

Medicinal Plants: A Medicinal Plants Sales Using Artificial Intelligence

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Abstract: *The Medical Plants Sales Using AI is a web-based application designed to help users find and purchase medicinal plants easily. Medicinal plants are widely used for natural treatment and health care. However, many people do not have proper knowledge about which plant is useful for specific diseases or health problems. This system uses Artificial Intelligence (AI) to recommend suitable medicinal plants based on the user's symptoms or health needs.*

The application allows users to register, search for different medicinal plants, view their details, and purchase them online. The AI recommendation system analyzes the symptoms entered by the user and suggests appropriate medicinal plants along with their benefits and usage. The system also includes an admin module where the administrator can manage plant information, update prices, and monitor customer orders.

This project aims to promote the use of natural medicine and make medicinal plants easily accessible through a digital platform. The system is developed using Python, web technologies like HTML, CSS, AI, ML and JavaScript, and a database such as MySQL. The project provides an efficient, user-friendly, and intelligent solution for medicinal plant sales and recommendations..

Keywords: *Medical Plants Sales*

I. INTRODUCTION

Medicinal plants have been used for centuries to treat various diseases and improve human health. Many traditional medicines are made from natural plants because they are considered safe and effective. However, many people today do not have enough knowledge about which medicinal plant should be used for a specific health problem. Because of this, it becomes difficult for people to choose the correct plant for treatment.

The Medical Plants Sales Using AI is developed to solve this problem by creating a smart online platform for medicinal plant information and sales. This system uses Artificial Intelligence (AI) to recommend suitable medicinal plants based on the symptoms or health issues provided by the user. The system helps users easily find the right plant and also allows them to purchase medicinal plants online.

In this system, users can register and log in to the application, search for medicinal plants, view their details, benefits, and usage, and place orders. The AI module analyzes the symptoms entered by the user and suggests the most suitable medicinal plants. This makes the process faster, easier, and more accurate.

II. RELATED WORK

Many researchers and developers have worked on systems related to medicinal plants identification and online plant selling platforms.



Earlier systems were mainly based on manual identification, where users had to search books or websites to recognize plants. This process was time-consuming and required expert knowledge.

With the advancement of technology, image processing and machine learning techniques have been used to identify plants. Some applications use deep learning models like Convolutional Neural Networks (CNN) to recognize plant species from images. These systems provide better accuracy compared to traditional methods.

There are also existing e-commerce platforms that sell plants online. However, most of them do not provide automatic plant identification features. Users need to know the plant name before purchasing.

Some mobile applications provide plant recognition, but they may not focus specifically on medicinal plants or do not include a direct buying option.

III. PROBLEM STATEMENT

The identification and utilization of medicinal plants require domain knowledge, which is not easily accessible to the general public. Traditional methods of plant identification are manual, time-consuming, and prone to errors. Incorrect identification may lead to improper usage and reduced effectiveness.

Existing systems either focus on plant information or e-commerce functionalities, but lack integration of automated plant recognition with medicinal knowledge and online purchasing capabilities. Additionally, most platforms require prior knowledge of plant names, which limits usability for non-expert users.

Therefore, there is a need to develop an intelligent system that can accurately identify medicinal plants using image-based recognition techniques, provide comprehensive information about their medicinal properties, and facilitate an integrated platform for online purchase.

IV. PROPOSED SYSTEM OVERVIEW

The proposed system is an AI-based application designed to identify medicinal plants and provide detailed information along with an online purchasing facility. The system integrates image processing, machine learning, and web technologies to deliver an efficient and user-friendly solution.

The system allows users to upload an image of a plant, which is then processed using a trained Artificial Intelligence model. The model analyzes the image and predicts the plant species with high accuracy. Once identified, the system retrieves relevant information such as plant name, medicinal uses, and benefits from the database.

In addition to identification, the system includes an e-commerce module that enables users to purchase medicinal plants directly through the platform. The system maintains a database to store plant details, user data, and transaction records.

V. SYSTEM ARCHITECTURE

The system architecture is divided into four main parts: Frontend, Backend, AI Model, and Database.

1. The Frontend provides the user interface to upload images and view results.
2. The Backend processes user requests and connects all components.
3. The AI Model identifies medicinal plants using image recognition techniques.
4. The Database stores plant information, user data, and transaction details.

The system works by taking an image from the user, processing it through the AI model, fetching details from the database, and displaying the result along with an option to purchase the plant.

