01 PROJECT OVERVIEW

Key user attributes: Gender, Age, Occupation, Sleep Duration, Quality of Sleep, Physical Activity, Stress Level. BMI, BP, Heart Rate, Daily sSteps, and Sleeping Disorder

02 LIBRARIES AND DATA HANDLING

Libraries used: Pandas, Matplotlib, Seaborn, etc. **Data Loading and preprocessing:** Loading from CSV, data cleaning, handling dates and categorical data.

03 DATA ANALYSIS TECHNIQUE

Descriptive Statistics, Inferential Statistics, Predictive Modeling

Visualization methods: Bar charts, pie charts, heatmaps, count and distribution plots.

04 KEY FINDINGS

User Demographics: Gender Differences, Age-related Trends, Occupation Influence, Sleep Duration Insights, Quality of Sleep Analysis, Other relative patterns.

05 ADVANCE ANALYSIS

Machine Learning Techniques, Predictive Modeling and Other insights

TABLE OF CONTENTS

06 MACHINE LEARNING

Linear Regression Model: powerful statistical method for predicting a continuous variable.

07 VISUAL INSIGHTS

08 CONCLUSION

Summary of insights derived, implications for future strategic decisions

09 APPENDIX

Code Snippets: Provided Python code used for loading, cleaning, transforming data, and

Google Colab Link:

 $\label{local-decomposition} $$ $ \frac{1UqUp55aKq4C2kL0QBe6d_64kwT_SiKf1?usp=sharing} $$$

Datasets: Sample Data Set of Sleep Health and Lifestyle for Data Analysis

Additional References:

Github Website Link: https://maxyyyne.github.io/CSST104-FINAL-PROJECT/

TABLE OF CONTENTS