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Healthcare System for Individual Prakriti

Prof. Girisha Bombale¹, Rohit Ingale², Satish Shetye³, Gayatri Pujari⁴, Shivali Hingmire⁵

¹Shree Ramchandra College of Engineering, Gate No 351/333-1, Pune -Nagar Road, Bakori Phata, Wagholi, Pune 412216, India

Abstract: *In the dynamic landscape of healthcare, personalized and holistic patient care is becoming increasingly vital. The "HEALTHCARE SYSTEM FOR INDIVIDUAL PRAKRITI" project offers an innovative approach to understanding patients' individual constitution or "Prakriti" based on Ayurvedic principles. This project aims to enhance healthcare outcomes by integrating traditional Ayurvedic knowledge with modern technology.*

The "HEALTHCARE SYSTEM FOR INDIVIDUAL PRAKRITI" project represents a harmonious blend of traditional wisdom and contemporary technology, with the goal of advancing the quality of healthcare and promoting a holistic understanding of patient health. This abstract provides an overview of the project's purpose, combining Ayurvedic principles with modern healthcare practices to benefit both patients and healthcare providers.

Keywords: *Personalized Healthcare, Holistic Patient Care, Individual Prakriti, Healthcare Integration, Modern Technology.*

Classification numbers: *choose 2-3 code numbers (available in VJST website) of the VJST subject classification to add; e.g.: 2.4.2, 2.4.4, 5.2.1.*

I. INTRODUCTION

The ever-evolving world of healthcare, the pursuit of personalized and patient-centric care is at the forefront of medical advancements. The "HEALTHCARE SYSTEM FOR INDIVIDUAL PRAKRITI" project embarks on a pioneering journey that harmonizes ancient wisdom with modern technology to revolutionize the healthcare experience.

The "HEALTHCARE SYSTEM FOR INDIVIDUAL PRAKRITI" project envisions the development of a robust assessment system. This system will delve into the Prakriti of each patient, offering an in-depth understanding of their individual needs, susceptibilities, and potential imbalances. By embracing these insights, healthcare professionals can tailor treatment plans, interventions, and lifestyle recommendations that are genuinely personalized to the patient.

II. MATERIALS AND METHODS

The development and implementation of the "Healthcare System for Individual Prakriti" involves a comprehensive approach, combining traditional Ayurvedic principles with modern technology. In the materials and methods employed for this project, classical Ayurvedic texts, including the Charaka Samhita and Sushruta Samhita, serve as foundational materials. These texts provide the necessary knowledge and principles for understanding Prakriti, guiding the development of the Prakriti assessment module.

A. Data Collection and Preprocessing

The data collection and preprocessing for the "Healthcare System for Individual Prakriti" involve several key steps. In data collection, a user-friendly Prakriti Assessment Module gathers Ayurvedic dosha-related inputs, wearable devices collect real-time health metrics, and curated Ayurvedic datasets are prepared for machine learning.

B. Health Monitoring Devices

Health monitoring devices play a pivotal role in the "Healthcare System for Individual Prakriti." These devices, which include wearables and specialized monitoring tools, contribute real-time data on various physiological parameters.

C. Prakriti Assessment Module

The Prakriti Assessment Module is meticulously designed to be user-friendly, enabling individuals to provide inputs related to their Ayurvedic Prakriti seamlessly. The module incorporates questions and parameters aligned with classical Ayurvedic dosha principles, ensuring a comprehensive understanding of individual constitutions. To prioritize user privacy, robust data transmission protocols are implemented, guaranteeing the secure and confidential handling of sensitive health information within the system.

D. User Feedback Integration

The User Feedback Integration feature is integral to the "Healthcare System for Individual Prakriti," offering users a platform to provide valuable insights on data accuracy and system recommendations. By developing mechanisms for transparent and user-friendly feedback, the system establishes a continuous improvement loop.

III. RESULTS AND DISCUSSION

The implementation of the "Healthcare System for Individual Prakriti" has demonstrated noteworthy outcomes in its quest to merge traditional Ayurvedic wisdom with modern technology for personalized healthcare. The following key results and discussions outline the system's performance and its implications for enhancing individual well-being

A. Enhanced Prakriti Assessment

The integration of Ayurvedic principles and machine learning models has led to an enhanced ability to assess and determine individual Prakriti accurately. Through user-friendly interfaces and carefully designed questions aligning with classical Ayurvedic dosha principles, the system showcases improved precision in understanding and categorizing Prakriti, laying a solid foundation for personalized healthcare recommendations.

B. Personalized Treatment Plans

Utilizing machine learning algorithms trained on Ayurvedic datasets, the system has excelled in formulating personalized treatment plans. By correlating Prakriti with health outcomes, the system provides contextually relevant and tailored recommendations, ranging from dietary advice to lifestyle modifications. This results in a holistic approach to healthcare that aligns with Ayurvedic principles.

C. User Engagement and Accessibility

The user-friendly interface, coupled with continuous user feedback mechanisms, contributes to a high level of user engagement. The seamless accessibility of the system empowers individuals to actively participate in their healthcare journey. The integration of educational materials ensures that users not only receive personalized recommendations but also gain insights into Ayurvedic principles, fostering a sense of awareness and empowerment.

IV. CONCLUSIONS

The "Healthcare System for Individuals" represents a significant leap forward in the realm of personalized healthcare management. This innovative system is designed to empower individuals with the knowledge and tools needed to take control of their health and well-being, paving the way for a healthier and more informed society.

The project's primary objective was to develop a comprehensive healthcare system that embraces the principles of Ayurveda, modern medicine, and advanced technology. The system achieves this by conducting Prakriti assessments to determine an individual's unique constitution and health needs, thus enabling personalized healthcare recommendations. It harmonizes the age-old wisdom of Ayurveda with cutting-edge machine learning and data analysis, making healthcare truly individual-centric.

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- 3) *Declaration of Competing Interest:* The authors declare no conflict of interest.

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