Project Initialization and Planning Phase

Date	10 July 2024
Team ID	739851
Project Title	Beyond The Veil Of Wellness: Machine Learning's Unique Journey In Animal Health Classification
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) report

The proposal report aims to the Beyond The Veil Of Wellness: Machine Learning's Unique Journey In Animal Health Classification. This project explores the application of machine learning (ML) to enhance animal health diagnostics. Traditional veterinary methods can be supplemented by ML to improve accuracy and efficiency.

- Develop an ML model to classify various animal health conditions.
- Collect and preprocess diagnostic data.
- Train and validate the model.
- Deploy the model in a practical veterinary diagnostic tool.

Project Overview	
Objective	Explore and document the applications of machine learning in animal health classification to improve diagnosis, treatment, and overall wellness of animals.
Scope	-Literature review -Data collection -Algorithm development -Case studies -Evaluation of models -Future trends identification
Problem Statement	

Description	This project uses machine learning to classify and predict animal health conditions by leveraging data from veterinary records, imaging, and IoT devices. It aims to develop models that assist veterinarians in making accurate and timely diagnoses, enhancing decision-making, and improving animal welfare.
Impact	-Improved diagnostic accuracy and speed -Early disease detection -Personalized treatment plans -Reduced healthcare costs -Enhanced veterinary education
Proposed Solution	
Approach	-Literature review and research -Data collection and preprocessing -Model development and testing -Implementation in veterinary practice -Continuous evaluation and feedback
Key Features	-Integration of diverse data sources -High model accuracy -User-friendly interfaces -Scalability for large datasets and diverse species -Real-time analysis -Continuous learning and improvement

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, NumPy, pandas, matplotlib, seaborn
Development Environment	IDE	Jupyter Notebook, PyCharm
Data		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv