PATENT DRAFT

Proposed Title:

"AI-Driven Prakriti-Based Chatbot for Personalized Ayurvedic Health Guidance."

List of Applicants:

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Field of the Invention:

This invention pertains to the field of healthcare and artificial intelligence, specifically focusing on personalized health assessment and guidance based on Ayurvedic principles. The invention leverages AI-driven algorithms to analyse user responses and provide customized recommendations for diet, lifestyle, and yoga practices.

Background of the Invention:

With the rapid advancement of technology and a shift toward fast-paced lifestyles, modern society faces an increasing prevalence of stress-related ailments, dietary imbalances, and lifestyle diseases. While conventional medicine provides symptomatic relief, it often lacks the holistic, preventive, and personalized approach that traditional systems like Ayurveda offer.

Ayurveda, an ancient Indian system of medicine, emphasizes the balance of body, mind, and spirit through individualized care based on **Prakriti**—an individual's unique constitution influenced by three **Doshas**: Vata, Pitta, and Kapha.

This invention addresses these gaps by integrating AI technologies into Ayurvedic health guidance. The system predicts an individual's Dosha by analysing their responses to predefined questions and offers personalized recommendations for diet, lifestyle, and yoga practices.

Moreover, the system incorporates educational resources, downloadable PDFs, video links, and interactive features to engage users. This enhances not only the accessibility of Ayurveda but also its understanding among modern users, making ancient knowledge seamlessly available through digital platforms.

Differentiate with Other Works:

Existing Works

- Most health chatbots provide symptom-based advice focused on immediate concerns, rather than addressing the holistic needs of an individual or long-term wellness.

- These tools offer insights into physical activity or diet but lack integration with Ayurvedic principles or personalized constitution-based guidance.

- Many Ayurvedic applications rely on static databases for recommendations, failing to dynamically adapt advice based on an individual's unique constitution.

Proposed Innovation

- The chatbot uses AI techniques to predict and provide tailored Dosha recommendations based on the user's unique constitution, going beyond static tools.

- Seamlessly blending Ayurvedic principles with AI, the system offers a comprehensive health solution that addresses diet, lifestyle, and yoga, making it a more personalized and adaptable system.

- Features like downloadable personalized health guides, video links, and localized Ayurvedic practices make the chatbot interactive, user-friendly, and culturally relevant, especially for Indian users while being adaptable for a global audience.

- The system is designed to be scalable, accessible across devices, and suitable for diverse global users, ensuring personalized Ayurvedic health advice is available to a wide range of individuals worldwide.

Objectives:

- Develop an AI-powered chatbot to analyse user inputs and predict their Prakriti (constitution) using machine learning models and NLP for personalized predictions.

- Provide customized Ayurvedic advice on diet, lifestyle, and yoga based on the user's Dosha and Prakriti for effective wellness guidance.

- Dynamic Health Guidance: Integrate real-time data from user habits and conditions to ensure the advice is relevant, actionable, and continually improving.

- User Engagement: Enhance user experience with educational content like health guides, videos, and localized Ayurvedic practices for a more interactive platform.

- Scalability and Accessibility: Ensure the system is scalable and accessible on various devices, providing Ayurvedic guidance to a global user base.
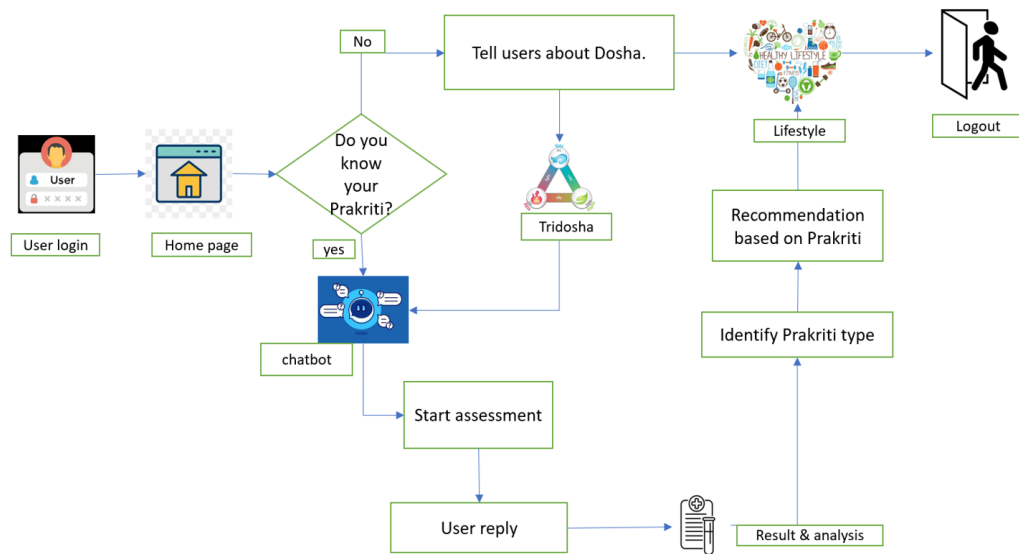
Flowchart:

