



Ayurvedic Healthcare Website using Chatbot & Disease Prediction using Machine Learning

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ABSTRACT :

This project introduces an Ayurvedic Healthcare Website that combines a chatbot, machine learning-based disease prediction, and an e-commerce platform for Ayurvedic products. The chatbot interacts with users, collecting symptoms and lifestyle details to offer personalized Ayurvedic advice. Based on user input, a machine learning model predicts potential health conditions, providing insights aligned with Ayurvedic diagnostics. Additionally, the website features an e-commerce section where users can purchase recommended Ayurvedic products, integrating wellness guidance with convenient access to Ayurvedic remedies and supplements.

KEYWORDS: Ayurvedic Healthcare, Chatbot Interaction, Disease Prediction, E-commerce Platform.

INTRODUCTION:

Ayurveda is the Sanskrit word, literally translated "the science of life," preventive and emphasizing health maintenance through proper diet, lifestyle, and usage of natural remedies. Whether you want to enhance your health, solve specific health issues, or know more about Ayurveda practices, you have landed on the appropriate website to guide you down the path of optimal health. We have the ancient wisdom of Ayurveda, a time-tested system of natural healing practiced over 5,000 years ago. Ayurveda, being a science originating from India, provides complete management in dealing with the state.

LITERATURE SURVEY:

The existing Ayurveda healthcare platforms in the current scenario use chatbots to provide personalized health advice and include windows for online shopping of Ayurveda healthcare products with easy access.

1. A Chatbot for Ayurvedic Consultation (2021): This paper discusses the development of an AI-driven chatbot designed to provide Ayurvedic consultation based on user inputs. It emphasizes natural language processing techniques to understand user queries and recommend appropriate Ayurvedic remedies.
2. Integrating Ayurveda into Global Health Practices A Comprehensive Review (2022): This review article analyses how Ayurveda has been adopted in different parts of the world. It discusses the global expansion of Ayurvedic practices, the challenges of standardization, and the potential for Ayurveda to complement Western medical practices in addressing chronic diseases like diabetes, arthritis, and obesity.
3. Integrating Ayurveda and Machine Learning for Holistic Health Management (2023): This paper discusses the integration of Ayurvedic principles with machine learning frameworks for comprehensive health management. The authors present case studies demonstrating how ML can be used to develop personalized health plans that combine dietary advice, herbal remedies, and lifestyle changes based on individual patient profiles.

Overall, these innovations aim to reduce manual errors, improve efficiency, and provide better customer service through automation.

OBJECTIVES:

- To provide personalized guidance, answer health-related queries, and offer product recommendations using Chatbot.

- To detailed product cata log of Ayurvedic remedies, supplements, and wellness products with descriptions,benefits, and usage instructions.
- To AI-powered disease prediction tool that analyses user symptoms and health data to provide insights on potential health conditions and suggest preventive or corrective Ayurvedic treatments.

PROBLEM STATEMENT:

To develop an advanced system that accurately predicts diseases based on user-input symptoms and deliver personalized Ayurvedic remedies with chatbot seamlessly integrating traditional wisdom with modern technology to offer a holistic and tailored approach to health management.

METHODOLOGY:

Methodology:

The methodology for this Ayurvedic Healthcare Website will utilize an integration of a chatbot and a machine learning model for giving out health guidance and disease prediction based on the user choices for symptoms and lifestyle. Using the gathered input, the chatbot then provided Ayurvedic recommendations on the given data. The machine learning model predicts diseases based on diagnostic procedures in Ayurveda. Besides, there is an e-commerce section provided on the website that enables users to order recommended Ayurvedic products. This approach puts together personal advice, predictive analytics, and easy access to handy products in order to render a total user experience.

Requirement Analysis:

The requirement analysis highlights the need for a chatbot, disease prediction model, and ecommerce features for personalized Ayurvedic health guidance.

System Design:

The system design integrates a chatbot, disease prediction model, and e-commerce module for aseamless Ayurvedic healthcare experience.

Software Development:

Code and program the system components with all requirements.

Testing and Validation:

Perform testing thoroughly to ensure that there will be precision and reliability in the system.

