A Review on Mobile Application to Search Fitness Centres Using GPS

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Abstract — The FIT-IN android app will allow the user to concentrate on their health in a better way with less efforts. The app uses the phone’s GPS and locate all fitness related places in your locality i.e. gyms, Zumba class, swimming pools etc. The user can choose the package they want among the nearest fitness centres. The mobile application breaks the stereotype that being healthy is a tough task. This app will utilize online payment methods and hence the user will not have to go to the gym directly. It also has the facility to interact with other users and hence they can build a network of likeminded individuals. Apart from that to keep a check on the details provided we have given a feature of reviews so that the user can rate the fitness centre and this would help others to take a better decision. The app also provides basic knowledge of what safety majors we have to take at the fitness centre.

Keywords— Fitness Centre, Mobile Application, Android app Health

1. INTRODUCTION

The fitness industry is a rapidly evolving business today. Being fit itself has unfolded from a luxury to being a basic need. As a result a large number of fitness centres have come up across cities. Our app focuses at breaking the stereotype that being fit is a difficult task.

This android based mobile application focuses on solving the above problems and make it easier for people to be fit. Our app uses phone’s GPS system to locate fitness centres around the person and find information about the centre and can even join the centre if desired. Therefore our app Fit-In aims to centralize all the fitness related places and make it convenient for people to find fitness centres around their place.

The working of our application is as follows:

- The user needs to download the application and create an account on our app.
- The user logs in into his/her account and enables the GPS
- The applications gives the user an option to apply filter and search his/her desired centre.
- The user can then access the details and see the information along with the rating of the centre.
- If the user wishes to join the centre one click on join option leads to the webpage of the fitness centre and then he/she can join the centre.

Our app works as a link between the user and the fitness centre and also allows the user to interact with the trainers and doctors along with the do’s and don’ts which saves the user from major injuries.

2. LITERATURE SURVEY

In this section the paper describes the review of current market that was performed. We could find few applications that performs almost the same functions as this application

Existing System

Through our market survey we found no other app that allows user to find and directly connect to the fitness centres. There were few web pages which do almost the same work but there is no app for it and we have to manually feed our location. There is only one existing app that also does cover the whole city.

Journal of Neuro Engineering and Rehabilitation 2012:

A review of wearable sensors and systems with application in rehabilitation. The aim of this review paper is to summarize developments in the field of wearable sensors and systems that are relevant to the field of rehabilitation. This device cannot be used all the time as it is a jacket and wearing it all the times is not possible.
Survey on Fitness Centres Automation and Development of Mobile Application for Android Platform:

This paper contains the details of research and market survey carried out for creation of an Android application that automates a fitness centre’s entire business process. The survey was done on automation of fitness centres and the mobile application would only help the fitness centres’ owners to ease their task of managing their centre in a proper manner and maintaining the client profile which is not of any use to the client or the person who is interested in joining the centre.

The International Journal of Engineering and Science (UES) 2014:

Healthcare system using Android OS with the help of medical expert system provides advantages to patients, enabling them to access medical information and support systems, irrespective of their current location and time.

This survey was done on a mobile application which gives any patient to interact with the medical personnel at any moment and medical support instantly without going to the hospital.

Survey of fitness applications:

GymPik.com:

GymPik.com is an online marketplace and aggregator for fitness service providers, which helps consumers find gyms, aerobic classes, martial art centres and dance classes with further information about trainers and professionals.

Website: www.gympik.com

Fitternity:

It is an online hyperlocal discovery and booking platform for fitness programmes including gyms, yoga, zumba, marathons, and cross fit training. The platform also tries to promote healthy eating through tiffin services, snacks and beverages.

Website: www.fitternity.com

Gymer:

With a ‘pay-as-you-go’ model, Gymer works as a mobile app and web-based service, which allows users to book workout sessions with gyms. Users can pick the closest centre to them through a list of verified gyms on their network. The platform aims to tackle the persistent issue of members paying heavy fees and not returning to the gym.

Website: Gymer, App

3. ANALYSIS

This section of the paper contains the comparison between the app and web usage as shown in Fig. 1. It shows the app dominance over websites as we can see that the usage of app is increasing over the year.

