Project Initialization and Planning Phase

Date	15 March 2024
Team ID	740678
Project Title	Panic Disorder Detection
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project aims to develop a system for the early detection of panic disorder using advanced data analysis and machine learning techniques. The goal is to provide healthcare professionals with a tool to identify symptoms and predict the likelihood of panic disorder in patients, thereby enabling timely and effective intervention.

Project Overview	
Objective	• **Develop a comprehensive dataset:** Collect and preprocess data related to panic disorder symptoms from various sources. • **Design and implement machine learning models:** Create models to analyse data and detect patterns indicative of panic disorder. • **Evaluate model performance:** Use metrics such as accuracy, sensitivity, specificity, and AUC-ROC to assess model efficacy. • **Deploy the detection system:** Integrate the model into a user-friendly interface for use by healthcare professionals.
Scope	The scope of a Panic Disorder Detection system encompasses the comprehensive range of activities, objectives, and boundaries related to the development and deployment of a system aimed at identifying and diagnosing panic disorder in individuals.
Problem Statement	
Description	Panic disorder is a debilitating condition characterized by sudden, recurrent panic attacks that cause significant distress and impairment
Impact	It is clearly explained about the improvement of patient care and optimize health care delivery

Proposed Solution	
Approach	Panic Disorder Detection System can be developed to provide reliable, accurate
Key Features	It must be ensure the panic disorder detection in comprehensive and user friendly tool

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	T4 GPU
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	scikit-learn, pandas, NumPy, seaborn, matplotlib
Development Environment	IDE, version control	Jupyter Notebook, VS code
Data		
Data	Source, size, format	Kaggle dataset, csv