Deployment and Training:

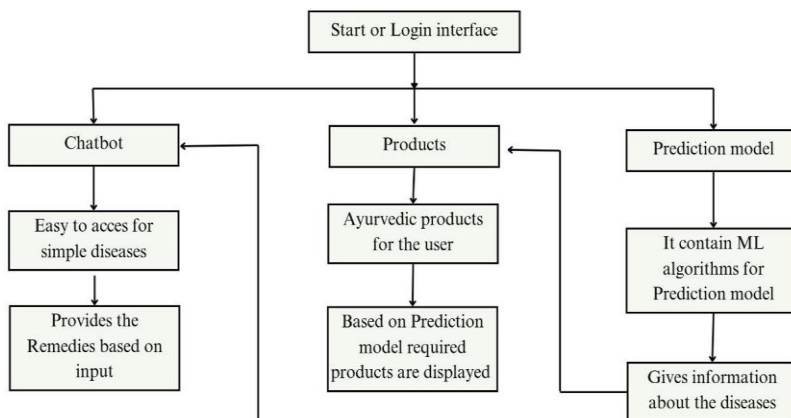
deployment includes a launch, whereas training helps in making proper use of the system.

Monitoring and Support:

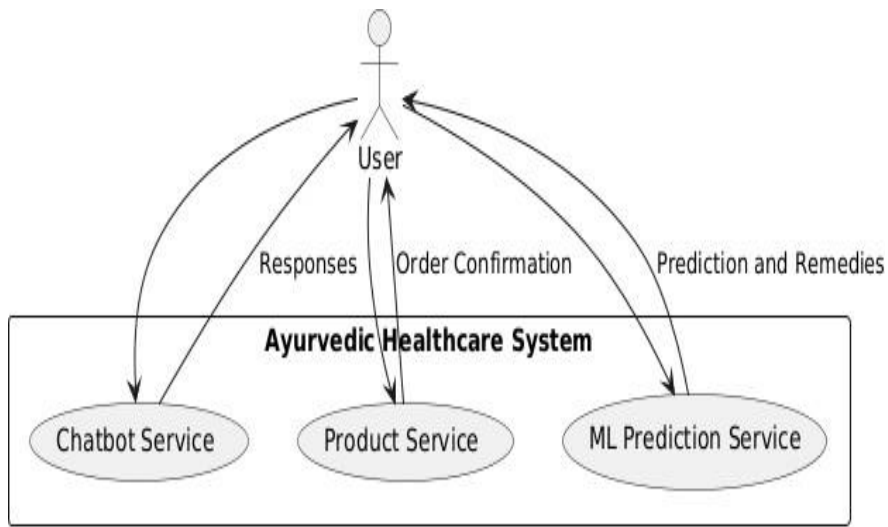
Continuous monitoring and support ensure reliability.

Architecture:

