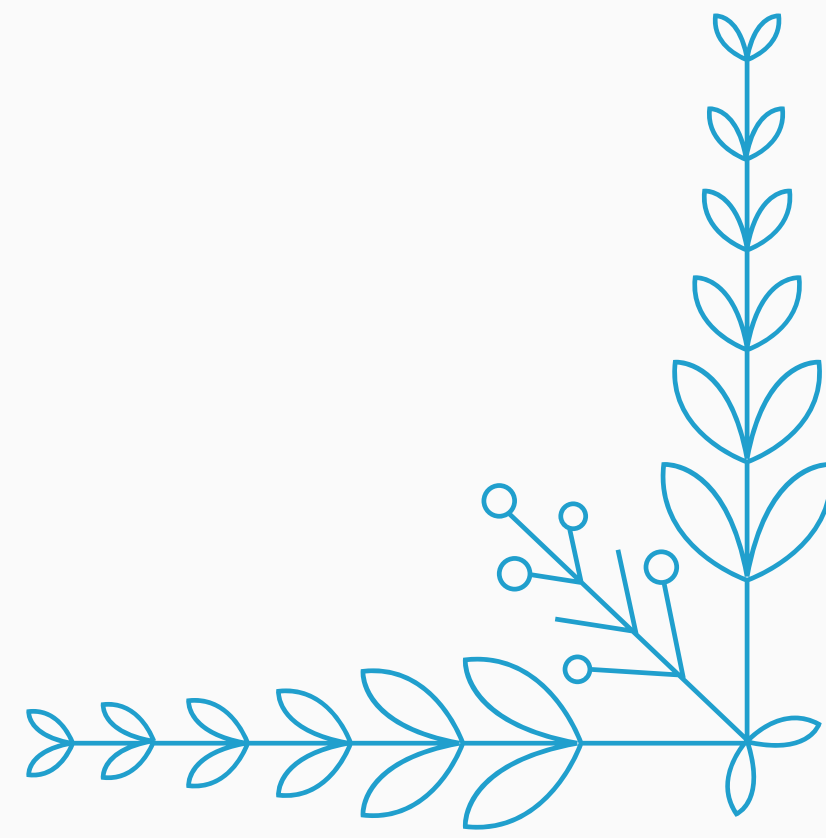


MOODSCAPE



MOODSCAPE

Prepared By :

Angelo Junior KITIO TSAGUE – Data Analytics

Elena Kirzhner – Data Analytics

Brian Stasiukaitis – Software Engineering

Devina Gillis – Software Engineering

Aaron Jazzar – Software Engineering

Rouzbeh Vahdatiasl – Software Engineering

Carol Barger – Team Advisor



MOODSCAPE

Mission



Moodscape looks to transform mental health support in the workforce.

We work to bridge technology with compassion to redefine mental health care.



Problem Statement



In today's fast-paced world, the negative effects that lifestyle choices have on mental wellness are pervasive and often overlooked. Existing solutions may fall short in providing accessible and personalized support. Our challenge is to innovate and create a solution that addresses these gaps, offering effective mood tracking, stress management, and personalized coping strategies to improve mental well-being.



Data Analysis

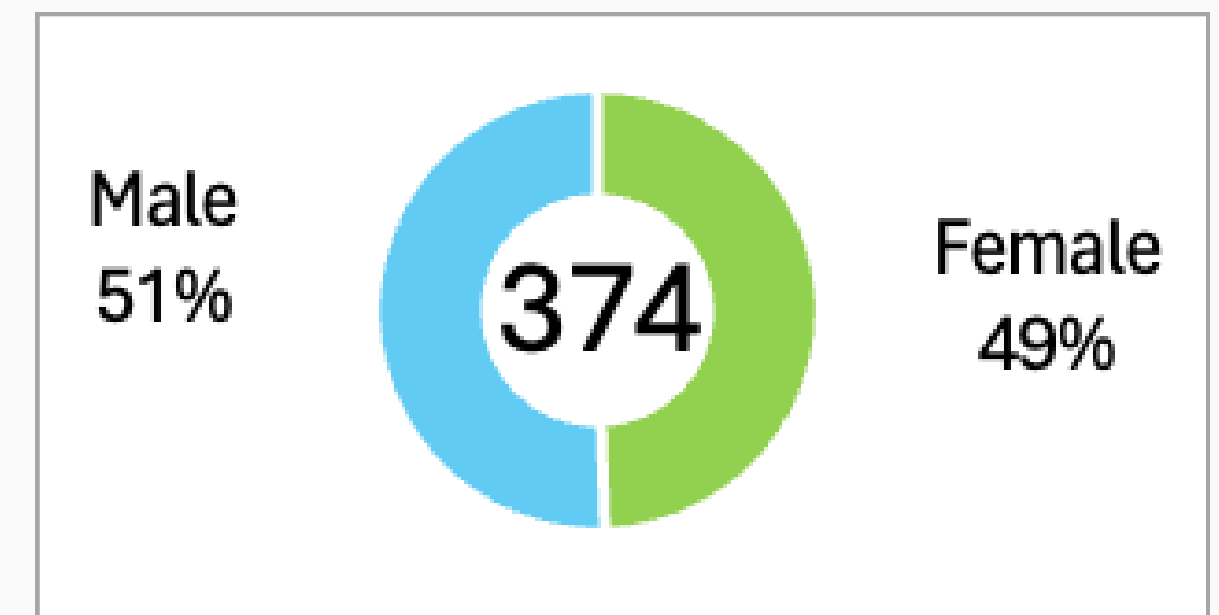


Goals:

- Analyze and visualize the provided data from Sleep Health and Lifestyle Dataset (<https://www.kaggle.com/datasets/uom190346a/sleep-health-and-lifestyle-dataset>)
- Provide KPIs and suggestions for increasing sleep duration and sleep quality

The Dataset:

The dataset contains 374 respondents, 400 rows and 13 columns, covering a wide range of variables related to sleep and daily habits. It includes gender, age, occupation, sleep duration, quality of sleep, physical activity level, stress levels, BMI category, blood pressure, heart rate, daily steps, and the presence or absence of sleep disorders.



