Study on How Artificial Intelligence is Utilized in Trade of Fitness Apps

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Abstract: *Tablets and smartphones are gradually but steadily transforming our notions of health and fitness. Users and health professionals may now access a plethora of applications that cover the whole health care continuum. Acquiring information, preventing, diagnosing, treating, and monitoring are all part of the procedure. Furthermore, our team developed myFitnessCompanion®, a mobile health and fitness app that has been accessible on the Android Market since February 2011. This article's purpose is to discuss our experience building and marketing a fitness and wellness app. This article examines the acceptance of health apps among users and the healthcare business, as well as how mobile health applications will be distributed in the near future. IBM Watson, IBM's artificial intelligence machine, has outpaced human intellect (at some levels). Watson not only beat previous Jeopardy! winners, but he was also acclaimed as a hero after accurately identifying a lady with leukaemia. We've collected a list of the best GPS tracking apps for Android below. 1. It is based on the authors' seven-year expertise as a mobile health and fitness software developer. Personal Health Record (PHR) systems (Microsoft HealthVault) and FDA restrictions may have an influence.*

Keywords: myFitnessCompanion

I. INTRODUCTION

Automation is a relatively new discipline that has seen both amazing accomplishments and equally spectacular failures. The failures were mostly the result of underestimating the intricacy of seemingly simple problems, as well as the notion that raw computer power can solve any problem. It is based on the authors' seven years of experience creating mobile health and fitness apps. Part of the research examines the influence of Personal Health Record (PHR) systems (Microsoft HealthVault) and FDA regulations on the future of mobile health apps. makers, and we talk about the problems and opportunities for app developers in the health industry. Engineering principles are emerging from all of this knowledge, and they may be used to guide engineers. who must cope with more complex difficulties in an increasingly competitive environment, and who may be used to advise engineers

[1] The increased number of clients who use smart phones and tablets, as well as access to health and fitness applications, has driven the healthcare industry to incorporate them.

[2] By 2015, more than a third of the world's 1.4 billion smartphone users would be using mobile health apps. At the time of writing, there are thousands of health and fitness apps available for download on Google Play (December 2012).

[3]. Three hundred and ninety-six of them use a sensor to obtain or derive physiological data (e.g., weight scale, blood pressure monitor, accelerometer, GPS). The applications are either free or have a little fee.

[4]. MyFitnessCompanion®, an app created by our team, does just that. care delivered from a distance as consumer demand for self-monitoring develops, the possibility for digital behemoths to create mHealth applications grows.

[5] It employs wireless sensors (Bluetooth, WIFI) or manual input to collect physiological data. Users may track their weight, food consumption, blood pressure, asthma, blood glucose, HbA1c (glycated haemoglobin), cholesterol, temperature, respiration, oxygen, intraocular pressure, bowel movement, and heart rate using Android phones and tablets. Some of the therapeutic areas include fitness, diabetes, asthma, obesity, and hypertension. utilises technology to extend healthcare practitioners' clinical contexts It's a wide word that refers to how the healthcare industry is utilising technological advances to deliver remote treatment. As consumer demand for self-monitoring develops, the possibility for digital behemoths to create mHealth applications grows.

The following are some of the most popular health-related smartphone apps:

KARDIA MOBILE APPLICATION:

In December 2011, there were a total of 10 billion beyond reach. Diabetes patients can monitor their heart health in order to reduce their overall risk of heart disease. Doctors advise you to have your heart tested, which includes an ECG. Furthermore, guess what? It is made possible by the Artmobile 6L, the world's first and only 6 lead US FDA-approved ECG heart monitor. The Artmobile 6L is a portable ECG monitor that can provide a medical-grade ECG in about 30 seconds. You will benefit from the gadget. detect Cardiac arrhythmias include atrial fibrillation, tachycardia, and bradycardia.
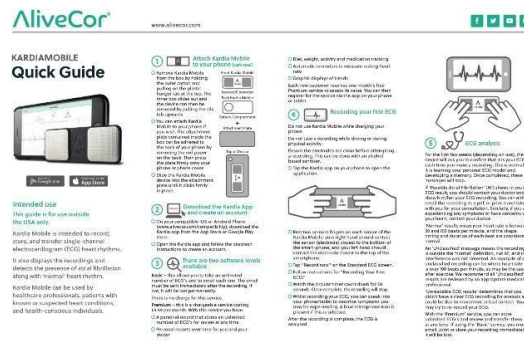
Heart arrhythmias can result in strokes and heart failure. A Fib is a condition in which the heart does not adequately pump blood, causing blood to pool and clot. If the clots dislodge and go to the brain artery, they can cause a fatal blockage or stroke.

Detecting tachycardia or bradycardia can also aid in the prevention of heart failure. The Alive or Artmobile 6L, the most advanced at-home heart monitor, can detect changes in your heart rhythm and alert you to potential cardiac problems.

