

1.Dataset link:

<https://www.kaggle.com/datasets/ziya07/mental-health-monitor-using-wearable-iot-sensors>

Summarization:

Number of rows: 500 entries

Number of columns: 13 columns

Column Information:

1. **Timestamp:** Date and time of the data record (object type).
2. **EEG_Frequency_Bands:** EEG frequency values recorded during the session (list of floats).
3. **GSR_Values:** Galvanic Skin Response (GSR) values indicating physiological response (float).
4. **Cognitive_State:** The cognitive state of the individual (e.g., Focused, Distracted) (object type).
5. **Emotional_State:** The emotional state of the individual (e.g., Anxious, Stressed) (object type).
6. **Student_ID:** Unique identifier for each student (integer).
7. **Age:** Age of the student (integer).
8. **Gender:** Gender of the student (Male/Female) (object type).
9. **Session_Type:** Type of session (e.g., Study, Test, Relaxation) (object type).
10. **Duration (minutes):** Duration of the session in minutes (integer).
11. **Environmental_Context:** The environment where the data was collected (Library, Home) (object type).
12. **Preprocessed_Features:** Processed features used for analysis (tuple of floats).
13. **Target:** The output column indicating the classification target (0 or 1).

14. Missing/ Duplicate Values:

There are no missing values or duplicate entries in this dataset.

15. Output Column:

Target: This column indicates the classification outcome, which might represent a binary label (0 for one class and 1 for another, such as 'Depressed' vs. 'Not Depressed').

2.Dataset Link:

https://drive.google.com/file/d/1Bxa-P-2xln-GeYNKCmiInIEJcndJzI1S/view?usp=drive_link
(stress)

- **Number of rows:** 843 entries
- **Number of columns:** 26 columns

Column Information:

1. **Gender:** Gender of the individual (encoded as integer values).
2. **Age:** Age of the individual (integer).
3. **Have you recently experienced stress in your life?:** Indicates whether the individual has experienced stress recently (integer).
4. **Have you noticed a rapid heartbeat or palpitations?:** Indicates if the individual has noticed a rapid heartbeat (integer).
5. **Have you been dealing with anxiety or tension recently?:** Whether the individual has experienced anxiety or tension (integer).
6. **Do you face any sleep problems or difficulties falling asleep?:** Sleep-related issues faced by the individual (integer).
7. **Have you been dealing with anxiety or tension recently? (duplicate column):**
Duplicate of column 5 (integer).
8. **Have you been getting headaches more often than usual?:** Frequency of headaches (integer).
9. **Do you get irritated easily?:** Whether the individual experiences irritability (integer).
10. **Do you have trouble concentrating on your academic tasks?:** Difficulty concentrating on academic tasks (integer).
11. **Have you been feeling sad or in a low mood?:** Presence of sadness or low mood (integer).
Have you been experiencing any illness or health issues?: Whether the individual has experienced any illness (integer).
12. **Do you often feel lonely or isolated?:** Feelings of loneliness or isolation (integer).
13. **Do you feel overwhelmed with your academic workload?:** Stress related to academic workload (integer).
14. **Are you in competition with your peers, and does it affect you?:** Impact of competition with peers (integer).
15. **Do you find that your relationship often causes you stress?:** Stress due to relationship issues (integer).
16. **Are you facing any difficulties with your professors or instructors?:** Difficulty with professors or instructors (integer).
17. **Is your working environment unpleasant or stressful?:** Stress due to work environment (integer).
18. **Do you lack confidence in your academic performance?:** Lack of academic confidence (integer).
19. **Do you lack confidence in your choice of academic subjects?:** Confidence in academic subject choice (integer).
20. **Academic and extracurricular activities conflicting for you?:** Conflict between academic and extracurricular activities (integer).

21. **Do you attend classes regularly?:** Regularity in attending classes (integer).
22. **Have you gained/lost weight?:** Weight changes (integer).
23. **Which type of stress do you primarily experience?:** Type of stress experienced (text description).

Missing/ Duplicate Values:

- There are **no missing values** in the dataset.
- The dataset includes **duplicate columns** ("Have you been dealing with anxiety or tension recently?" appears twice).

Output Column:

- **Which type of stress do you primarily experience?:** This is likely the output column that categorizes the type of stress experienced by the individual ("Eustress" or "Distress").

