KARTIVERSE 2.0

Team Name : **MEDIFLORA**

Theme : **SCIENTIFIC LEARNING**

Title : AI for medicinal plant information

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ABSTRACT

The development of a Medicinal Plant Identification and Information Retrieval application using artificial intelligent will help close the gap between people and abundance of natural remedies that can found in plants. The Exploiting the state-of-art Deep Learning framework, the system uses Convolutional Neural Networks (CNN) to analyse and identify plant images. The application uses Multiclass Classification algorithms for sorting out the plants species or therapeutic groups mainly by the appearance. Through incorporating the Generative AI (Gen AI) models such as Groq or Google PaLM API the system produces real-time data associated with the therapeutic properties of each plant, its use in folk medicine, and possible side effects. Through LLM, natural language understanding is possible and can quickly translate the user queries to different languages and provided deeper and more personalized plant-related information. The backend is developed in Django framework for enhancing the work around the choice of a database, API interaction and integration of machine learning models. As constructed for healthcare enthusiasts, researchers and farmers this site creates a global consciousness of the healing values of medicinal plants and thus, the optimal and efficient utilization of natural resources in current medicine.

KEYWORDS:

Medicinal Plant Recognition Machine Learning, Artificial Intelligence, Neural Network, CNN, Generative AI, Groq, Google PaLM API, LLM, Django.

PROGRAMMING LANGUAGES & TOOLS:

Python, Html, CSS, Django, CNN, Generative AI (Groq, Google PaLM API), LLMs, TensorFlow and OpenCV.