

Project Initialization and Planning Phase

Date	15 March 2024
Team ID	SWTID1720447482
Project Title	Thyroid classification
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	The main goal is to identify different types of thyroid problems based on medical information.
Scope	project will collect medical data like test results and images to build a system that can classify thyroid conditions accurately.
Problem Statement	
Description	We'll gather medical data, clean it up, and use it to train a computer system to recognize different thyroid issues, like hyperthyroidism or thyroid cancer.
Impact	project aims to help doctors make quicker and more accurate diagnoses of thyroid problems, which could improve patient care and reduce medical costs.
Proposed Solution	
Approach	We will use machine learning techniques to analyze the medical data and teach the computer system how to classify different thyroid conditions.
Key Features	<p>Data Collection: Gather all the necessary medical information.</p> <p>Data Cleaning: Make sure the data is accurate and organized.</p>

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., TensorFlow, PyTorch
Libraries	Additional libraries	e.g., pandas, numpy, matplotlib, seaborn etc
Development Environment	IDE, version control	e.g., Google collab
Data		
Data	Drug_classification Disease Dataset	e.g., 200 records