Project Initialization and Planning Phase

Date	15 March 2024
Team ID	SWTID1720437019
Project Title	Thyroid Classification
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

The proposal study seeks to improve accuracy and efficiency in thyroid classification by utilizing machine learning. It addresses inefficiencies in the system and promises improved operations, lower risks, and happier patient's. Real-time decision-making and a credit model driven by machine learning are important characteristics.

Project Overview	
Objective	The primary objective is to have knowledge on pre-processing the data/transformation techniques on outlier and some visualization concepts and Know fundamental concepts and techniques used for machine learning in thyroid classification.
Scope	The study uses machine learning to create a more reliable and effective method, thoroughly evaluating and improving the thyroid classification procedure.
Problem Statement	
Description	Addressing inaccuracies and inefficiencies in the current thyroid classification system adversely affects operational efficiency and customer satisfaction.
Impact	Solving these issues will result in improved operational efficiency, reduced risks, and an overall enhancement in the lending process, contributing to patient satisfaction and organizational success.
Proposed Solution	

Approach	Employing machine learning techniques to analyze and predict creditworthiness, creating a dynamic and adaptable thyroid classification.
Key Features	Implementation of a machine learning-based credit assessment model

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, matplotlib
Development Environment	IDE, version control	Jupyter Notebook, Git
Data		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv