

# Coverage Testing Report

GitHub Repository URL: [https://github.com/kisangkay/Milestone2\\_Group62.git](https://github.com/kisangkay/Milestone2_Group62.git)

## 1. Test Summary

list all tested functions related to the five required features, for example:

Tested Functions
on_search(event)
get_on_food_selected(event)
get_on_filter(food_data, nutrient, min_density, max_density)
get_filter_nutrition_level(food_data, selected_nutrient, level)
get_comparison_click(food_data, selected_nutrient, selected_foods)

## 2. Statement Coverage Test

### 2.1 Description

For all functions in the assignment, we designed tests to achieve 100% statement coverage by covering both valid and invalid input scenarios. This approach ensured that every possible code path was tested, including expected behaviors and error handling. By validating both successful cases and edge cases, we made sure that each line of code was executed, leading to a robust and reliable codebase.

### 2.2 Testing Results

```
===== test session starts =====
platform win32 -- Python 3.13.0, pytest-8.3.3, pluggy-1.5.0
rootdir: C:\Users\Harsh Patel\Desktop\Tr12\Software_Technologies\Milestone2_Group62
plugins: cov-5.0.0, html-4.1.1, metadata-3.1.1
collected 10 items

test_all_functions.py ..... [100%]

----- coverage: platform win32, python 3.13.0-final-0 -----
Coverage HTML written to dir statement_cov

===== 10 passed in 0.72s =====
PS C:\Users\Harsh Patel\Desktop\Tr12\Software_Technologies\Milestone2_Group62>
```

## 3. Branch Coverage Test

### 3.1 Description

For all functions in the assignment, we designed tests to achieve 100% branch coverage by covering both valid and invalid input scenarios. This approach ensured that every decision point in the code was tested, including all possible outcomes of conditional statements. By thoroughly validating both successful cases and error cases, we made sure that each branch was executed, leading to a comprehensive and reliable codebase.

## 3.2 Testing Results

```
===== test session starts =====
platform win32 -- Python 3.13.0, pytest-8.1.3, pluggy-1.5.0
rootdir: C:\Users\Harsh Patel\Desktop\Tri2\Software_Technologies\Milestone2_Group62
plugins: cov-5.0.0, html-4.1.1, metadata-3.1.1
collected 10 items

test_all_functions.py ..... [100%]

----- coverage: platform win32, python 3.13.0-final-0 -----
Coverage HTML written to dir branch_cov

===== 10 passed in 0.70s =====

PS C:\Users\Harsh Patel\Desktop\Tri2\Software_Technologies\Milestone2_Group62>
```