Project Initialization and Planning Phase

Date	24 April 2024
Team ID	739847
Project Title	**One Year Life Expectancy post on Thoracic Surgery using Machine Learning**
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) report

The proposal report aims to Predict one-year life expectancy after thoracic surgery is crucial for patient well-being and clinical decision-making. Machine learning (ML) offers advanced capabilities to analyze complex datasets and provide accurate predictions, aiding in better management and outcomes for patients undergoing thoracic surgery

Project Overview	
Objective	The primary objective is To explores the ML approach to predicting one year survival, identifying key influencing factors, and emphasizing the importance of these predictions in clinical practice.
Scope	By training models on historical patient data, ML can predict the likelihood of a patient surviving one year post surgery, providing valuable insights for clinicians.

Problem Statement	
Description	Given patient data after thoracic surgery, our goal is to predict whether the patient will survive for one year after the surgery or not. Specifically, we want to determine if the patient will:-
Impact	“Predicting life expectancy after thoracic surgery involves training a model on a dataset to estimate the likelihood of survival one year post-surgery.”

Proposed Solution

Approach	Employing machine learning techniques to analyze and , creating a Model and train on data set to predict the patient life expectancy .
Key Features	- Implementation of a machine learning-based predicting assessment model.

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Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	Intel Graphics
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, matplotlib, seaborn
Development Environment	IDE	Jupyter Notebook, spyder
Data		
Data	Source, size, format	dataset, 614, csv dataset, 690, csv