



Model Development Phase Template

Date	19 May 2025
Team ID	SWTID1750233055
Project Title	Mental Health Prediction
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
Age	Age of the respondent	Yes	Age can influence mental health risk and patterns.
Gender	Respondent's gender identity	Yes	Helps identify patterns across gender; useful for fairness analysis.
Country	Country of residence	No	Not relevant for mental state prediction in general ML model; could introduce location bias.
state	State of residence	No	Many null values and not impactful on prediction in this context.
self_employed	Whether the person is self-employed	Yes	Work type can affect mental stress and access to resources.
family_history	Family history of mental illness	Yes	Strong predictor — indicates genetic or household mental health history.

Feature	Description	Selected (Yes/No)	Reasoning
treatment	Whether the person has sought treatment	Yes	Critical target or related variable for mental health analysis.
work_interfere	If work interferes with mental health	Yes	Directly measures mental health impact due to work.
no_employees	Company size (number of employees)	Yes	Workplace environment varies by organization size — important factor.
remote_work	Whether they work remotely	Yes	Remote work can affect isolation, stress, or comfort — important in mental health.
tech_company	Whether they work in a tech company	Yes	Dataset is tech-focused; relevant to job stress and culture.
benefits	Availability of mental health benefits	Yes	Indicates access to support, affects mental wellness.
care_options	Availability of mental health care options	Yes	Affects likelihood of seeking help and recovery.
wellness_program	Presence of wellness programs at work	Yes	Supports mental health indirectly through workplace care.
seek_help	Ease of seeking mental health help at workplace	Yes	Reflects organization openness — strong influencing factor.
anonymity	Is help-seeking anonymous?	Yes	People are more likely to seek help if privacy is guaranteed.
leave	Flexibility to take mental health leave	Yes	Encourages rest/recovery; impacts stress levels.
mental_health_consequence	Consequence of discussing mental health at work	Yes	Fear of judgment or stigma impacts help-seeking behavior.

Feature	Description	Selected (Yes/No)	Reasoning
phys_health_consequence	Consequence of discussing physical health at work	Yes	Good for comparison with mental health stigma.
coworkers	Comfort discussing mental health with coworkers	Yes	Social support at work is an important psychological factor.
supervisor	Comfort discussing mental health with supervisor	Yes	Managerial support is crucial to workplace mental well-being.
mental_health_interview	Willingness to discuss mental health in interviews	Yes	Reflects perceived stigma and openness in job context.
phys_health_interview	Willingness to discuss physical health in interviews	Yes	Comparison point — to highlight difference in comfort levels.
mental_vs_physical	Which is taken more seriously — mental or physical	Yes	Shows societal/company attitudes toward mental wellness.
obs_consequence	Whether the person has seen negative consequences for others who revealed mental illness	Yes	Affects personal decision-making and openness.
comments	Open-ended comments	No	Mostly free text, unstructured and difficult to use in classification without NLP preprocessing.