



Novel Journal of Applied Sciences Research

A Generative AI Solution for Healthcare Problems: Application of Large Language Model DawiTech

Slimani islem Abdelkader*, and Becharef Mohamed Amine

Department of informatics/MICR 2, University of Dr Taher Moulay, Saida, Algeria

*Corresponding author: Slimani islem Abdelkader, Department of informatics/MICR 2, University of Dr Taher Moulay, Saida, Algeria

Submitted: 10 May 2024 Accepted: 14 May 2024 Published: 20 May 2024

doi https://doi.org/10.63620/MKNJASR.2024.1015

Citation: Abdelkader, S. i., & Amine, B. M. (2024). A Generative AI Solution for Healthcare Problems: Application of Large Language Model DawiTechy. Nov Joun of Appl Sci Res, 1(3), 01-02.

Introduction

What's Dawitech?

Dawitech is a medical chatbot designed to interact with users in natural language, providing information, guidance, and assistance related to medical topics and healthcare. These chatbots are equipped with algorithms and databases containing medical knowledge and information, allowing them to understand users' queries and provide relevant responses.

The purpose of this project is to provide immediate medical consultation for everyone through our platform, whether by writing or by uploading a set of images and videos of the medical condition.

At the core of Dawitech's mission is the recognition of the need for immediate access to medical consultation and assistance. Leveraging the power of artificial intelligence (AI), Dawitech's chatbot interface provides users with instant responses to their medical queries, eliminating the barriers of time and location. This AI-driven approach not only expedites the process of diagnosis and treatment but also empowers users to make informed decisions about their health.

Our application analyzes and diagnoses the illness, and then provides you with solutions for treatment (medical guidance, medications) accompanied by continuous follow-up.

DawiTech is directed to all citizens of different age groups, with the possibility of use by medical centers and hospitals to avoid overcrowding issues and provide immediate assistance in various cases, both regular and urgent, without the need to wait Moreover, Dawitech goes beyond traditional healthcare delivery methods by integrating wearable devices into its platform. Through seamless connectivity with wearable technology, users can effortlessly monitor their health parameters, including heart rate, blood pressure, and activity levels, in real-time. This personalized health monitoring empowers individuals to take a proactive approach to their well-being, enabling early detection of health issues and timely intervention.

Mission and Vision

The mission of Dawitech is to democratize access to healthcare by leveraging technology to provide affordable, convenient, and personalized medical assistance to individuals worldwide.

The vision is to become a global leader in digital healthcare innovation, driving positive impact on patient outcomes and healthcare accessibility.

Type of Images can DawiTech Analyse

- Radiography: The chatbot can analyze radiographs to detect fractures
- **IRM:** It is capable of analyzing IRM to identify lesions or
- Skin Lesions: It can also identify suspicious skin lesions for early diagnostic purposes.

The Benefits of Using Dawitech

- Fast Assistance: The chatbot can provide answers and advice within seconds, improving the efficiency of care.
- 24/7 Availability: Patients can have immediate access to relevant medical information at any time.
- Continuous Education: The chatbot can assist in educating patients about disease prevention and available treatments

Innovation

Dawitech uses AI to provide quick medical help, making healthcare more accessible and efficient. It offers a complete platform for consultation, diagnosis, treatment, and patient education, changing how people access healthcare.

Remote Health Monitoring

Dawitech introduces a remote health monitoring feature that allows users to track their health parameters and receive personalized insights for proactive healthcare management.

Leveraging wearable devices, IoT sensors, and data analytics, Dawitech enables users to monitor vital signs such as heart rate, blood pressure, and activity levels in real-time.

Page No: 01

Key Components

- Wearable Devices Integration: Dawitech seamlessly integrates with a variety of wearable devices, including smartwatches, fitness trackers, and medical-grade sensors. Users can connect their devices to the Dawitech platform to sync health data automatically.
- Real-time Data Analysis: Dawitech employs advanced data analytics algorithms to analyze the continuous stream of health data collected from wearable devices. This includes identifying patterns, detecting anomalies, and generating personalized health insights for users.
- Health Dashboard: Dawitech provides users with a comprehensive health dashboard that displays their vital signs, activity levels, and trends over time. The dashboard offers visualizations and actionable recommendations to help users understand their health status and make informed decisions.
- Alerts and Notifications: Dawitech sends alerts and notifications to users in case of any abnormalities or concerning trends detected in their health data. This proactive approach enables early intervention and preventive measures to maintain optimal health.
- Integration with Healthcare Providers: Dawitech facilitates seamless communication between users and their healthcare providers by sharing relevant health data and insights. This enables remote monitoring by healthcare professionals, virtual consultations, and timely interventions when necessary.

What is the most effective way to generate revenue from our project?

- Subscription Model: Offer subscription plans for users and healthcare institutions to access Premium features and services, such as priority consultations and extended follow-up.
- Licensing: License the Dawitech platform to medical centers, hospitals, or other healthcare organizations for integration into their systems, generating revenue through licensing fees.
- Sponsored Content and Partnerships: Collaborate with pharmaceutical companies, medical device manufacturers, and other healthcare brands to promote their products and services through sponsored content, advertisements, and partnerships within the Dawitech platform.
- Telemedicine Services: Integrate telemedicine services into Dawitech, allowing users to schedule virtual appointments with healthcare professionals for a fee.

Conclusion

In conclusion, Dawitech represents a paradigm shift in healthcare delivery, where innovation, accessibility, and collaboration converge to empower individuals in their journey towards better health. As Dawitech continues to push the boundaries of what is possible in healthcare, it reaffirms its commitment to revolutionizing the way healthcare services are delivered and experienced.

Copyright: ©2024 Slimani islem Abdelkader, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Page No: 02 www.mkscienceset.com Nov Joun of Appl Sci Res 2024