

Product Function Module Definition: Smart Nutrition Assistant for Busy Professionals

Product positioning

1. Users perceive health management as an ongoing task rather than a one-time effort, emphasizing the need for tools that support habit formation.
2. Target users - busy professionals - are highly sensitive to time expenditure, favouring health solutions that integrate seamlessly into their daily routines.

Purpose: simplify user operations to the greatest extent and serve users in the most intelligent way.

Code description: V0 and V1 are MVP that means the core functions that the product must achieve.

V0 - User Module Design

- Registration flowchart
- Login/Logout interaction design
 - Log in directly using common email addresses: Google, Apple store
- User profile input:
 - Currently, most products use the traditional method, which does not require users to input step by step. - Waste time
 - **Three new solutions to replace the traditional way:**
The expectation is that users only need to register to get their unique ID and choose their "model" to complete a whole registration process.

1. Lazy mode: annoying preset + subsequent fine-tuning	Initially raise a set of neutral defaults, allowing the user to adjust them later
2. Smart completion: dynamically build portraits based on user operations	Automatically determine user type based on recognition history and intake preferences
3. Preset template selection: provide several "character cards"	The user selects "Which group of people do I resemble?" and the system automatically generates a set of parameters

- User information local storage & cloud synchronization design

V0 - Shooting/Uploading Module Design

- Photo interface design
- Single page photo -> automatic upload (remove the "preview and manual confirmation" steps)
- Upload status prompt (progress bar, success/failure)
- Interface structure (whether to perform image compression, local cache)

V0 - Food recognition + nutritional analysis module design

- Image recognition flow chart
 - User upload → Server identification → Return result
 - Requirements clarification:
 1. Identify vegetables, meat and eggs
 2. Top - 1 Accuracy: 85% (+- 3%) - this means the proportion of model Top 1 predictions that are consistent with the true label
 3. Output format: backend API response format
- Recognition result interface design (Graph + Label + Confidence)
- Nutritional information (Calories / Protein / Carbs / Vitamins...charts)
- User confirmation or modification of recognition result function
- Calorie calculation logic description document (Database? Unit? Quantity estimation?)

V1- Nutrition reminder module design

- Setting Standards for Adults based on Australian Nutrition Guidelines
 - Carbohydrates 45-65% (% of total energy)
 - Protein 15-25% (% of total energy)
 - Fat 20-35% (% of total energy)
- Real-time ingestion and target comparison design
- Reminder Feature

V2 - Diet records and trend dashboard

- Daily food log design (time, food name, nutritional chart) -table format
- Weekly intake trend chart (line chart)
- User feedback module