

## Model Development Phase Template

Date	20 June 2024
Team ID	739813
Project Title	Optimizing Sleep Efficiency: Harnessing Machine Learning For Enhanced Restorative Rest
Maximum Marks	5 Marks

## Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
ID	Unique identifier for each person	Yes	ID is using for serial wise data is stored
Age	Age of the participant	Yes	Any age is healthy
Gender	Identifier for male or female	Yes	To find out which gender is healthy

<b>Bedtime</b>	<b>Each person on sleep time</b>	<b>No</b>	<b>Bedtime and Date is not convert to float</b>
<b>Wakeup time</b>	<b>How many people sleep wake time</b>	<b>No</b>	<b>Wakeup time and date is not convert to float</b>
<b>Sleep duration</b>	<b>Total hours of sleep</b>	<b>Yes</b>	<b>To find out which sleep duration is healthy</b>
<b>Sleep efficiency</b>	<b>The percentage of time spent asleep while in bed</b>	<b>Yes</b>	<b>How many hours should be in bed stay healthy</b>
<b>REM sleep percentage</b>	<b>Sleep is one of four stages the brain moves through while sleeping. REM sleep percentage is 20%-25%</b>	<b>Yes</b>	<b>Calculated for Sleep is one of four stages the brain moves through while sleeping</b>
<b>Light sleep percentage</b>	<b>On average, light sleep will take up about 50% to 60% or more your night.</b>	<b>Yes</b>	<b>Calculated for Light sleep percentage</b>
<b>Awakenings</b>	<b>Number of awakenings during the night</b>	<b>Yes</b>	<b>In the night How many awakenings</b>

<b>Caffeine consumption</b>	<b>Amount of caffeine consumption daily</b>	<b>Yes</b>	<b>Is Caffeine consumption good for health</b>
<b>Alcohol consumption</b>	<b>Amount of Alcohol consumption daily</b>	<b>Yes</b>	<b>Reducing alcohol consumption to stay healthy</b>
<b>Smoking status</b>	<b>Whether the participant smokes(yes/no)</b>	<b>Yes</b>	<b>Health purpose is checking for smoking is yes or no</b>
<b>Exercise frequency</b>	<b>Frequency of physical exercise</b>	<b>Yes</b>	<b>How many hours exercise is good health</b>