

ARTIVERSE 2.0

Team Name : SpartanZ

Theme : Health

Title : Gen-fit: AI-Powered Personalized Health Insights for a

Smarter You

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ABSTRACT

A machine learning system can provide personalized healthcare advice by integrating genetic data with lifestyle factors such as diet, exercise, sleep, and environment. With the growing accessibility of genetic testing, individuals can gain insights into their genetic predispositions, such as the risk for certain diseases or how they may respond to specific medications. When combined with lifestyle information, this data can help generate customized recommendations that optimize health outcomes. It uses machine learning algorithms to find patterns and predict risks, which could be due to genetics or lifestyle, related to chronic conditions like diabetes and heart disease. The system provides lifestyle adjustments recommendations in the form of diet changes or exercise modifications that may reduce such risks. With new data emerging, the system will always adjust its recommendations based on the most current research available. This approach empowers people to make more informed decisions about their health by offering personalized advice based on an individual's unique genetic profile and daily habits. The system also ensures that user data is protected, prioritizing privacy and security. Ultimately, this personalized healthcare model has the potential to revolutionize preventive care, helping individuals take proactive steps to improve their health and well-being.

KEYWORDS: Personalized healthcare, Lifestyle factors, Chronic conditions, Diet and exercise recommendations, Proactive healthcare.

PROGRAMMING LANGUAGES & TOOLS:

Python, Mongo DB, Flask, VS Code.