Project Initialization and Planning Phase

Date	12 July 2024
Team ID	SWTID1720083491
Project Title	Early Prediction of Chronic Kidney Disease Using Machine Learning
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 primary objective of this project is to develop a machine learning model to predict chronic kidney disease early
Scope	The project comprehensively assesses and enhances the early prediction of chronic kidney disease process, incorporating machine learning for a more robust and efficient system.
Problem Statement	
Description	Chronic kidney disease (CKD) is a serious condition that affects millions of people worldwide. Early detection of CKD is important because it allows for early intervention and treatment, which can help slow or prevent the progression of the disease
Impact	A machine learning model for early prediction of CKD could have a significant impact on public health. By allowing for earlier detection and treatment, the model could help slow or prevent the progression of CKD and improve patient outcomes.
Proposed Solution	
Approach	It involves training a model using machine learning algorithm on patient data to predict chronic kidney disease.
Key Features	- The model will be accurate and reliable in predicting CKD. - The model will be easy to use by healthcare professionals.

	- The model will be cost-effective to implement.

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	512 GB SSD
Software		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	scikit-learn, pandas, numpy, seaborn, matplotlib
Development Environment	IDE, version control	Jupyter Notebook, Git
Data		
Data	Source, size, format	Skill Wallet(Google Drive), 400, csv