The Process



The analysis has been performed, and key findings were noted, along with t-tests, dynamic and static dashboards and KPI recommendations.

Two questions were addressed in this analysis:

1. Is there a significant difference in KPIs between sleep duration, sleep quality, stress level, physical activity level, daily steps and heart rate?
2. Is there any correlation between sleep duration, quality of sleep, stress level, physical activity level, daily steps and heart rate?

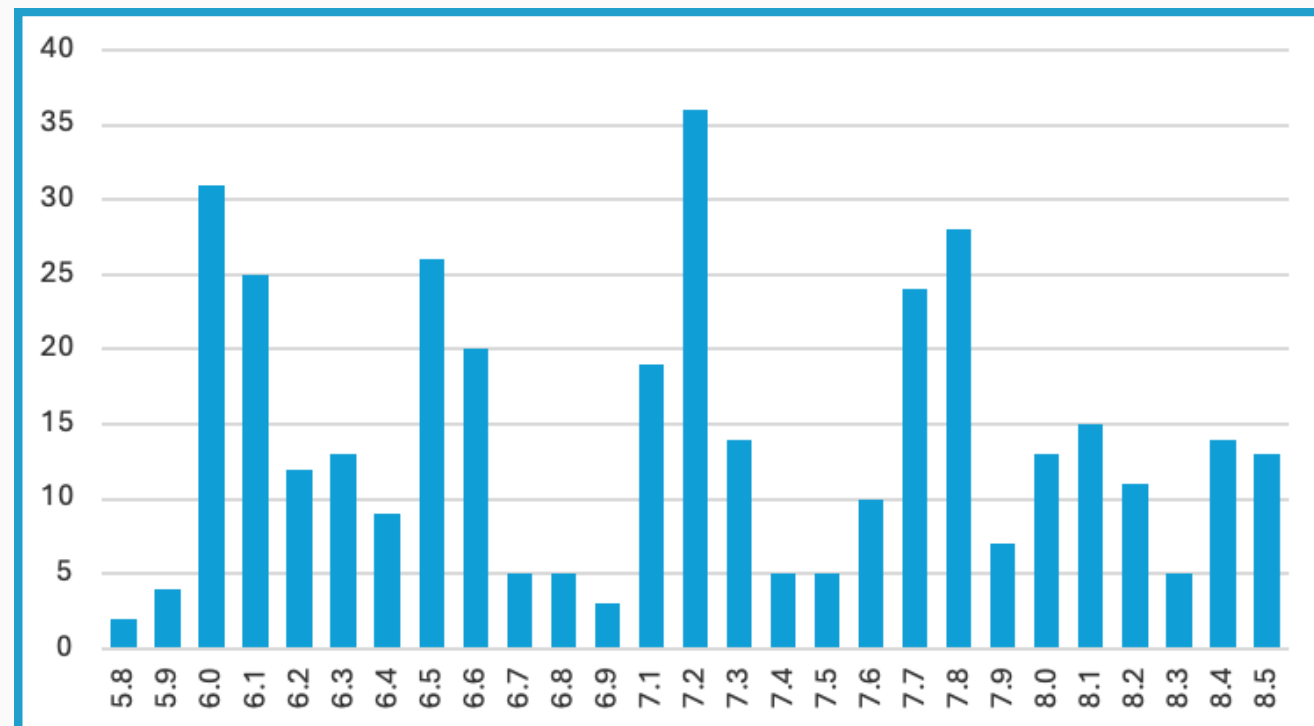
Once KPIs were established, heat-map and scatterplot visualizations were used to show correlations of sleep duration between the other five variables.