3.Dataset Link:

https://drive.google.com/file/d/13TWe4b0mdMezJ5cuErGw1Xlv3UASTWsq/view?usp=drive_link
(student lifestyle)

- **Number of rows:** 2000 entries
- **Number of columns:** 8 columns

Column Information:

1. **Student_ID:** Unique identifier for each student (integer).
2. **Study_Hours_Per_Day:** Number of hours the student spends studying each day (float).
3. **Extracurricular_Hours_Per_Day:** Number of hours the student spends on extracurricular activities each day (float).
4. **Sleep_Hours_Per_Day:** Number of hours the student sleeps each day (float).

5. **Social_Hours_Per_Day**: Number of hours the student spends on social activities each day (float).
6. **Physical_Activity_Hours_Per_Day**: Number of hours the student spends on physical activities each day (float).
7. **GPA**: Grade Point Average (GPA) of the student (float).
8. **Stress_Level**: The stress level of the student (categorical: Low, Moderate, High) (object).

Missing/ Duplicate Values:

- There are **no missing values** or **duplicate entries** in this dataset.

Output Column:

- **Stress_Level**: This is the output column representing the student's level of stress, categorized as **Low**, **Moderate**, or **High**.

4.Dataset Link:

https://drive.google.com/file/d/1PlxGHZmP3gL4NeTZkexJMccJ9hVKUZHf/view?usp=drive_link
(emotional_monitoring)

- **Number of rows**: 1000 entries
- **Number of columns**: 14 columns

Column Information:

1. **HeartRate**: Heart rate of the individual (integer).
2. **SkinConductance**: Skin conductance level indicating physiological response (float).
3. **EEG**: Electroencephalogram (EEG) signal level (float).
4. **Temperature**: Body temperature of the individual (float).
5. **PupilDiameter**: Diameter of the pupil (float).
6. **SmileIntensity**: Intensity of the individual's smile (float).

7. **FrownIntensity**: Intensity of the individual's frown (float).
8. **CortisolLevel**: Cortisol level in the individual's body (float).
9. **ActivityLevel**: Activity level (integer).
10. **AmbientNoiseLevel**: Level of ambient noise (integer).
11. **LightingLevel**: Lighting level (integer).
12. **EmotionalState**: Emotional state of the individual (e.g., engaged, disengaged, etc.) (object).
13. **CognitiveState**: Cognitive state of the individual (e.g., focused, distracted) (object).
14. **EngagementLevel**: Level of engagement (integer).

Missing/ Duplicate Values:

- There are **no missing values** or **duplicate entries** in this dataset.

Output Column:

- **EmotionalState**: This is the output column representing the emotional state of the individual (engaged, disengaged, partially engaged).

5.Dataset Link:

https://drive.google.com/file/d/1zBsuR0okYdEwjgWhLzWF5nbZbqvrg56g/view?usp=drive_link
(simulated_student)

- **Number of rows**: 1200 entries
- **Number of columns**: 18 columns

Column Information:

1. **Session_ID**: Unique identifier for each session (integer).
2. **Student_ID**: Unique identifier for each student (integer).
3. **HRV**: Heart Rate Variability (float).

4. **Skin_Temperature**: Skin temperature of the student (float).
5. **Expression_Joy**: Intensity of the joy expression (float).
6. **Expression_Confusion**: Intensity of the confusion expression (float).
7. **Steps**: Number of steps taken during the session (integer).
8. **Emotion**: The emotion expressed by the student (e.g., Interest, Happiness) (object).
9. **Engagement_Level**: Level of engagement (integer).
10. **Session_Duration**: Duration of the session in minutes (integer).
11. **Learning_Phase**: The phase of learning (e.g., Practice, Conclusion) (object).
12. **Start_Time**: Start time of the session (datetime).
13. **End_Time**: End time of the session (datetime).
14. **Learning_Outcome**: The outcome of the learning session (e.g., Successful, Unsuccessful) (object).
15. **HRV_Frequency_Feature**: Frequency feature of HRV (float).
16. **Skin_Temperature_Frequency_Feature**: Frequency feature of skin temperature (float).
17. **Emotion_Label**: Numeric label representing emotion (integer).
18. **Learning_Phase_Label**: Numeric label representing the learning phase (integer).

Missing/ Duplicate Values:

- There are **no missing values** or **duplicate entries** in this dataset.

Output Column:

- **Learning_Outcome**: This is the output column representing the result of the learning session, categorized as **Successful** or **Unsuccessful**.