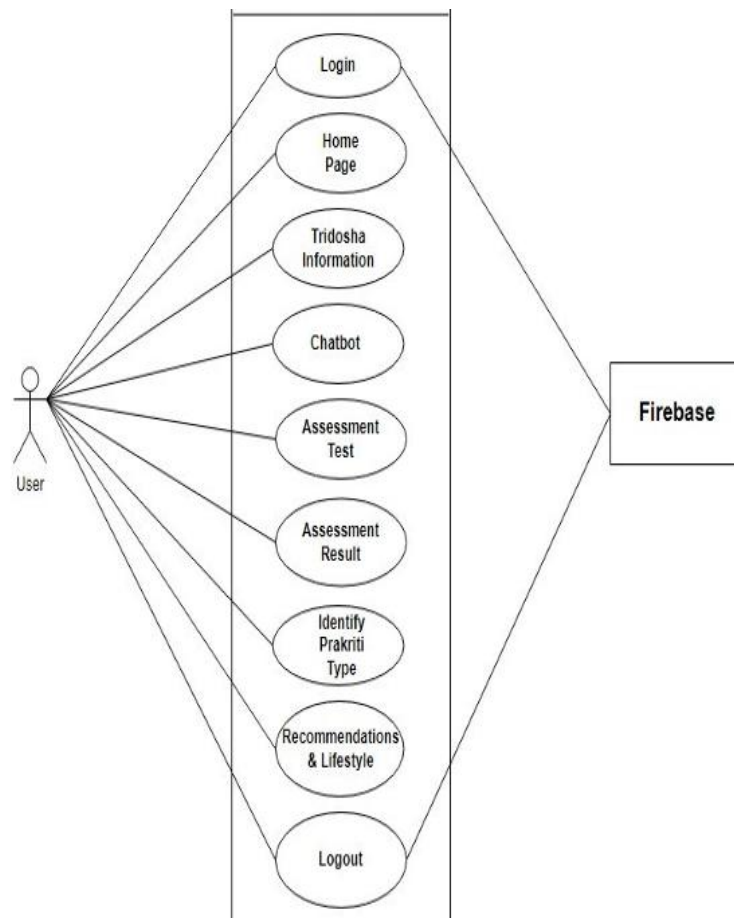Fig 1: SYSTEM ARCHITECTURE DIAGRAM

FIG 2: SEQUENCE DIAGRAM

Claims:

- The AI-powered chatbot analyzes user responses to predict their Dosha (Vata, Pitta, or Kapha) and provides personalized Ayurvedic health advice based on their unique constitution.
- The system delivers tailored Ayurvedic recommendations on diet, lifestyle, and yoga, ensuring the advice aligns with the user's specific Dosha and overall well-being.
- The platform includes a supervisory admin interface for managing user data, refining Dosha predictions, and ensuring the accuracy of personalized health guidance.
- The chatbot's modular design allows easy scalability and integration of additional features, making it adaptable for future improvements and user engagement through interactive educational resources.
- resources.

Technology Used

Software:

- Frontend: React.js, HTML5, CSS3, Tailwind CSS.
- Backend: Python (Django or FastAPI), Node.js.
- Database: SQLite, PostgreSQL, MongoDB.
- Machine Learning Algorithms
- Development Tools: Visual Studio Code

Hardware:

User devices: Smartphone, Tablet, or PC.

Abstract:

This invention introduces an AI-powered Prakriti-based chatbot that analyzes an individual's unique constitution (Prakriti) using advanced machine learning techniques. The chatbot predicts the user's Dosha (Vata, Pitta, or Kapha) through an interactive questionnaire, offering personalized Ayurvedic recommendations for diet, lifestyle, and yoga. The system also includes a downloadable feature for personalized health guides and educational resources, enhancing user engagement and understanding of Ayurveda. An admin interface is integrated to manage user data, refine Dosha predictions, and ensure accurate, relevant health guidance. By combining traditional Ayurvedic wisdom with modern AI technology, this innovation makes holistic health practices accessible, actionable, and tailored to individual needs.

End Users:

- Health-conscious individuals seeking personalized guidance.
- Ayurvedic practitioners and clinics.
- Wellness and fitness platforms.
- Educational institutions teaching Ayurveda.
- Individuals in remote areas lacking access to Ayurvedic expertise.

Advantages:

- Provides personalized health advice based on Ayurvedic principles, tailored to individual Dosha.
- Combines AI technology with traditional Ayurvedic wisdom for modern, accessible healthcare solutions.
- Offers downloadable personalized health guides and educational resources to enhance user engagement and learning.
- Includes an admin interface for managing data and refining Dosha predictions, ensuring accuracy and relevance.
- Scalable and cost-effective solution, making Ayurvedic health practices accessible to a global audience.

Conclusion:

This invention presents a significant advancement in the integration of artificial intelligence with traditional Ayurvedic practices. By providing personalized health advice based on an individual's Dosha, the AI-driven chatbot offers a modern, accessible, and user-friendly solution for holistic well-being. The system's ability to provide tailored recommendations for diet, lifestyle, and yoga, along with an intuitive admin interface for data supervision, ensures the ongoing accuracy and relevance of health guidance. With its scalable design and educational resources, this innovation has the potential to make Ayurvedic health practices widely accessible, bridging the gap between ancient knowledge and modern technology.