Key Findings

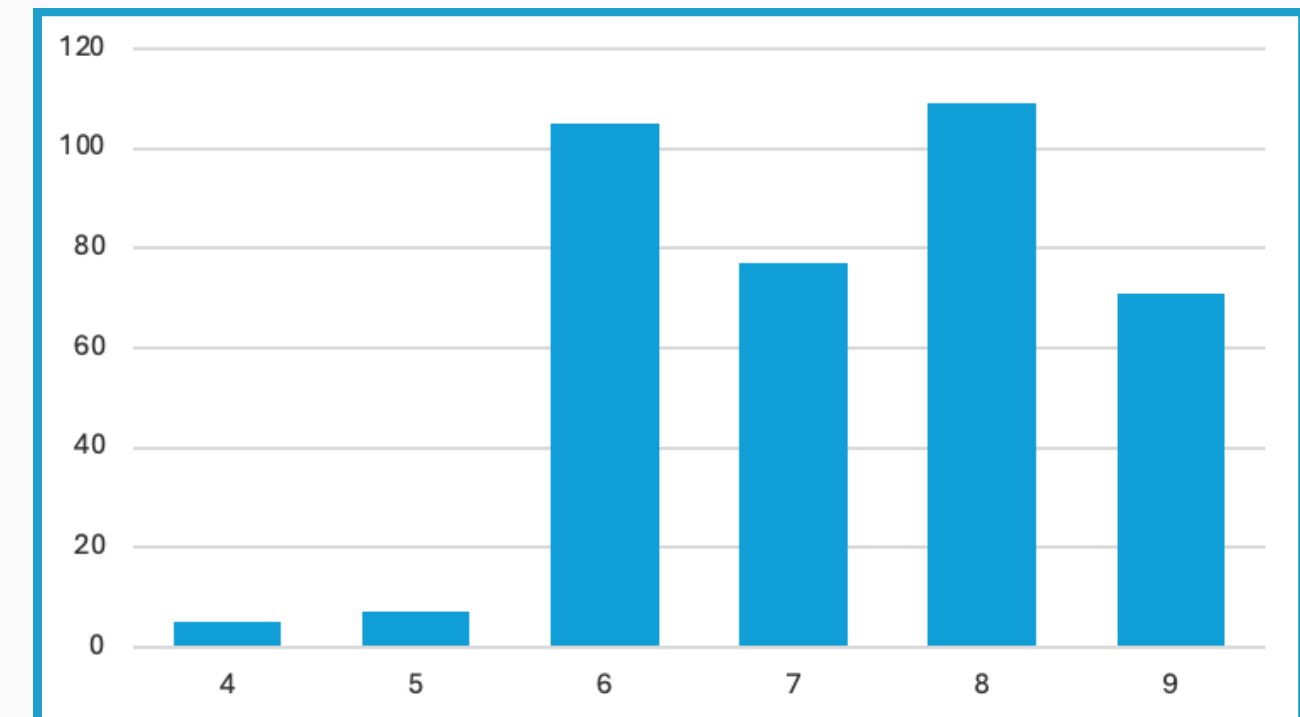
T-test proved the hypothesis that the sleep duration KPI affect other variables.

	Sleep Duration	Quality of Sleep	Stress Level	Physical Activity Level	Daily Steps	Heart Rate
Average	7.13	7.31	5.39	59.17	6816.84	70.17
Minimum	5.8	4	3	30	3000	65
Maximum	8.5	9	8	90	10000	86
KPI	7	7	5	59	6817	70