6.Dataset Link:

https://drive.google.com/file/d/1MtpfQyZfb5wqtD9tqzdli60lQUIJrv9h/view?usp=drive_link(Depression)

- **Number of rows:** 502 entries
- **Number of columns:** 11 columns

Column Information:

1. **Gender:** Gender of the individual (Male/Female) (object type).
2. **Age:** Age of the individual (integer).
3. **Academic Pressure:** Level of academic pressure experienced (float).
4. **Study Satisfaction:** Level of satisfaction with study routine or performance (float).
5. **Sleep Duration:** Duration of sleep reported by the individual (e.g., "7-8 hours", "More than 8 hours") (object type).
6. **Dietary Habits:** The quality of the individual's dietary habits (e.g., "Healthy", "Moderate", "Unhealthy") (object type).
7. **Have you ever had suicidal thoughts?:** Indicates whether the individual has ever had suicidal thoughts (Yes/No) (object type).
8. **Study Hours:** Average study hours per day (integer).
9. **Financial Stress:** Level of financial stress (integer).
10. **Family History of Mental Illness:** Whether there is a family history of mental illness (Yes/No) (object type).
11. **Depression:** Whether the individual is classified as depressed (Yes/No) (object type).

Missing/ Duplicate Values:

- There are **no missing values** or **duplicate entries** in this dataset.

Output Column:

- **Depression:** This is the output column indicating whether the individual is classified as depressed (Yes/No).

7.Dataset link:

[https://drive.google.com/file/d/1CBWZEDxUgd2ufOkcjTI2n28weLLR479A/view?usp=drive_link\(sstresslysis\)](https://drive.google.com/file/d/1CBWZEDxUgd2ufOkcjTI2n28weLLR479A/view?usp=drive_link(sstresslysis))

- **Number of rows:** 2001 entries
- **Number of columns:** 4 columns

Column Information:

1. **Humidity:** Humidity level during the data recording (float).
2. **Temperature:** Temperature during the data recording (float).
3. **Step_count:** Number of steps taken during the recording period (integer).
4. **Stress_Level:** Stress level of the individual, represented as an integer (0 for low, 1 for moderate, 2 for high).

Missing/ Duplicate Values:

- There are **no missing values** or **duplicate entries** in this dataset.

Output Column:

- **Stress_Level:** This is the output column representing the individual's stress level, categorized as **0** (low), **1** (moderate), or **2** (high).

8.Dataset link:

https://drive.google.com/file/d/1_hkRCMTLrB-YJdDjgr0ytxpEN003dNip/view?usp=drive_link

- **Number of rows:** 235 entries
- **Number of columns:** 19 columns

Column Information:

1. **Certification Course:** Whether the student is enrolled in a certification course (object type).
2. **Gender:** Gender of the student (object type).
3. **Department:** The department the student belongs to (object type).
4. **Height(CM):** Height of the student in centimeters (float).
5. **Weight(KG):** Weight of the student in kilograms (float).
6. **10th Mark:** Marks obtained by the student in their 10th grade (float).
7. **12th Mark:** Marks obtained by the student in their 12th grade (float).
8. **College Mark:** Marks obtained by the student in college (float).
9. **Hobbies:** The student's hobbies (object type).
10. **Daily Studying Time:** The time spent by the student on daily studying (object type).
11. **Prefer to Study In:** The preferred time of day for studying (object type).
12. **Salary Expectation:** The expected salary of the student (integer).
13. **Do You Like Your Degree?:** Whether the student likes their degree (Yes/No) (object type).
14. **Willingness to Pursue a Career Based on Their Degree:** The percentage of willingness to pursue a career based on their degree (object type).
15. **Social Media & Video:** The average time spent on social media and videos (object type).

16. **Travelling Time:** The time spent by the student traveling (object type).
17. **Stress Level:** The stress level of the student (e.g., "Bad", "Awful", "Good") (object type).
18. **Financial Status:** The financial status of the student (e.g., "Bad", "Good") (object type).
19. **Part-time Job:** Whether the student has a part-time job (Yes/No) (object type).

Missing/ Duplicate Values:

- There are **no missing values** or **duplicate entries** in this dataset.

Output Column:

- **Stress Level:** This is the output column representing the stress level of the student, with values such as **Bad**, **Awful**, and **Good**.

9. Dataset link: