LITERATURE SURVEY

- Nutrition is vital to the growth of the human body. Nutritional analysis ensures that the meal satisfies the necessary vitamin and mineral requirements, and the study of nutrition in food helps to understand the ratio of fat to carbohydrates, the amount of proteins and fibre, the amount of sugar, and other factors. Not going above our daily calorie needs is something else to keep in mind. If this threshold is crossed, we might gain weight.
- An app called "Eatly" grades the meal into one of three categories—"very healthy," "it's O.K.", or "unhealthy"—based on the user's food photos.The rating is actually completed manually by the app's user base, not automatically by computerised methods.
- DeepFood: This article describes the development of a brand-new Convolutional Neural Network (CNN)-based food photo identification system to address the problem of computer-assisted nutritional assessment using deep learning. On two sets of real food image data, we used our suggested method (UEC-256 and Food-101).
- Snap Meal Meal Snap for iPhone: The user is prompted to take a picture, indicate whether they are eating breakfast or lunch, and give a brief text caption in order for the Magical Meal Logging programme to estimate how many calories they are consuming. However, the precision of calorie estimation varies and mostly depends on how effectively people directly inputtext.

- Neutrino: Nutrition App using Artificial Intelligence. The app, which as its name suggests offers nutrition-based analytics and data to its users, is swiftly establishing itself as a leading platform for providing AI fitness services. It uses mathematical and natural language processing (NLP) methods to implement predictive analysis for customised data compilation. In order to enhance its services and product offerings, it also shares nutrition-related data with its partners via SDK and API integration. It is an Israeli company founded in 2011 that enables pregnant women to tailor the nourishment their bodies need. This programme worked in conjunction with IBM's natural language capacity to offer round-the-clock support and dietary suggestions.

- Fitness AI : The Perfect Home Workout Solution these tailored training plans are part of the fitness AI software's design. It was originally "gym exclusive software," but it has now updated its platform to meet "at home fitness" demands. Fitness AI claims that their system "outperforms any human fitness teacher" since it has been trained on more than 5.9 million workouts. Additionally, over a three-year period, it examined nearly 10 million sets, weights, and reps from roughly 30000 experienced gym-goers and weightlifters. To put it another way, it is a superb example of machine learning in action for better exercise planning.

- MyFitnessPal: App creates a daily food diary for you by recognizing the food from photos you shoot. It is supposed to be as simple as that. You take a picture, dial in data such as whether you are eating breakfast or lunch and add a quick text label, and the app estimates the calorie content. It does a pretty good job, although its estimate can be a bit unpredictable. It also needs a network connection, which is something to think about when eating out.

REFERENCE :

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