Distribution of Sleep Duration



Distribution of Sleep Quality

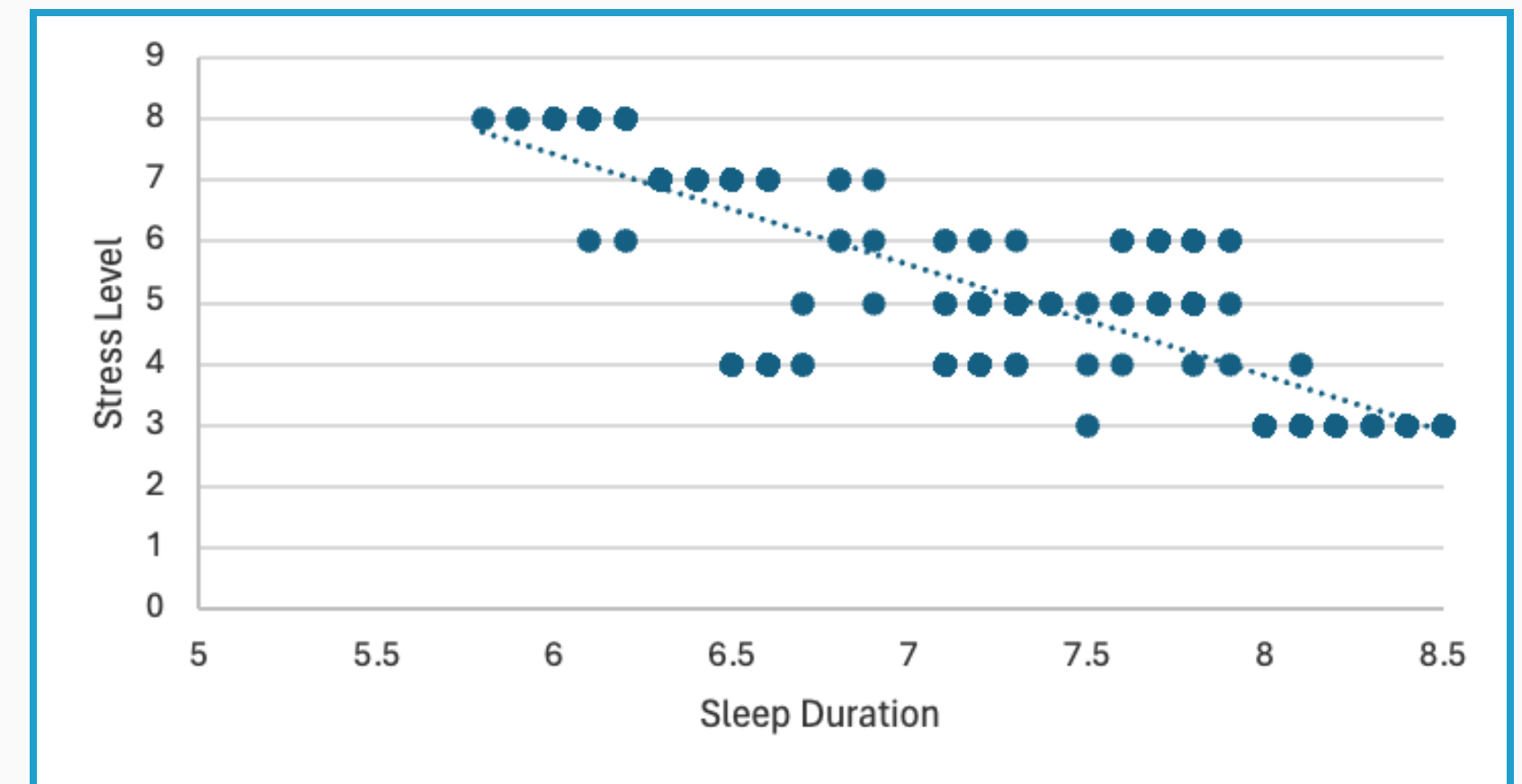
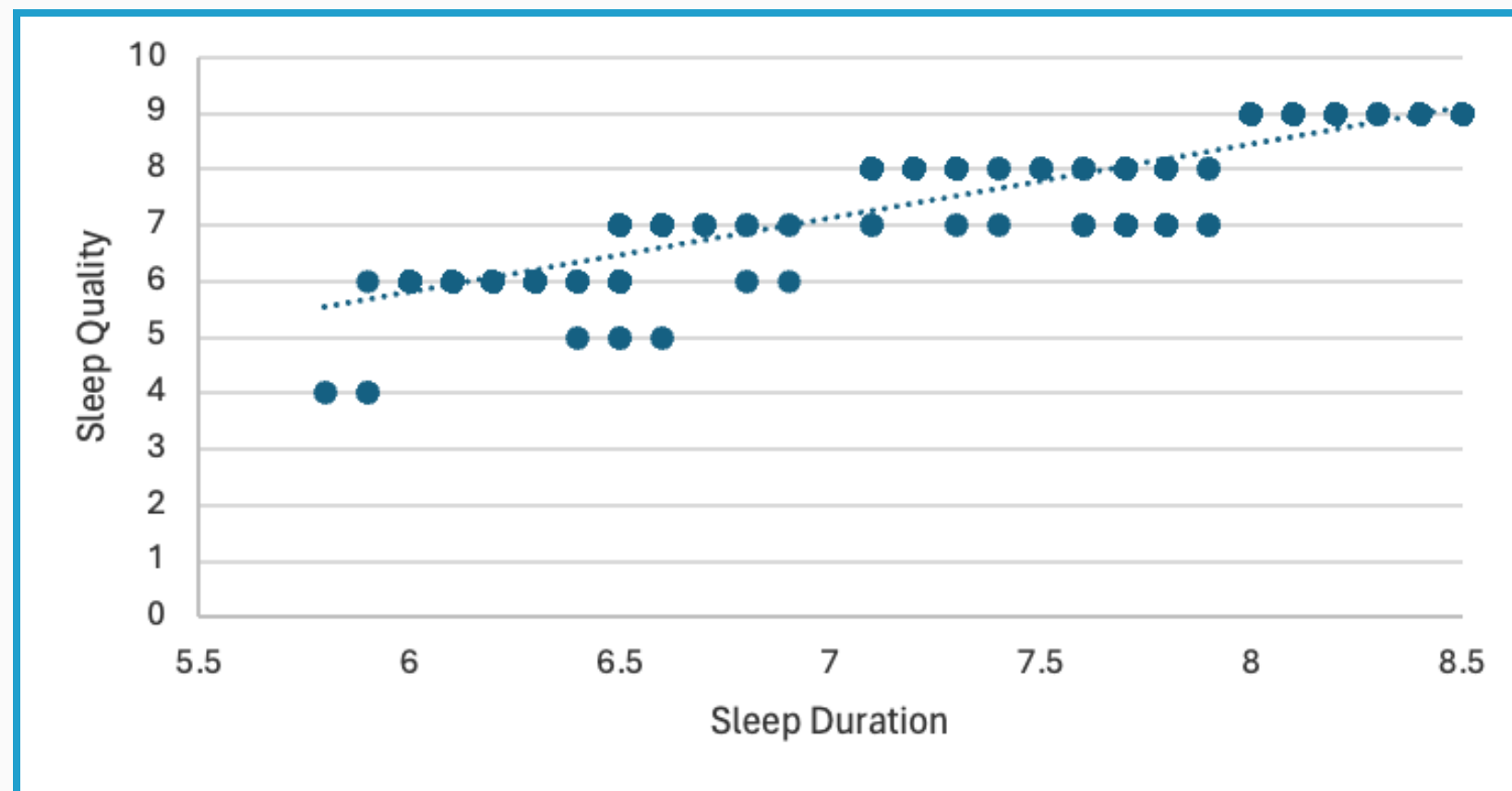


Key Findings

The scatter plots show correlation between sleep duration, quality of sleep, stress level, physical activity level, daily steps and heart rate. This means that 5 subjects have impact on sleep duration.