Step	Process
1	User opens the web/mobile application
2	User uploads plant image or sends request (search, view, buy)
3	Request is sent to the backend server
4	Server forwards image to AI model for processing



5	AI model identifies the plant and sends result to server
6	Server retrieves plant details from database
7	Response is sent back to application

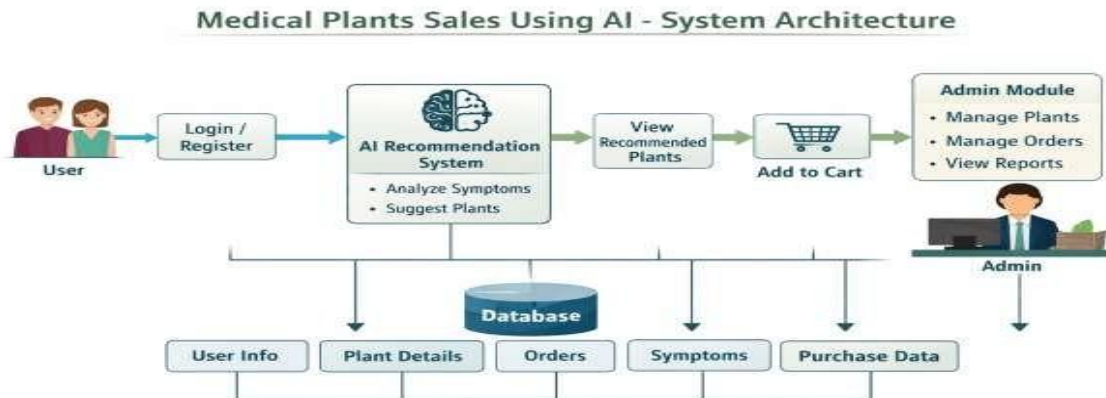


Fig. 1. System Architecture

VI. MODULE DESCRIPTIONS

1. User Module

This module allows users to interact with the system. Users can register, login, upload plant images, view plant details, and purchase medicinal plants.

2. Image Processing Module

This module handles the uploaded images. It performs preprocessing such as resizing, filtering, and preparing the image for analysis by the AI model.

3. AI Prediction Module

This module uses a trained machine learning model (e.g., CNN) to identify the medicinal plant from the given image and predict its species accurately.

4. Database Module

This module stores all system data, including plant information, user details, and transaction records. It ensures efficient data storage and retrieval.

5. Admin Module

This module is used by the administrator to manage the system. Admin can add/update plant data, manage users, and monitor orders.

6. E-commerce Module

This module provides online buying functionality. Users can select plants, place orders, and complete transactions through the system.



VII. IMPLEMENTATION

5.1. System Requirement

Operating Environment – Hardware and Software

For this project various technologies are used as follows:

Operating System

- Windows 10
- 64-bit operating system
- 4 GB RAM or More

Client-Side Scripting

- HTML
- CSS
- JavaScript

Server-Side Scripting

- Python

Database Tool

- MySQL
- IDE
- PyCharm ,Xampp MySql, Idle

VIII. SYSTEM ANALYSIS

System Analysis is the process of studying the existing system and identifying its limitations and requirements for developing a new system.

In the current scenario, identification of medicinal plants is mostly done manually or through basic online search. This approach is time-consuming, requires prior knowledge, and may lead to incorrect identification. Existing systems do not provide an integrated solution for plant identification, information access, and online purchasing.

The proposed system analyzes these limitations and aims to develop an AI-based solution that automates plant identification using image processing techniques. It also provides detailed information about medicinal plants and integrates an online purchasing system.

The analysis focuses on:

- User Requirements: Easy plant identification, accurate information, and simple buying process
- System Requirements: Fast processing, accurate AI model, secure data handling
- Feasibility: Technically feasible using AI and web technologies, economically affordable, and user-friendly

IX. PROJECT TIMELINE

Month	Activity
Dec 2025	Problem scoping, literature survey, topic finalization
Jan 2026	Requirements gathering, system analysis, architecture design
Feb 2026	Frontend and backend development across all modules
Mar 2026	Integration, end-to-end testing, debugging
Apr 2026	Documentation, presentation preparation, formal submission

TABLE V. Project Timeline — Academic Year 2025–26



X. CONCLUSION

The proposed system, Medicinal Plants Sales using Artificial Intelligence, provides an efficient and intelligent solution for identifying medicinal plants and facilitating their online purchase. By integrating AI-based image recognition with a web-based platform, the system overcomes the limitations of traditional plant identification methods.

The system ensures accurate plant identification, easy access to medicinal information, and a user-friendly interface for purchasing plants. It also promotes the use of natural medicine and increases awareness about medicinal plants among users.

Overall, the project demonstrates the effective use of modern technologies such as Artificial Intelligence, web development, and database management to build a practical and beneficial application.

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