

I. Test Plan Overview

The approach we're taking with testing is that we are going to test our app by its components. We're going to test each tracker (exercise, nutrition, and sleep) and check whether we can view the page and modify the items/entries. All of the test cases will operate in normal conditions. For data persistence, we'll test the connection with our database and check if the values remain/are correct. All of the tests operate under the condition that the user is logged in and should remain logged in based on browser cookies. For the recommendation system, the database will be populated with simulated data.

II. Test Cases

Case #	Description	Input(s)	Output(s)	Results
1	User should be able to navigate using the navigation bar	Button click	Page route	
2	User should be able to view profile	Button click	User profile page	
3	User should be able to edit profile	Name, Age, Height, Weight, Goals: [Type, Subtype, Description]	User profile page	
4	User should be able to view nutrition tracker	Button click	Nutrition tracker page	
5	User should be able to input new food item	Date, Food Name, Servings, Nutrition: [Calories, Protein, Carbs, Fats]	Food diary entry	
6	User should be able to edit/delete food item	Button click, Date, Food Name, Servings,	Food diary entry	

		Nutrition: [Calories, Protein, Carbs, Fats]		
7	User should be able to view sleep tracker	Button click	Sleep tracker page	
8	User should be able to add an entry to sleep tracker	Wake time, Sleep time, Deep sleep	Sleep score	
9	User should be able to view exercise tracker	Button click	Sleep tracker page	
10	User should be able to create a new workout	Exercise, Repetitions, Sets	Workout routine	
11	User should be able to edit/delete a workout	Exercise, Repetitions, Sets	Workout routine	
12	User data should persist between uses	All previous imputed data, settings, etc.	Persisted data across app	

III. Test Case Matrix

Case #	Normal/Abnormal	Blackbox/Whitebox	Functional/Performance	Unit/Integration
1	Normal	Whitebox	Functional	Unit
2	Normal	Whitebox	Functional	Unit
3	Normal	Whitebox	Functional	Unit
4	Normal	Whitebox	Functional	Unit
5	Normal	Whitebox	Functional	Unit
6	Normal	Whitebox	Functional	Unit
7	Normal	Whitebox	Functional	Unit
8	Normal	Whitebox	Functional	Unit
9	Normal	Whitebox	Functional	Unit
10	Normal	Whitebox	Functional	Unit

11	Normal	Whitebox	Functional	Unit
12	Normal	Whitebox	Functional	Integration