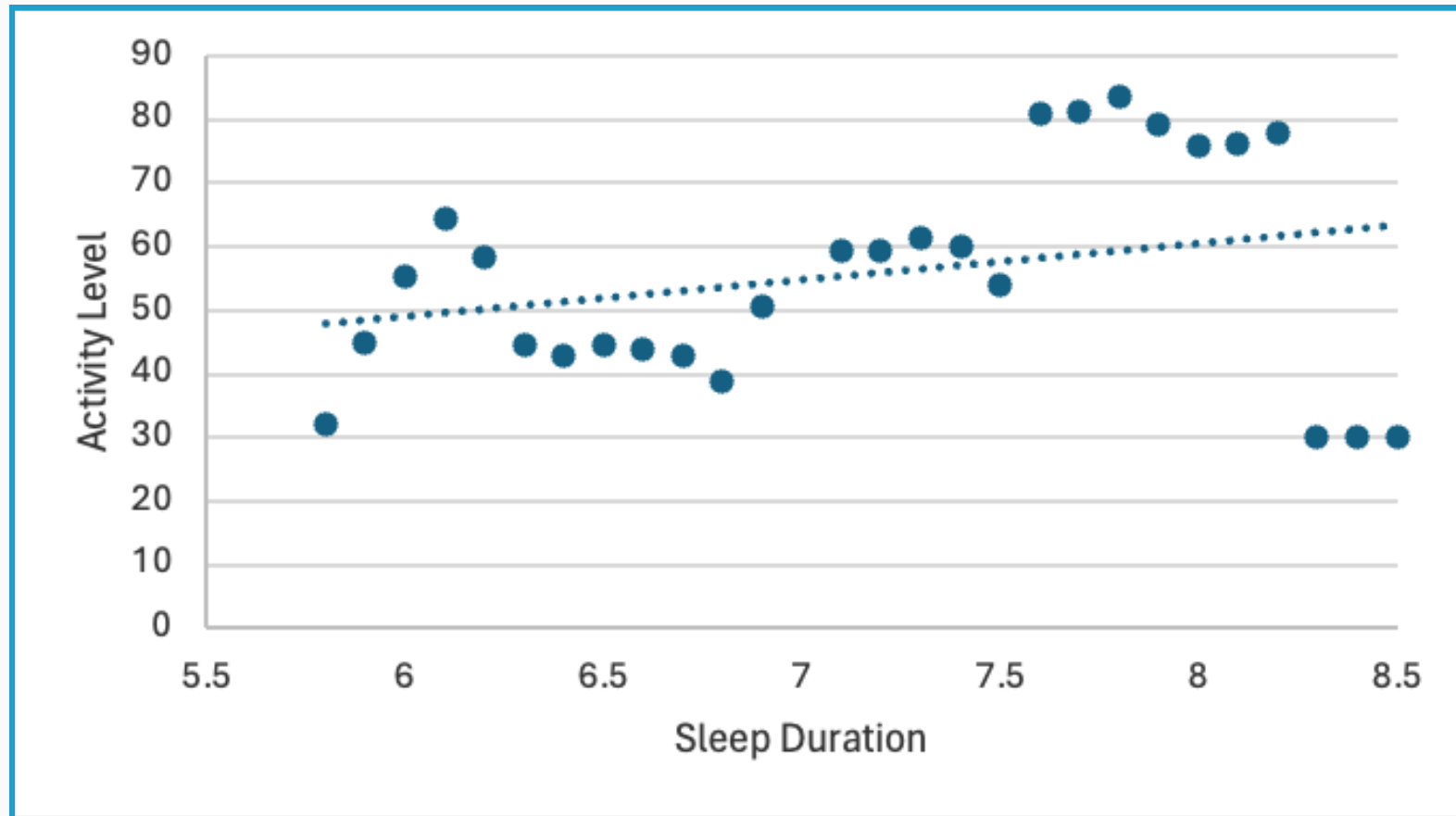
Sleep Longer Means Better Sleep Quality

Sleep Longer Means Less Stress

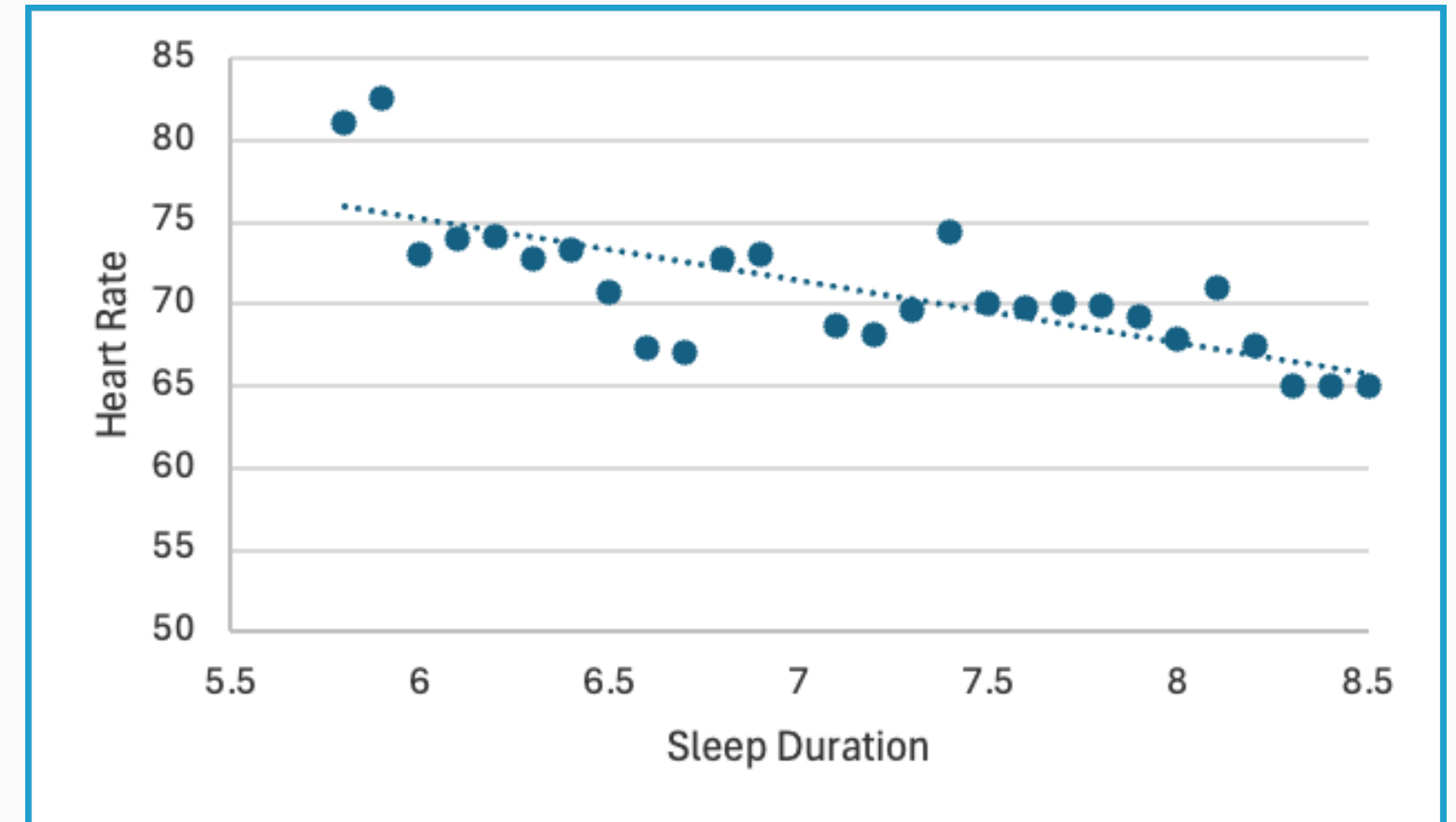


Key Findings

Sleep Longer Means Higher Activity Level