Google Play rating: 4.4

The impact of the pandemic on heart health. As a result, cardiologists are embracing modern technologies to find novel methods to treat patients.

As a result of the pandemic, patients are turning to telehealth for cardiovascular care, and those with cardiovascular disease can benefit from telemedicine in the form of remote monitoring and consultation. One of the most significant benefits of telehealth visits is the opportunity to consult with a cardiologist from a distance, which is especially useful for patients who reside in rural places. In the context of the present pandemic, tele-electrocardiogram (ECG) home monitoring is more appropriate, with patient-friendly mobile phone applications allowing the transmission of ECG results directly to professionals for examination.

Alienor's free Kordia app, available for iOS and Android, captures and saves single-channel ECGs in combination with the Heart Monitor.

TGA-approved (ARTG)In combination with the Heart Monitor, Alienor's free Kordia app for iOS and Android captures and saves single-channel ECGs. Artifacts are decreased as a result of the enhanced filtering procedure, resulting in high-fidelity tracing. There are the following Google Play downloads available: 100K+

BLUESTAR DIABETES APP:

The BlueStar Diabetes App, created by Weldon Inc., operates by capturing blood-glucose readings and providing real-time coaching. Weldon's algorithm analyses data from over 20,000 automated coaching messages and delivers a personalised coach to assist patients manage their medication and therapy. Submitting diabetes questions and receiving responses from expert diabetes educators can help. Furthermore, the app tracks the user's medications, sends reminders, and provides healthy recipes, meal planning, and lifestyle counselling. The app can also link with fitness trackers and be coupled with the OneTouch Verio Flex® metre to wirelessly communicate blood glucose data to the app.

10K+ Google Play downloads
Google Play rating: 4.1 App Store rating: 4.5
Google Play and the App Store both have it.

FITNESS APPS:

Before we get into all of the benefits of fitness apps, let's look at their history. Google Health looked to be a big success when it was released in 2008. It would almost surely be successful if it were published now, but it was so unpopular at the time that the company was forced to cancel the project in 2011. Why did Google Health fail, despite the numerous opportunities it provided?
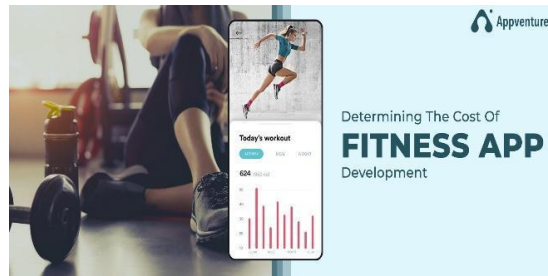
In recent years, it has been trendy to live a healthy lifestyle. Nowadays, being healthy involves being gorgeous, successful, and physically fit. Obesity and sedentary office work are becoming more generally recognised as illness factors.

As a result of these and other health-related difficulties, millions of individuals throughout the world participate in sports. As a consequence, a fitness app is a programme that can be downloaded and utilised on any mobile device to keep in shape. Over 165,000 health-related applications were available in 2015 on the two most popular platforms, the iPhone operating system (iOS) and Android. [1] Apps may assist people in changing their behaviours by allowing them to set fitness goals, manage their calorie intake, acquire workout suggestions, and share their achievements on social media.

They may be used as a platform to encourage healthy behaviour change by providing customised exercises, fitness instruction, and nutrition programmes. Fitness applications may connect wearable device health data to third-party devices, making it easier to access. By adding gamification elements and generating a competitive spirit among friends and family

ACTIVITY TRACKING APPS:

Wearables are widely used in conjunction with activity tracking applications. Even if you don't go to the gym or participate in sports, you may utilise activity tracking software to ensure that you receive adequate exercise. These applications can keep track of how many steps you've completed as well as how many calories you've ingested. They can use geolocation to track the distance travelled. Two of the more exciting parts here are sleep quality evaluation and smart alarm clocks that wake users up during the REM sleep period, helping them to get up quickly and effortlessly.

Many activity monitoring applications work with wearables, but if a user does not have one, the capabilities of a smartphone are adequate to collect data.

Plan My Run.

Fitness Partner.

JEFIT Workout Scheduler.

RunKeeper.

MyFitnessPal.

Runner of ten kilometres.

