Chapter 2
A Wellness Mobile Application for Smart Health

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ABSTRACT

The suggested wellness mobile application uses many processes, both automatic and manual, to record various parameters on a daily basis. The wellness app also calculates and monitors the appropriate indicators monitoring nutrition, physical activity, and sleep quality to motivate the user to alter their lifestyle. An inference reasoning module analyses these signs to identify the types of recommendations the subject needs to adopt the desired behaviours. These recommendations might include, for example, maintaining the Mediterranean diet correctly, which is acknowledged as the suitable diet for preventing cardiovascular disease, and/or improving the activity plan. Guidance, exercise, sleep, and mindfulness are among linked aspects that Flutter, a wellness app for Android and iOS, takes care of.

INTRODUCTION

Promoting health and fitness through a balanced diet, frequent exercise, and healthy sleep habits is a major goal in many countries. The Wor1d Health Organization estimates that 31% of adults undertake inadequate physical activity, which results in about 3.2 million deaths per year. Additionally, a study found that certain conditions are to blame for a whopping 86% of fatalities, 77% of years spent bedridden, and 75% of healthcare costs in Europe. These problems include illnesses of the heart, malignancies, diabetes, the chronic respiratory system, the mind, and the

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musculoskeletal system. Common risk factors for these disorders include smoking, being overweight or obese, abusing alcohol, eating too few fruits and vegetables, and not exercising (Abraham et al. 2008).

LITERATURE SURVEY

Obtaining a diet plan through the current dietitian system is entirely manual. To learn about the recommended diet, people must physically visit their neighbourhood dietitian. The user has to wait for their dietitian appointment. The user occasionally may have to wait for many hours. Receiving their diet plan as a result is quite inconvenient for the individuals. Even merely learning what they should eat requires them to wait. When seen from the perspective of the end user, this is ineffective (Alberti-Fidanza, et al. 2017). Under the previous system, conditioning algorithms and data mining were frequently used to construct diet charts, which encouraged database use and only relied on the database, necessitating repetitive data entry. Current systems consider a user's height, weight, and diet while ignoring daily activities, medical issues, and dietary preferences, which is a severe problem. Given that the domains are different, the AI domain has an advantage in producing a healthy diet plan, which other systems lack. The following are some drawbacks of prior systems: It doesn't consider the user's health state, such as diabetes or cardiac patients. A group of dietitians, personal trainers, and behavioural psychologists support the Noom programme, which emphasises on changing behaviours rather than restricting one's diet or following a rigorous exercise routine. It is based on how our behaviours connect to food and the psychology of eating (Alshawmar, M et al. 2021). The app also allows you to monitor your exercise, weight, blood sugar, and blood pressure. It also provides articles to motivate you, health quizzes, and one-on-one health counselling (Alderfer, C.P. et al. 2019).

Middle-Earth About a thousand guided meditations on subjects including stress, anxiety, acceptance, happiness, inspiration, focus, and breath are available in Meditopia's library. The fitness app by Lucy Mecklenburgh. It results in Wellness Lifestyle takes pride in being able to house all of your health apps in one place, with more than 1,000 workouts, 600+ meals, four mindset courses, 11 organised programmes, and monthly live workout sessions. We enjoy the "pain clinic" portion, which focuses on managing back discomfort. Delectably Ella's app With her de1icious plant-based recipes delivered directly to your phone, Deliciously Ella's popular app is like carrying a recipe book around with you. There are about 300 nutritious options to choose from, and the upgrade for 2021 will add even more for you to savour.