Sleep Longer Means Lower Heart Rate

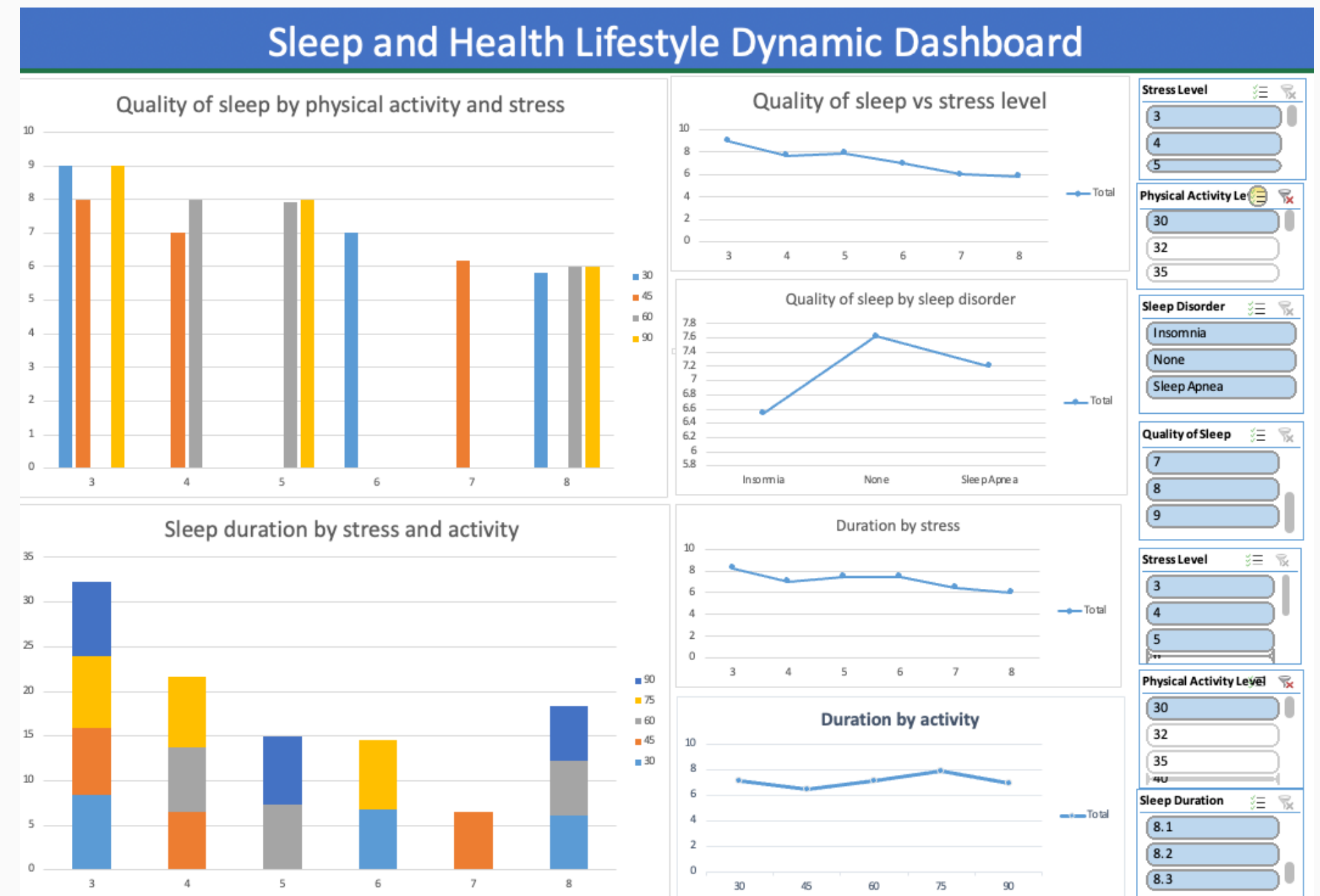


What Affects Sleep Duration and Sleep Quality



These observations suggest improvement scenarios that should be experimented in dynamic dashboard, as follows:

