# User Interface Design for Food and Blood Sugar Tracking App

## Login Page

Platform: Web / Mobile

A screenshot of a login page

AI-generated content may be incorrect.

A screenshot of a cell phone

AI-generated content may be incorrect.

Function Description: Users enter their username and password to log into the system.

### User Flow Steps:

* User opens the login page.
* Enters username and password.
* Clicks the 'Login' button.
* System verifies credentials and redirects to the main interface.

## User Profile Setup Page

Platform: Web / Mobile

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a phone

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Function Description: Users can set up and edit their profile including name, gender, date of birth, and medical background for more accurate data logging.

### User Flow Steps:

* User clicks 'Profile' or 'Settings' button.
* Page displays current user information.
* User fills or updates name, gender, date of birth, and medical background.
* Clicks 'Save' button.
* System verifies input and saves data, displaying 'Save successful' message.

## Manual Food Logging Page

Platform: Mobile

A screenshot of a phone

AI-generated content may be incorrect.

Function Description: Users can manually log the food they consume and its quantity, allowing the app to compute calorie intake per meal and per day.

### User Flow Steps:

* User clicks 'Log Food' button.
* Enters food name, quantity, and unit (e.g., grams, servings).
* System estimates calories based on database.
* User confirms and clicks 'Add'.
* Page updates to show total daily calorie intake.

## Barcode / Camera Food Recognition Page

Platform: Mobile

A screenshot of a cell phone

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Function Description: Users can scan a barcode or take a picture of their food, allowing the app to automatically recognize the food and estimate calories.

### User Flow Steps:

* User clicks 'Scan/Photo Recognition' button.
* Chooses 'Scan Barcode' or 'Take Photo'.
* System recognizes food and displays name and estimated calories.
* User confirms and adds to log.

## Saved Food Items Page

Platform: Mobile

A screenshot of a phone

AI-generated content may be incorrect.

Function Description: Users can view a list of saved common food items for quick re-logging in daily food logs.

### User Flow Steps:

* User clicks 'Saved Food Items' button.
* Page displays list of saved items.
* User clicks an item to quickly add it to the daily log.

## Manual Blood Sugar Entry Page

Platform: Mobile

A screenshot of a phone

AI-generated content may be incorrect.

Function Description: Users can manually enter their blood sugar level along with the time and date of the reading, allowing them to track it over time.

### User Flow Steps:

* User clicks 'Log Blood Sugar' button.
* Enters blood sugar value, date, and time.
* Clicks 'Save'.
* System saves data and updates trend charts.

## Bluetooth Glucose Meter Integration Page

Platform: Mobile

A screenshot of a cell phone

AI-generated content may be incorrect.

Function Description: The app automatically reads blood sugar data from a Bluetooth-enabled glucose meter, reducing the need for manual entry.

### User Flow Steps:

* User turns on Bluetooth and connects to glucose meter.
* Clicks 'Sync Blood Sugar Data'.
* System automatically reads and displays the latest blood sugar value.
* Data is saved to user log.

## OCR Blood Glucose Meter Capture Page

Platform: Mobile

A screenshot of a cell phone

AI-generated content may be incorrect.

Function Description: Users take a photo of their blood glucose meter screen, and the app uses OCR to automatically read the number.

### User Flow Steps:

* User clicks 'Photo Capture Blood Sugar' button.
* Takes a photo of the glucose meter screen.
* System reads the value using OCR and displays it.
* User confirms and saves.

## Data Visualization Page

Platform: Web/ Mobile

A screenshot of a computer

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A screenshot of a cell phone

AI-generated content may be incorrect.

Function Description: Users can view graphs of historical data for calorie intake and blood sugar readings, allowing them to see trends over days, weeks, or months.

### User Flow Steps:

* User clicks 'Data Charts' button.
* Selects type of data (calories / blood sugar) and time range (day / week / month).
* System generates and displays the chart.
* User can scroll or zoom to view detailed data.

## Reminders and Notifications Page

Platform: Mobile

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Function Description: The app sends reminders to check blood sugar at specific times, such as after meals or before sleep, helping users maintain their logging streak.

### User Flow Steps:

* User clicks 'Set Reminders' button.
* Adds reminder times (e.g., 2 hours after meals, before sleep).
* System sends notifications at set times.
* User clicks notification to directly jump to logging page.

## BMR Estimation and Prediction Page

Platform: Web / Mobile

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a cell phone

AI-generated content may be incorrect.

Function Description: The app estimates the user's basal metabolic rate (BMR) based on historical data and provides dietary suggestions.

### User Flow Steps:

* User clicks 'Health Analysis' button.
* System displays estimated BMR value.
* Provides suggested daily calorie intake range.
* User can adjust diet plan based on suggestions.