



ARTIVERSE 2.0

Team Name	: TECH TITANS
Theme	: Empowering Health Through Nature: An AI-Driven Platform for Medicinal Plant Knowledge
Title	: PlantWise AI: An Intelligent Solution for Medicinal Plant Identification and Information
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ABSTRACT

Medicinal plants have been integral to both traditional practices and modern medicine. However, one of the main challenges is the lack of easily accessible and accurate information about these plants. Effectively utilizing medicinal plants has become a difficult task due to this information gap.

The primary issue is not the use of medicinal plants themselves, but rather the difficulty in identifying them and understanding their health benefits, safety protocols, and proper usage. Hence, there is a pressing need for a practical and accessible solution that provides reliable information about these plants.

"PlantWise AI" is an innovative concept for a mobile application that could address this gap by identifying medicinal plants through image recognition. This app would offer detailed information on plant characteristics, health benefits, and safe usage guidelines, all while being capable of functioning offline, ensuring that underserved populations can also benefit from it.

The proposed AI-driven platform would not only identify plants but also educate users about their medicinal properties, potential side effects, and safe consumption methods. The app would utilize machine learning models, cloud-based processing, and local storage, allowing for precise plant identification and immediate access to vital information without requiring an internet connection.

While this idea is still in the conceptual phase, it holds promise, as early testing of similar models has shown great potential in accurately identifying plants and providing critical information. Such a tool could prove to be valuable for both everyday users and researchers working with plant-based medicines.

Ultimately, this concept could significantly contribute to public health, education, and research by making medicinal plant knowledge more accessible globally.

KEYWORDS:

1. Medicinal Plant Identification
2. AI-powered Mobile Application
3. Offline Functionality
4. Health Benefits & Safety
5. Machine Learning & Image Recognition

PROGRAMMING LANGUAGES & TOOLS:

Programming Languages:

Python

Dart

Tools:

Flutter

TensorFlow/Keras

OpenCV

Firebase

SQLite

Cloud Platforms (AWS, Google Cloud)

