

Nowadays there is increasing awareness about health and nutrition. This is gaining popularity at remarkable rate. With the ease of usability and efficiency, BLE is going to be a good platform in every field. Organizations are looking for new ways to maximize their knowledge & services in communication networks, IoT solutions.



Intelligent Food Plate is one of the latest trends in nutritional technology furnished with advanced weight sensors & object recognition, which allows automatically identifying the nutritional value of the Food available on plate instantly and suggesting client appropriately as per Goal set by user.

Studies show even health-conscious eaters struggle with estimating portion sizes. For people working towards fitness and performance goals, the "portion distortion" is made even worse when viewed through the psychologic and metabolic effects of exercise and sports training on food intake. Intelligent food plate is poised to remove the obstacles and provide insight to help people make smarter food choices.

Developing an application for BLE enabled Intelligent Food Plate was first of its kind for Hidden Brains and it was necessary for us to have intense brain storming sessions with client about the exact use of Food Plate, its Firmware and integration with 3rd party APIs/SDK for Food Plate Firmware, calculating Recipe nutrition value, Recipe image recognition and QR code scanner.

Let us take a deep dive into the feature & functionalities of an application & the Intelligent Food Plate with which application is connected:



## Challenges faced by HB:

- Integration with
   Firmware provided to make sure active connection and data transfer between
   Food plate and Mobile application
- Integration of Image Recognition engine
- Integration of 3rd party API to recognize nutrition value of a Recipe

## Advance object recognition:

- An intelligent system that instantly analyzes everything that User intakes.
- It automatically analyzes a user's entire meal with the highest degree of accuracy.
- System will visually determine each food, weigh the portions, and then report back with recipe nutrition data such as Calorie, Fat, Protein, Carbs, and Salt.

## **Record or Tracks:**

- Manage and Tracks User Goals
- View Daily Intake
- Generate Notifications
- Manage Daily Intake History
- Manage Fitness Activity as per Defined Goal

