

# Table of CONTENTS

01

## Project Overview

**Key user attributes :** Person ID, Age, Gender, Occupation, Sleep Duration, Quality of Sleep, Physical Activity Level, Stress Level, BMI Category, Blood Pressure, Heart Rate, Daily Steps and Sleep Disorder.

02

## Libraries and Data Handling

**Libraries used :** Pandas, Numpy, Seaborn, Matplotlib, DateTime

**Data Loading and preprocessing :** Loading from CSV, data cleaning, handling dates and categorical data.

03

## Data Analysis Technique

**Descriptive statistics :** Mean, median, count, standard deviation. **Visualization methods :** Bar Charts, Scatter Plot, KDE Plot, Count Plot.

04

## Key Findings

**User Demographics :** Age and gender distribution, Occupations Distribution **Sleep Disorder Distribution :** BMI and Sleep Disorders, Gender Sleep Disorders. **Environmental Factors Impact on Sleep Quality :** Environmental Impacts.

05

## Advance Analysis

**Environmental Conditions :** Discover prevalence of sleep disorders and sleep behaviors based on different environmental conditions **Temporal trends :** Discover patterns and fluctuations in sleep-related metrics across different time intervals.



# Table of CONTENTS

06

## Visual Insights

**Sleep Disorder Distribution** : Count plots by Gender Occupation, BMI, Age, Sleep Duration **Sleep Level and Quality of Sleep Relationship**: Scatter plot by stress level and quality of sleep.

07

## Conclusion

Summary of insights and knowledge derived, implications for future strategic decisions.

## Appendix

**Code Snippets** : Provided Python code used for loading, cleaning, transforming data, and generating visualizations.

**Datasets** : Sample dataset of Netflix users for data analysis.

**Additional References** : Referenced any external datasets or tools used during the analysis process.

**Github Website Link** :

<https://github.com/Rozumary/CSEL-302-FINAL-PROJECT>