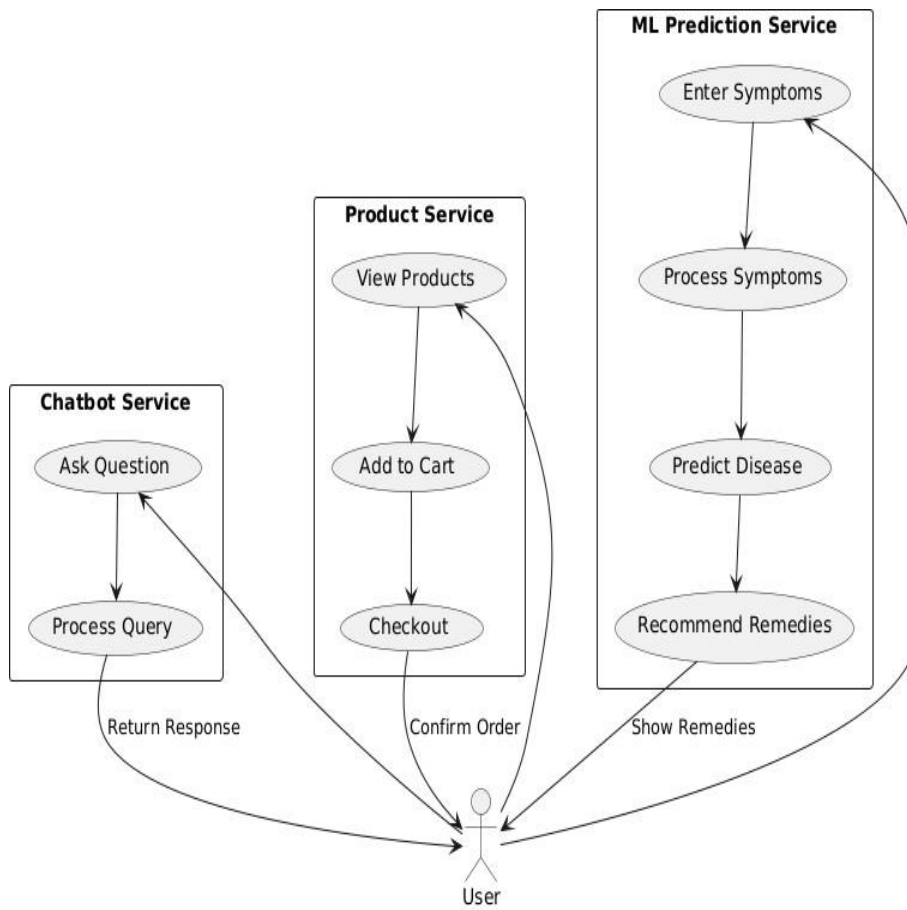
Fig5.2.: Architecture



Data Flow Diagram:



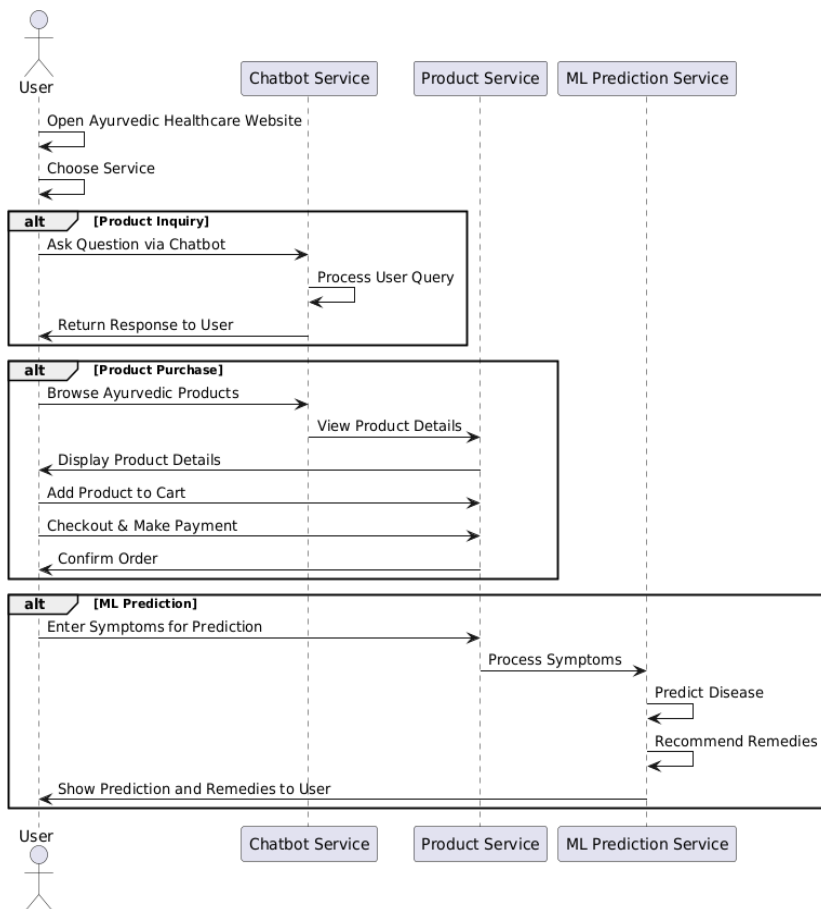
Level 0 DFD: Ayurvedic Healthcare System



Level 1 DFD: Ayurvedic Healthcare Services

Activity Diagram:

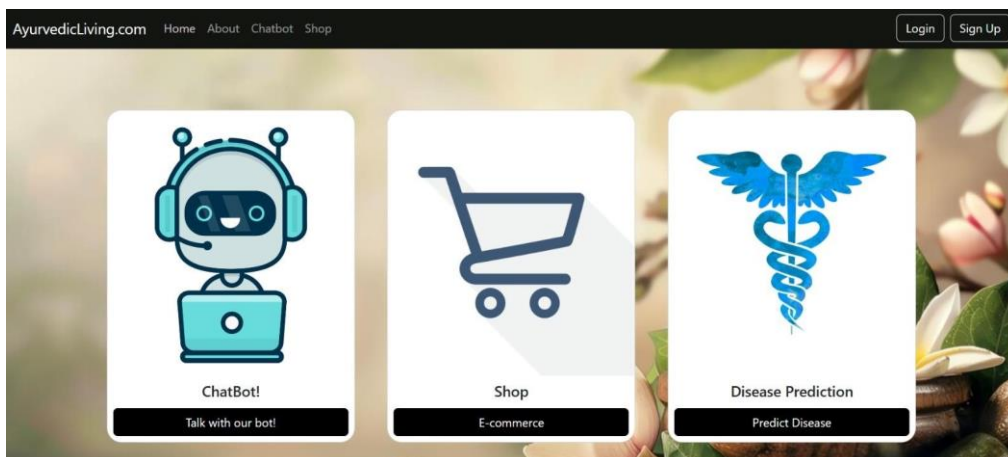
fig 5.4.: Activity Diagram



The activity diagram of the Ayurvedic Healthcare Website features the user journey from opening up the website and opening a selected service. If the user was seeking information on a product, the relevant query would be dealt by the chatbot and furnished with appropriate response. If the user then wishes to purchase the product, they will find the list of available Ayurvedic products through the chatbot. The chatbot fetches the product details from the product service and displays them to the user. Then, the user can add their choice of product to the cart and proceed with the process of checking out, where they make the payment for the order and then confirm its acceptance. If the user chooses disease prediction, then he gives the symptoms to the system, and the machine learning service processes that, giving back the predictions and treatments to the user. This diagram represents a smooth interaction between the user and the services involved to help the user with their interaction with it.

IMPLEMENTATION 1. Frontend Pages.