Untasted

It may be challenging to keep track of everything you do on a daily basis, especially if you're tracking different behaviours. Among the applications provided are simple checklists, habit-building social networks, and personal data centres. Hopefully, you'll be able to find one that meets your requirements. Calorie counting and recipe discovery are made easier with nutrition apps

NUTRITION APPS:
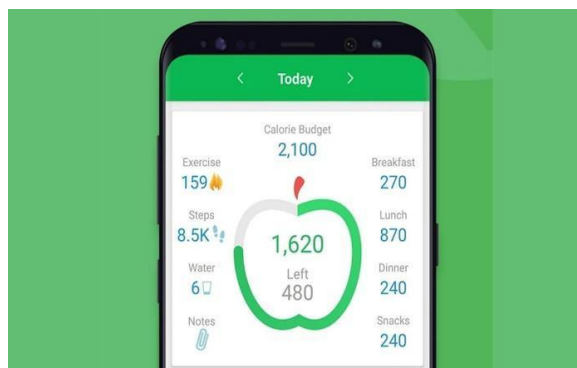
These applications help users keep a healthy weight by measuring calories consumed and spent, monitoring water balance, and encouraging healthy eating habits. They can also help you keep track of how much coffee you drink and maintain a healthy body fat weight and percentage. The smartphone in your pocket is a technological marvel. Its processing capacity dwarfs that of the computers used by NASA for the Moon landings, and it links you to a global network of nearly 3 billion individuals. The finest diet apps available today use the power of your smartphone to assist you in taking control of your nutrition and health via healthier eating. We put 10 of the most popular weight reduction apps for Android to the test iPhone (iOS) (iOS). Here's an overview of those options, as well as their advantages and disadvantages. While some of the diet apps on our list are calorie counters and food diaries with extra bells and whistles, we've also included some original and unusual solutions.

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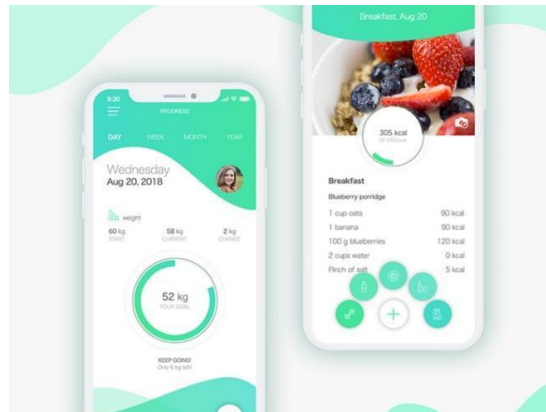
Remember that the actual measure of an app's worth is whether or if it assists you in making healthy adjustments. If an app doesn't push you to modify your diet, it's just a waste of time. Personal objectives are the primary emphasis of such apps. If you're having difficulty sticking to a healthy diet, the app may assist you in making grocery lists and even collecting healthy food recipes! Three of the best applications of this sort are Healthy Out, Calorie Counter & Food Diary, and MyPlate Calories Tracker.
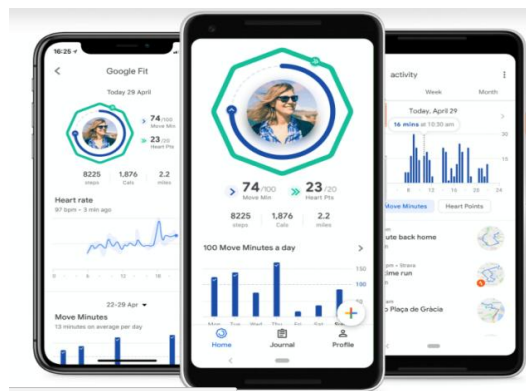
Apps for measuring physical activity:

Wearables are widely used in conjunction with activity tracking applications. Even if you don't go to the gym or participate in sports, you may utilise activity tracking software to ensure that you receive adequate exercise. These applications can keep track of how many steps you've completed as well as how many calories you've ingested. They can use geolocation to track the distance travelled. Two of the more exciting parts here are sleep quality evaluation and smart alarm clocks that wake users up during the REM sleep period, helping them to get up quickly and effortlessly. Many activity monitoring applications work with wearables, but if a user does not have one, the capabilities of a smartphone are adequate to collect data.

Regular exercise can help people maintain a healthy weight and lower their risk of illnesses such as coronary heart disease, diabetes, and cancer. It can also assist to strengthen the heart, enhance lung function, and lower the risk of depression.

II. CONCLUSION

According to the Centres for Disease Control and Prevention, adults should aim for at least 150 minutes of moderate-intensity aerobic activity every week (CDC). Finding the motivation to exercise, on the other hand, might be difficult. According to 2014 research involving 15 mobile app users, fitness applications may motivate users to increase their physical activity. However, customers should exercise caution when using a fitness app, according to 2015 research. The researchers looked at 30 popular fitness apps and determined that adherence to the American College of Sports Medicine's criteria was low overall. Only one app received a score of greater than 50%. Finding the motivation to exercise, on the other hand, might be difficult. According to 2014 research involving 15 mobile app users, fitness applications may motivate users to increase their physical activity. However, according to a 2015 research, users should exercise caution while choosing an app.

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