RewardApp Test Case

Purpose of this test cases is to validate and check the application is producing the correct reward points for all scenarios of monthly transactions of customer based on the transaction rule where customer receives 2 points for every dollar spent over $100 in each transaction, plus 1 point for every dollar spent between $50 and $100 in each transaction. Also the api should return the rewardpoint monthly summary for three months.

Test Env:

Language :Java

Tool: STS4

Lib: Junit , Spring Boot

## Test Case 1:

#### Description

Test the calculation of reward points for a customer’s three month transactions with amount spent over $100 , between $50 - $100 and less than $50.

#### Input:

Input the customer txns as below table for Customer: 1

|  |  |  |
| --- | --- | --- |
| CustID | Txn Date | Txn Amount |
| 1 | 4/10/2024 | 120 |
| 1 | 4/20/2024 | 180 |
| 1 | 5/11/2024 | 171 |
| 1 | 5/21/2024 | 171 |
| 1 | 6/12/2024 | 55 |
| 1 | 6/22/2024 | 15 |

#### **Expected Output**

The expected output will be the summary of customer reward points for monthly and total reward points so far.

|  |  |
| --- | --- |
| Month | Reward Points |
| 2024-04 | 300 |
| 2024-05 | 384 |
| 2024-06 | 5 |
| Total Points | **689** |

#### **Test Steps**

1. Execute the CustomerRewardsEndPointTest1 function with the provided input.
2. Verify that the points earned for April ,may and June and match the expected value.
3. Verify that the total points earned for customer “1 “ match the expected value.

## Test Case 2:

#### Description

Test the calculation of reward points with different set of values of customer’s three month transactions with amount spent over $100 , between $50 - $100 and less than $50.

#### Input:

Input the customer txns as below table for Customer: 2

|  |  |  |
| --- | --- | --- |
| CustID | Txn Date | Txn Amount |
| 2 | 4/10/2024 | 40 |
| 2 | 4/20/2024 | 100 |
| 2 | 5/11/2024 | 55 |
| 2 | 5/21/2024 | 105 |
| 2 | 6/12/2024 | 400 |
| 2 | 6/22/2024 | 71 |

#### **Expected Output**

The expected output will be the summary of customer reward points for monthly and total reward points so far.

|  |  |
| --- | --- |
| Month | Reward Points |
| 2024-04 | 50 |
| 2024-05 | 65 |
| 2024-06 | 671 |
| Total Points | 786 |

#### **Test Steps**

1. Execute the CustomerRewardsEndPointTest2 function with the provided input.
2. Verify that the points earned for April ,may and June and match the expected value
3. Verify that the total points earned for customer “2 “ match the expected value