**Model Development Phase Template**

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| Date | 08 July 2024 |
| Team ID | SWTID1720075414 |
| Project Title | Panic Disorder Detection |
| 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.

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| **Feature** | **Description** | **Selected (Yes/No)** | **Reasoning** |
| Participant ID | Unique identifier assigned to each participant | No | For predicting Panic Disorder, Participant ID is not required |
| Age | Person's Age | Yes | Relevant for assessing the diversity and potential bias among different age groups |
| Gender | Person's Gender | Yes | Relevant for assessing the diversity and potential bias among different genders |
| Family History | Indicates the presence of a family history of panic disorder | Yes | Panic Disorders can be increased due to the influence of genetic predisposition and shared environmental |
| Personal History | Indicates personal medical history related to panic disorder | Yes | Previous experiences, traumas, or major life events can predispose individuals to panic disorders. |
| Current Stressors | Level of current stress | Yes | Presently affecting stress factors can increase the chances of Panic Disorder among individuals |
| Symptoms | Types of symptoms experienced (e.g., shortness of breath, panic attacks, chest pain, dizziness, fear of losing control). | Yes | Specific symptoms can directly indicate the presence of Panic Disorder |
| Severity | Severity of symptoms | Yes | The intensity or frequency of symptoms can indicate the severity of the disorder, which affects prediction. |
| Impact on Life | The impact of symptoms on day-to-day life | Yes | How much the disorder interferes with daily life can indicate help in predicting it’s outcomes. |
| Demographics | Urban or rural classification | Yes | Demographic factors, such as education, socioeconomic status, can directly influence the chances of having a Panic Disorder |
| Medical History | Existing medical conditions(e.g., diabetes, asthma, heart disease, or none). | Yes | Recurring or simultaneously occurring medical conditions may increase, decrease or interact with panic disorder symptoms. |
| Psychiatric History | Existing psychiatric conditions (e.g., bipolar disorder) | Yes | Previous diagnoses can affect the likelihood and severity of panic disorder. |
| Substance Use | Use of substances such as alcohol, drugs, or none. | Yes | Certain substances can trigger or worsen panic attacks, influencing disorder prediction. |
| Coping Mechanisms | Methods used to cope (e.g., seeking therapy) | Yes | How individuals manage stress can impact the development and severity of Panic Disorder. |
| Social Support | Indicates the Level of social support | Yes | Strong social networks can act as a defence against stress and reduce the likelihood of developing panic disorder. |
| Lifestyle Factors | Lifestyle factors such as exercise, diet, sleep quality. | Yes | Diet, exercise, sleep patterns, and other lifestyle choices can impact mental health and the occurence of panic disorder. |