# FITNESS INSTRUCTOR SYSTEM

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Data: 01/12/2022

#### Abstract

As I mentioned in the title of this report, I proposed an idea about the Fitness instructor app, In which the system provides the proper instruction to the health conscious customers to improve their health by providing a proper time table, proper diet, proper exercises, health tracker etc. Nowadays the living capacity of the humans are reducing day by day because of the machines which reduces the humans day to day working activity or say physical activites, eating unhealthy food, lack of proper nutritions etc. So this AI(Artificial Intelligence) based app gives instructions to the customer who is really too busy in their life, neglecting their health, and generates balance in their life

#### 1. Problem statement

Problem statement is using the Artificial Intelligence model to analyse the customers requirements about their fitness. How do they want to balance fitness with their busy schedule? So the system designs a timetable for the customer, and changes according to the situations. Which includes all the instructions with time which is relevant to the customer for example from the beginning of the day what kind of meal they should eat, what kind of nutritions they should consume, what kind of exercises they need to do etc. and providing a tracker for their health.

### 2. Market/Customer/Business need assessment

As i explained due to the machines work ,decreases the humans activity or say physical activity, lack of nutritions , consumes unhealthy foods because of this all small reasons the humans health is significantly affecting due to this the living capacity of the human reducing day by day , and most of the humans are ignoring it. So this system provides health instructions and tasks to the customers, so they will follow them, and day by day health is going to improve for sure. This is the business model that can change the way of humans in a healthy way, and the market for this business is huge because everybody wants to live longer and reduce the speed of getting old.

## 3. Target specification and characteristics

The system provides the customer instructions when they provide their some data for the analysing, after analysing the system provides the instructions to

the customer and as per the customer require for their health they choose whatever they want to follow,

The following instructions can be provide by the system:

- Full diet plan(includes what kind of nutritions customer required)
- Providing Exercise plan (includes gyming instructions for every part of the body with proper process and with video clips.)
- Zumba/ Aerobics
- Weight reducing as well as weight increasing plan(includes all the mentioned instructions above)
- Providing books as well as experts expertise,
- And many more.

### 4. External Search

The sources that I have used as reference for the analysing need of this app for the humans better lives and for the better business. And how can I make this app user friendly by using the AI.

- <a href="https://reference.jrank.org/fitness/Fitness\_Apps.html#:~:text=The%20purpose%20of%20a%20fitness,to%20download%20from%20the%20internet.">https://reference.jrank.org/fitness/Fitness\_Apps.html#:~:text=The%20purpose%20of%20a%20fitness,to%20download%20from%20the%20internet.</a>
- Borison, Rebecca. "Health and Fitness Apps Are Exploding in Popularity—Here's Who Is Using Them." Business Insider.com. http://www.businessinsider.com/healt-hand-fitness-apps-exploding-in-popularity-2014-6 (accessed February 21, 2017).
- Fitness Health. "Study Casts Doubt on Effectiveness of Fitness Apps." FitnessHealth101.com. http://www.fitnesshealth101.com/news/2015/09/23/study-casts-doubt-on-effectiveness-of-fitness-apps (accessed February 21, 2017)
- <a href="https://neoteric.eu/blog/how-is-ai-revolutionizing-the-fitness-industry-nowdays/#:~:text=Freeletics%20is%20another%20great%20example,research%2C%20and%20user's%20individual%20preferences">https://neoteric.eu/blog/how-is-ai-revolutionizing-the-fitness-industry-nowdays/#:~:text=Freeletics%20is%20another%20great%20example,research%2C%20and%20user's%20individual%20preferences</a>
- Pappas, Stepanie. "Health App Downloads Soar, But Do They Work?"
   Today.com.

http://today.msnbc.msn.com/id/42310835/ns/today-today\_tech/t/health-a pp-downloads-soar-do-they-work (accessed February 21, 2017).

### 4.1 Benchmarking

The Fitness instructor app, In which the system provides the proper instructions to the health conscious customers to improve their health by providing a proper time-table, proper diet, proper exercises, health tracker etc. so they can live as they want. It provides the treatment like a personal trainer to you. It helps clients stay healthy and make their workouts are even more effective.

## 4.2 Application Constraint

- Data Collection from customer.
- Continuous data collection and maintenance.
- Lack of technical knowledge for the user.
- Taking care of Technical issues..
- Giving customers technical support.

## 4.3 Applicable Regulations

- Data protection and privacy regulations(Customers)
- Govt Regulations for small businesses
- Employment Laws
- Antitrust Regulations
- Regulations against false advertising

## 5. Business Opportunity

AI and machine learning power the best fitness applications on the market. Data analytics and artificial intelligence are the future of the fitness and wellness industry, and, as rising trends, they should not be ignored. Clients' expectations are dynamically changing. Customers require more and more personalized services, and they will soon reach for services and products that meet those needs.

## 6. Final Product Prototype

The above system is not built for considering young people, it's built for all age group people. Based on the ages the app will instruct them properly without any risks. In the future, I'm going to add YOGA in this app because physical health is not only important , along with physical health , mental health is also important, As Indian i know the YOGA , how it is important to the human's life for better living. This has a huge market. Providing this kind of facility to the customer will make them happy and healthy.

Giving data to the system

Analysing the data

Providing Instructions by the system

- The app will take inputs from the customer, inputs like age, weight, height, whether the customer has a disability or not, photo of the customer, and what customer required.
- Then analyse all the data which is given by the customer, the system provides all the instructions with alarms to the customers, instructions like diet plan, list of exercise with information, nutrition plan etc.
- According to how the customer performs, the tracker will track the performance of the customer.
- Arranging online meet with experts who are expert in this field.

### 7. Conclusion

Artificial Intelligence is the revolution in many sectors. Data analytics and artificial intelligence are the future of the fitness and wellness industry, and, as rising trends, they should not be ignored. Clients' expectations are dynamically changing. Customers require more and more personalized services, and they will soon reach for services and products that meet those needs.