Fig1.1: Frontend Page



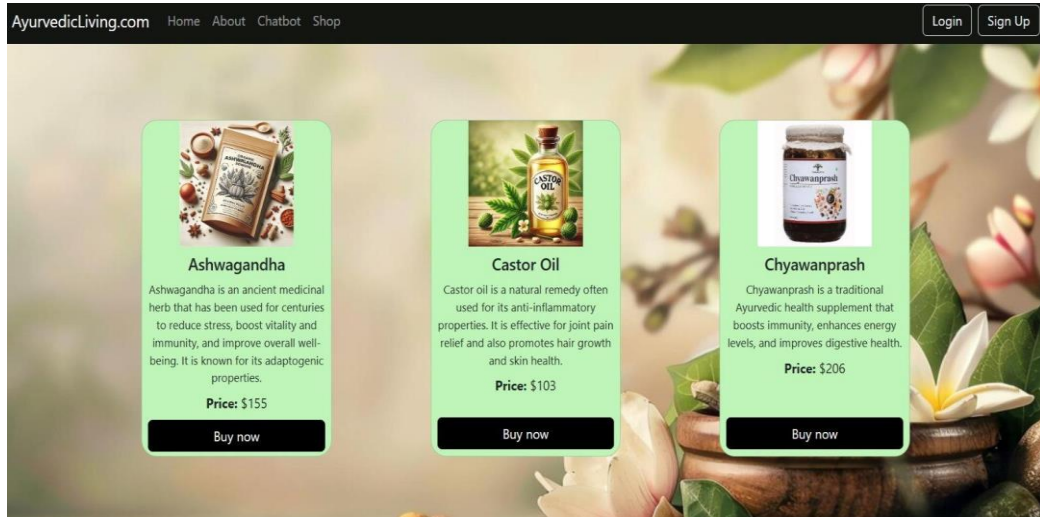


Fig 1.2: Frontend Page

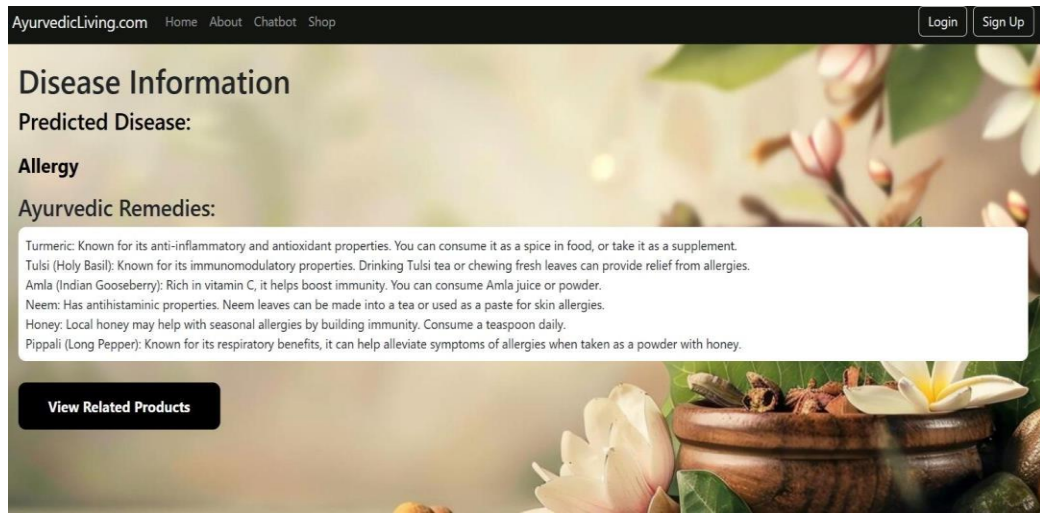
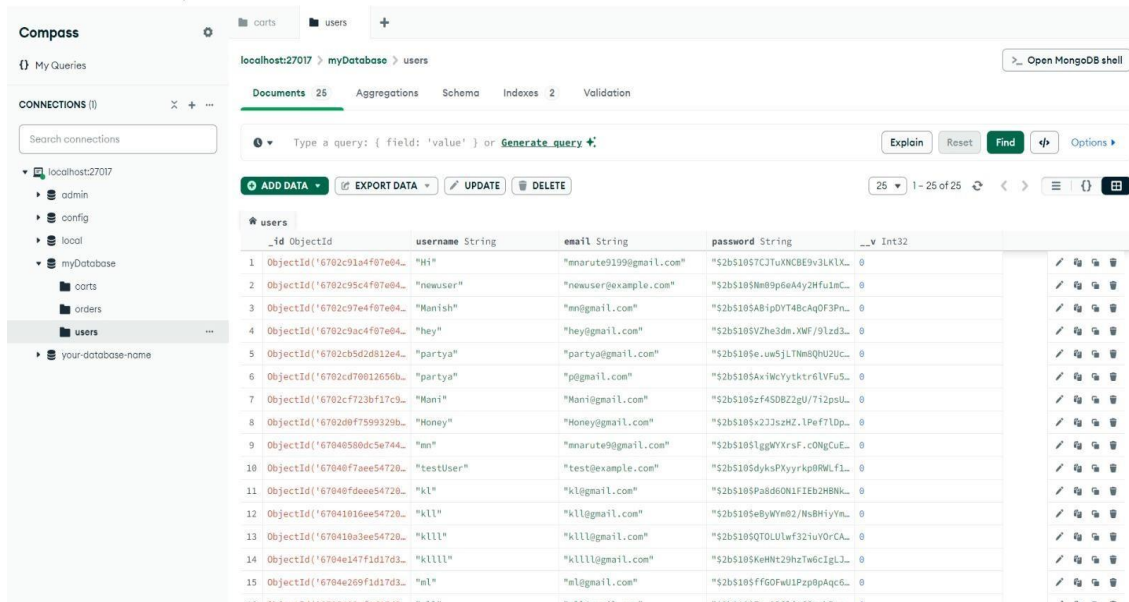


Fig 1.3: Frontend page

Backend System



CONCLUSION:

In conclusion, the Ayurvedic healthcare website stands as a model for future initiatives that seek to harmonize traditional medicine with technology, ultimately promoting better health outcomes and a deeper understanding of Ayurvedic principles in a contemporary context.

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