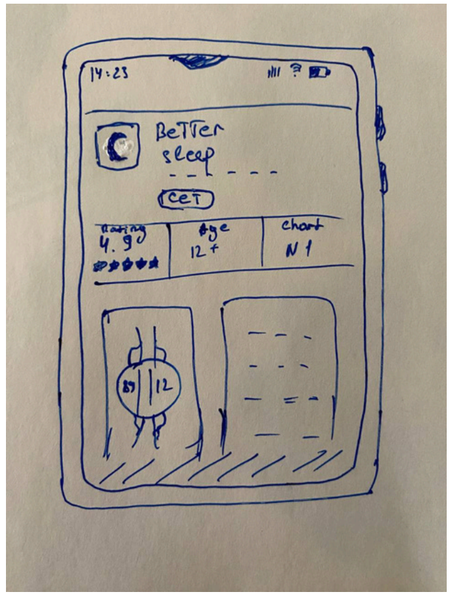

.Deep
.REM
.Light
.Awake

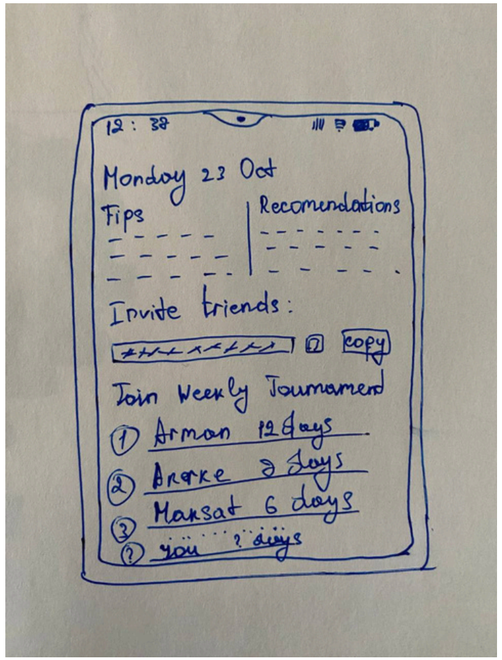

activ
.Deep
.REM
.Light
.Awake
5331s/15000s
Recomendations
Try reducing caffeine in the evening for better sleep quality


activ
Monday, 12 Sept
12:47
Health App
Congratulations! You've improved your deep sleep by 15% this week.
Start winding down 30min before sleep


activ
Tuesday, 12 Sept
Welcome Back!
Congratulations!
You get bonus points
Your place in leaderboard is 3
Weekly
Timur 10 days streak
Mansur 7 days streak
Arushan 5 days streak


12:31
Tilgad
Try this app!
Monday
Tips
your sleep q.
83%
Ok


14:23
BeTTer
sleep
CET
4.9
Age
12+
chart
N1


12:37
Monday 23 Oct
Tips
Recomendations
Invite friends:
Copy
Join Weekly Tournament
1 Arman 12 days
2 Anarke 9 days
3 Maksat 6 days
? you ? days

CONLUSION

THE ANALYSIS OF STUDENTS' SLEEP BEHAVIORS, BOTH WITH AND WITHOUT TRACKERS, REVEALED CRITICAL INSIGHTS INTO THEIR CHALLENGES AND OPPORTUNITIES FOR IMPROVEMENT. BY IDENTIFYING KEY OBSTACLES SUCH AS POOR SLEEP HYGIENE, EXTERNAL STRESSORS, AND LOW AWARENESS OF SLEEP QUALITY METRICS, THE STUDY HIGHLIGHTS THE NEED FOR INTERVENTIONS THAT ARE SIMPLE, PERSONALIZED, AND ACTIONABLE. THESE FINDINGS HAVE GUIDED THE DESIGN PROCESS TO CREATE A MORE EFFECTIVE AND ENGAGING SLEEP TRACKING SOLUTION.

THANK YOU

FOR YOUR NICE ATTENTION