Personalized Health Assistant

Overview:

Personalized Health Assistant is an integrated IoT solution designed to cater to your healthcare needs. It focuses on enhancing your well-being, safety, and convenience.

Technology and Standard

The Project implementation will include

Communication from the wearable device to the mobile app through Bluetooth and **4G/5G Cellular systems which provides** high bandwidth and reliable communication and covers long distance with ultra-low latency, this is very important for time sensitive solution.

Components: 1.

Wearable Health Monitor:

• Develop a wearable IoT device such as a smartwatch or health band that continuously monitors vital health metrics. This could include heart rate, blood pressure, blood glucose levels, body temperature, and more.

• The device should be personalized to your medical history and health conditions, sending alerts in real-time when any parameter falls out of the normal range...

2. Health Dashboard:

- Mobile app that syncs with your wearable health monitor.
- This app provides real-time and historical data on your health metrics, allowing you to track your health progress.
- The data will also be uploaded to the Electronic Health Record system which can be accessed by your personal health care provider.
- Implement AI-driven analytics that provide personalized health

recommendations and insights.

4. Emergency Response:

- Include an emergency button on the wearable device and in the mobile app.
- An embedded sensor in the wearable device to quickly locate patient in the case of emergency
- In case of a health emergency during transportation, you can press the button, and the system will immediately contact the nearest healthcare provider and share your health data.

5. Data Security and Privacy:

• Implement robust security measures to protect your health and location data.

Ensure compliance with personal data protection regulations.

6. Customization and Machine Learning:

- Over time, the system should adapt to your specific health and transportation preferences through machine learning.
- Customization options should allow you to set personal thresholds and preferences.

7. Feedback Loop:

• Establish a feedback mechanism through the app to continuously improve the system based on user experiences and requirements.

8. User Support:

• Provide dedicated customer support to address any issues or questions related to the system.

Benefits:

- Enhanced health monitoring and quick response to health emergencies.
- Integrate IoT medical data into healthcare systems.
- The health care provider will have access to the medical data remotely and can plan the treatment accordingly without the need for the patient to visit the doctor.