

# FitFeast: Personalized Nutrition & Meal Planning System

FYP-016/FL24

## Software Test Plan

S. No	Description	Test Engineer	Start Date	End Date
1	Login Screen	Maryam Shehnaz	15-June-2025	15-June-2025
2	Sign-Up Screen	Maryam Shehnaz	15-June-2025	15-June-2025
3	Meal Customization – Add Ingredient	Rabail Arshad	15-June-2025	15-June-2025
4	Meal Customization – Incompatibility Alert	Rabail Arshad	15-June-2025	15-June-2025
5	Meal Planner – Dietary Filters	Maryam Shehnaz	02-July-2025	02-July-2025
6	Personalized Recipes & Recommendations	Maryam Shehnaz	02-July-2025	02-July-2025
7	Calorie Breakdown via Edamam API	Sara Shehnaz	02-July-2025	02-July-2025
8	Calorie Alert & Recommendation System	Sara Shehnaz	02-July-2025	02-July-2025
9	Profile Calorie Goal Update	Sara Shehnaz	02-July-2025	02-July-2025
10	Incompatible Ingredient Detection	Rabail Arshad	02-July-2025	02-July-2025

# Test Cases

Module Name: Login & Sign-Up

Test Case ID: TC-001

Test Engineer: Syeda Maryam Shehnaz

Date: 15-June-2025

Test Case Description: Validating login and sign-up functionalities

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Open app and navigate to login screen	—	Login screen is displayed	Login screen opened	Pass
2	Enter valid email	<a href="#">user@example.com</a>	Email input accepted	Email entered successfully	Pass
3	Enter valid password	test@123	Password input accepted	Password entered successfully	Pass
4	Click Login Button	—	Redirect to dashboard	Dashboard displayed	Pass
5	Navigate to Sign-Up screen	—	Sign-Up screen opens	Sign-Up screen displayed	Pass
6	Enter user details	Name, Email, Password	Inputs accepted	Form filled successfully	Pass
7	Click Sign-Up	—	Account created and redirected	User registered and redirected	Pass

## Module Name: Meal Customization – Ingredient Add & Calorie View

**Test Case ID:** TC-002

**Test Engineer:** Rabail Arshad

**Date:** 15-June-2025

**Test Case Description:** Add ingredients and display calorie/nutrient updates

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Navigate to dashboard	—	Meals are listed	Meals displayed	Pass
2	Click on a meal	Grilled Chicken	Meal details open	Meal opened successfully	Pass
3	Click Add Ingredient	Cheese	Ingredient added	Cheese added successfully	Pass
4	View calorie info	—	Calories updated	Calories updated instantly	Pass
5	View nutrition info	—	Nutrient chart displayed	Protein, carbs, fats shown	Pass

## Module Name: Meal Customization – Incompatibility Alert

**Test Case ID:** TC-003

**Test Engineer:** Rabail Arshad

**Date:** 15-June-2025

**Test Case Description:** Detecting incompatible ingredients during customization

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Select meal	Poha	Meal screen displayed	Meal screen displayed	Pass
2	Add first ingredient	Oil	Ingredient added successfully	Oil added	Pass
3	Add second ingredient	Chocolate	Alert triggered for incompatibility	Alert shown: "Incompatible"	Pass
4	Acknowledge alert	OK	Alert dismissed	Alert dismissed	Pass
5	View updated calorie info	—	Calories updated	Calories updated accurately	Pass

## Module Name: Meal Planner – Dietary Filters

**Test Case ID:** TC-004

**Test Engineer:** Maryam Shehnaz

**Date:** 02-July-2025

**Test Case Description:** Filtering meals based on dietary and allergy preferences

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Launch Meal Planner	—	Meal planner screen opens	Meal planner opened	Pass
2	Select dietary type	Vegan	Vegan meals shown	Vegan meals shown	Pass
3	Add allergy filter	Peanuts	Peanut meals excluded	No peanut meals shown	Pass
4	Set calorie range	100–400 kcal	Meals within range only shown	Meals in range shown	Pass
5	Submit filters	All filters applied	Meals match all filters	Filtered results accurate	Pass
6	View meal details	Vegan Salad Bowl	Detailed nutrition info displayed	Info displayed properly	Pass

## Module Name: Personalized Recipes & Recommendations

**Test Case ID:** TC-006

**Test Engineer:** Maryam Shehnaz

**Date:** 02-July-2025

**Test Case Description:** Generate personalized meals per user preferences

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Open Meal Planner	—	Meal Planner screen opened	Meal Planner screen opened	Pass
2	Set preferences by meal	B: High Protein, L: Low Carb, D: Balanced	Preferences saved	Preferences recorded per meal	Pass
3	Add diet/allergy filters	Gluten-Free, Nut Allergy	Meals adjusted accordingly	Filters applied	Pass
4	Set nutrition targets	Carbs <100g, Protein >60g	Macronutrient-based recipes shown	Results filtered accurately	Pass
5	Tap Generate Meals	—	Personalized recipe list shown	Recipes generated	Pass

## Module Name: Calorie Breakdown Viewer

**Test Case ID:** TC-007

**Test Engineer:** Sara Shehnaz

**Date:** 02-July-2025

**Test Case Description:** View full calorie + nutrition via Edamam API

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Select a meal	Chicken Salad	Meal selected	Meal selected and visible	Pass
2	Tap Nutrition Info	—	API triggered	Edamam API call successful	Pass
3	View breakdown	—	Macronutrients shown clearly	Carbs, protein, fat shown properly	Pass
4	Ingredient compatibility	Oil + Chocolate	Show warning if incompatible	Incompatibility alert shown	Pass

## Module Name: Calorie Alert & Recommendations

**Test Case ID:** TC-008

**Test Engineer:** Sara Shehnaz

**Date:** 02-July-2025

**Test Case Description:** Test calorie goal enforcement and food suggestions

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
TC-1	Set calorie goal	1500 kcal	Goal saved	Goal saved	Pass
TC-2	Add meals exceeding goal	Meals = 1700 kcal	Real-time alert or block action	No alert shown	Fail
TC-3	View suggestions	—	Suggestions shown only after excess	Only earlier suggestions shown	Fail

## Module Name: Profile Calorie Goal Update

**Test Case ID:** TC-009

**Test Engineer:** Sara Shehnaz

**Date:** 02-July-2025

**Test Case Description:** Verify that goal updates reflect across the app

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Open profile settings	—	Profile settings open	Settings opened	Pass
2	Change calorie goal	1800 kcal	Goal updated	Goal updated	Pass
3	Go to planner screen	—	New goal displayed	New goal 1800 shown	Pass

Module Name: Incompatible Ingredient Detection

Test Case ID: TC-010

Test Engineer: Rabail Arshad

Date: 02-July-2025

Test Case Description: System alerts users on incompatible ingredient combinations

S. No	Steps	Input Data	Expected Result	Actual Result	Pass/Fail
1	Select a meal	Poha	Meal customization screen displayed	Meal customization screen displayed	Pass
2	Add compatible ingredient	Oil	Added successfully	Oil added successfully	Pass
3	Add incompatible ingredient	Chocolate	Show alert: "Incompatible combination"	Alert shown as expected	Pass
4	Try to save with incompatible	Poha + Oil + Chocolate	Warning remains until fixed	Warning persisted correctly	Pass