Sleep health improvement dashboard

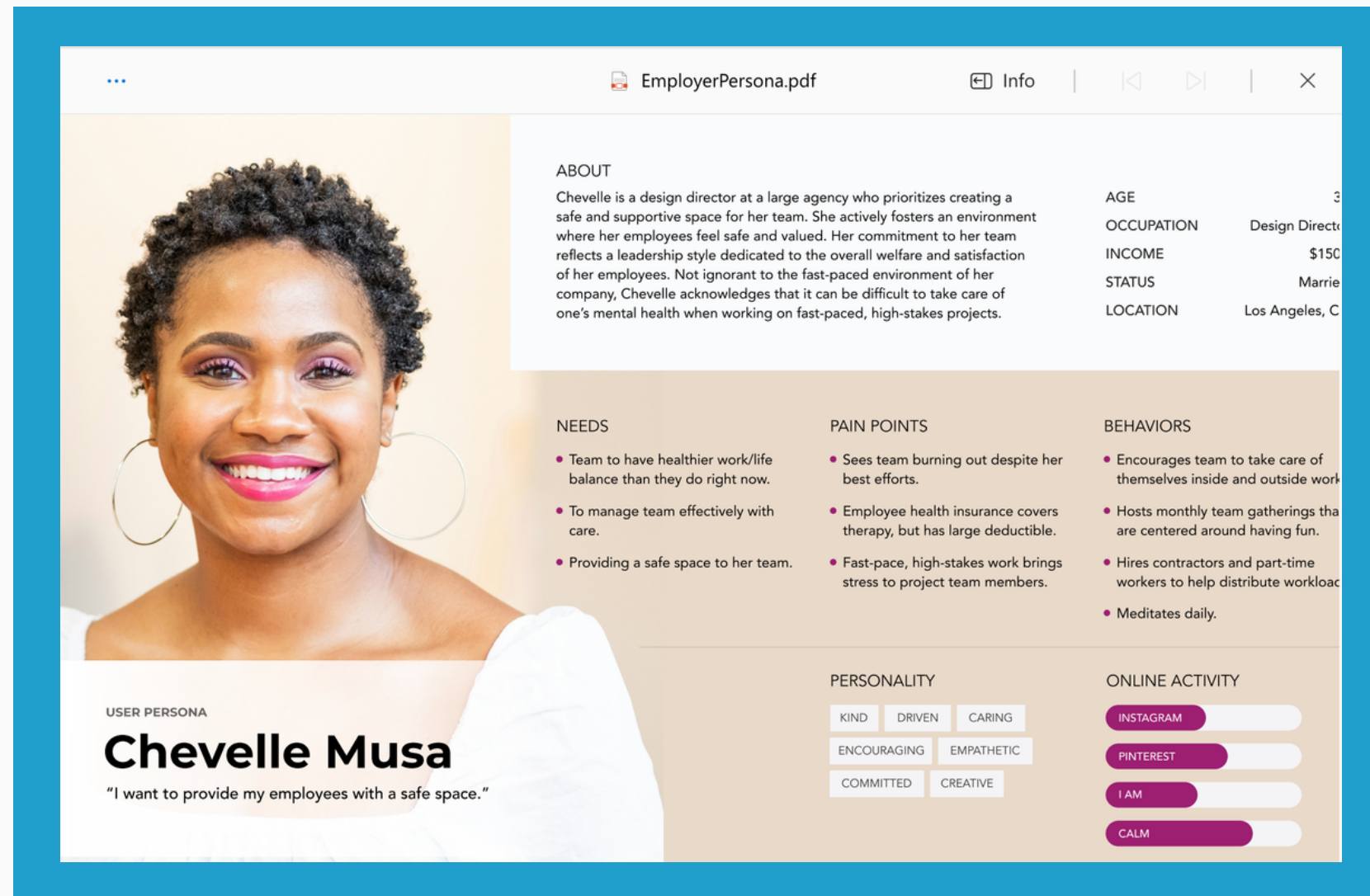


Who is Moodscape
Designed For?

UX/UI Design



Employees facing burnout and stress in the workplace



Employers who need a tool to help them create a healthier working environment for their team



User Needs

- A way to manage stress and work/life balance
- Solutions for handling burnout in the workplace

Our Solution

An app that provides mood tracking and personalized recommendations for user wellness

