

HEALTHMate: An Android-Based Health Management System

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Abstract

This project aims to address health management, which is now required for increasing obesity, diabetes, and other health-related issues. The majority of existing health apps are partial solutions, and individuals need to rely on multiple apps for planning diets, fitness monitoring, and medication reminders. To address this, HEALTHMate is developed as an integrated Android-based health management application. Written with Android Studio in Java and XML, the app integrates AI meal planning, a BMI and macronutrient calculator, a pedometer for steps, and a medicine reminder system. Firebase authentication allows secure storage and real-time syncing of user data. By offering a user-friendly interface and personalized recommendations, HEALTHMate maximizes convenience and engagement between diabetic and non-diabetic patients. The application closes the loop between medication management, diet, and fitness, encouraging a healthier lifestyle. With real-time data processing and seamless integration of multiple features, HEALTHMate provides an integrated solution for health management.

Keywords

Health management application, AI meal planning, BMI calculator, Macronutrient tracking, Pedometer, Medication reminder, Firebase authentication.

SDG Goals:

Zero Hunger, Good Health and Well-being, Quality Education, Gender Equality, Reduced Inequality, Life on Land.