![Graph showing app dominance over websites](image1.png)

Fig. 1 A sample graph using colours which shows the app dominance over websites

![Average daily app usage growth](image2.png)

Fig. 2 A sample graph using colors which shows the average daily app usage

![Fitness app details](image3.png)

Fig. 3 Fitness app details
In Fig. 2, the graph shows the average daily app usage growth. We can see the health and fitness apps are used more frequently over any other apps.

The Fig. 3 shows that by 2016 there were more than 1 billion annual health-related app download and it is increasing year by year. It also shows that 1 in 5 smartphone user track their health with a mobile app.

4. PROPOSED SYSTEM

Our proposed system, which is an android-based mobile application works mainly on breaking the myth that being fit is a difficult task. This myth exists because people do not have much knowledge about fitness. In this lifestyle which we are living in, being fit is the most important along with the other amenities such as eating. To solve this problem we plan on bringing fitness world in everyone’s hand. People can download the app and know everything about fitness, this can make them check the fitness centres available on their location using the GPS of their device. This app also includes other basic details such as the do’s and don’ts of each workout, detailed diet plans along with the details of some nutritionist and doctors.

Fig. 4 shows the architecture diagram of our android app. The user have to sign up using their basic details such as Name, Phone number, email id, age etc. Once this is done they need to login in to their FIT-IN account and the app would ask them to turn on the GPS location on their phone, the user can also enter their location manually. Once this is done they can apply filters based on the price, facilities distance etc. This will help the user to find the best centre for them. The FIT-IN app contains data of all the fitness centres such as Fitness Studios, Dance Classes, and Zumba Centres etc. The user can then select from the fitness centres and check their details along with the reviews. If the user wishes to join, they can directly pay through the app itself. The app also gives the user to give reviews for the centres hence the reviews provided would be genuine and beneficial for other users.

In the near future we plan on integrating a chat platform in the app where all the users can interact with each other and share experiences. This would be a common platform for interacting with the doctors, nutritionist etc.

5. MODULE DESCRIPTION

The app will basically have five modules. These modules divide the development of the app in parts and makes it easier. The five modules are:

1) Design Module
2) Location Module
3) Database Module
4) Payment Module
5) Feedback Module

The design module basically includes the UI design of the application. A basic design will be followed throughout the app to give a unified experience to the user. The users have become familiar to some design elements and know what actions they perform, therefore it is beneficial to use common design elements for efficiency, completion and satisfaction. The design module basically is the face of our application therefore it has to be simple and easy to use.

The location module basically focuses on GPS integration to the application so as to make sure that the app provides real-time location. Using the GPS the app will find the location of the user and shows all the fitness centres within the range of 2 km. When the GPS is on the app will take the location of the user automatically and search the nearest fitness centres and it also allow user to feed the location manually as well.

Database module stores the information of the registered user and fitness centres. It stores the personal information of the user and all the needed information about the fitness centres like fee structure, photos of the fitness centre, equipment present, address and a map which guides to that address. The user can see all the information about the centres and the centres can also see the information of the user who applied to that centre.
Payment module is made for payment methods which may include payment through Net Banking and mobile payment options such as Paytm and PhonePe. The user can pay through the app to the chosen fitness centre and apply for the membership directly. During the payment the user can apply the present promo codes to avail the special discount or offers. This facility makes the app more user friendly and saves time because the user does not have to go to the centre to pay and join.

Feedback module allows the user to give the feedback for the fitness centres they joined. If someone wants to join any centre he/she can see the review given to that gym and can join accordingly. This module makes the information provided on the app more accurate because the reviews are provided by people who have already joined and they can write about their experiences. This will surely help other users to have a clear and more accurate picture rather than just believing what is given.

6. CONCLUSION

One of the major concern of every individual is to be fit and healthy. This application will solve the problem which is faced by every person who is interested to be fit or to do something to have a better health. The app uses the GPS and allows the user to get information of the nearest fitness centers with ease. Hence the app also promotes Indian Fitness Industry and aims to make every Indian fit and healthy.

7. ACKNOWLEDGMENT

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8. REFERENCES