UX/UI Design



Employee Flow

209FCD

FAFAFA

F8EFA0

393550

161626

Daily Survey

MOODSCAPE

Daily Survey

Sleep Quality

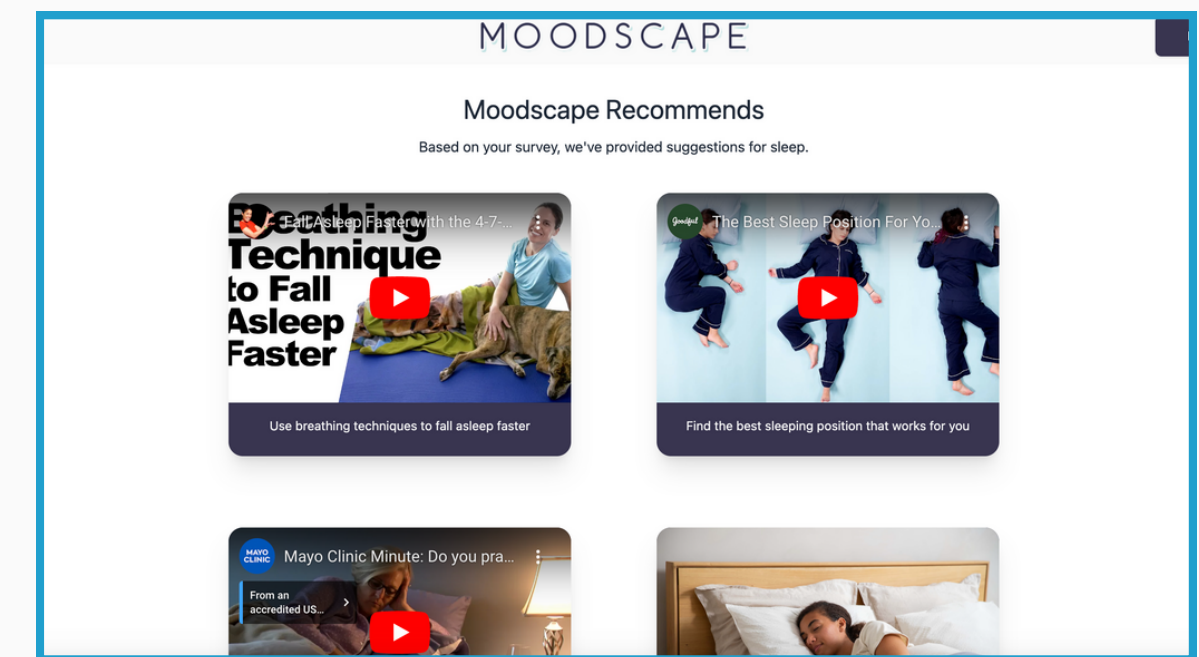
Hours Slept

Time spent active

Work Stress

Submit Cancel

Personalized Suggestions



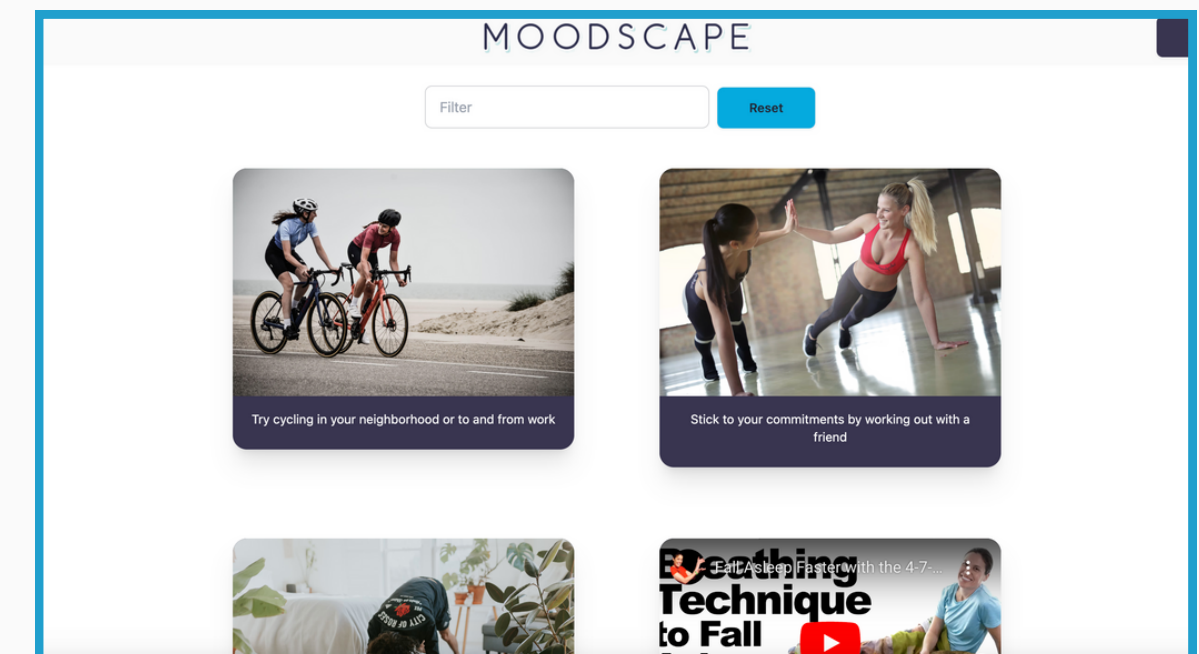
Mood Tracker

MOODSCAPE

user 11's Survey History

February 20 Stress: 2 Area: sleep	▼	Date: February 20 Work Stress: 2 Focus Area: stress	▼	Date: February 20 Work Stress: 2 Focus Area: sleep
February 20 Stress: 10 Area: physical-activity	▼	Date: February 20 Work Stress: 5 Focus Area: stress	▼	Date: February 20 Work Stress: 4 Focus Area: stress
February 20 Stress: 5 Area: sleep	▼	Date: February 21 Work Stress: 6 Focus Area: physical-activity	▼	Date: February 21 Work Stress: 10 Focus Area: stress
February 21 Stress: 4	▼	Date: February 21 Work Stress: 7 Focus Area: physical-activity	▼	Date: February 21 Work Stress: 5

Filter



Font: Poppins

UX/UI Design



Employer Flow

Login

A login form for MOODSCAPE. It features the MOODSCAPE logo at the top, followed by 'Username:' and a text input field, 'Password:' and another text input field, and a blue 'Login' button at the bottom.

Employee List

A screenshot of the 'Employee Overview' table in the MOODSCAPE application. The table has columns for Occupation, Age, Admin, and Remove. It lists several employees with their respective details and a 'Delete' button for each.

Occupation	Age	Admin	Remove
Sales-Representative	28	Yes	Delete
Nurse	31	Yes	Delete
Scientist	33	Yes	Delete
Accountant	35	Yes	Delete
Software-Engineer	35	Yes	Delete
Salesperson	43	Yes	Delete
Teacher	44	Yes	Delete
Engineer	50	Yes	Delete

Add Employees

A screenshot of the 'Add an Employee' form in the MOODSCAPE application. It features a form with fields for Gender, Age, and Occupation, and 'Submit' and 'Cancel' buttons at the bottom.



