Test Cases for Reward Points Calculation by Customer Transactions

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Purpose

The purpose of these test cases is to ensure that the reward points calculation function behaves as expected under different scenarios and edge cases.

Test Stack

\*\*Frontend: \*\* React JS

\*\*Testing: \*\* Jest & React Testing Library

Location

src/\_\_tests\_\_/ calculateRewardPointsByTransactions.js

Test Cases

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Test Case 1: Customer Earned Reward Points for a Single Transaction

Description

Test the calculation of earned reward points for a single transaction with single customer.

Input

[

{

custid: 1,

customerName: "Ram",

transactionDate: '05-01-2024',

amount: 120

}

]

Expected Output

[

'1': {

monthlyRewardPoints: {

February: {

amount: 120,

points: 90,

} },

totalRewardPoints: 90,

totalAmount: 120

}

]

Test Steps

1. Execute the reward points calculation function with the provided input.

2. Verify that the total points earned for customer match the expected value.

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Test Case 2: Customer Earned Reward Points for multiple transactions with 2 customers.

Description

Test the calculation of earned reward points for multiple transactions with 2 customers.

Input

[

{

custId: 1,

customerName: "Ram",

transactionDate: ‘05-02-2024’',

amount: 75

},

{

custId: 2,

customerName: "Rohan",

transactionDate: '05-02-2024',

amount: 100

}

]

Expected Output

[

'1': {

monthlyRewardPoints: {

February: {

amount: 75,

points: 25,

} },

totalRewardPoints: 25,

totalAmount: 75

},

'2': {

monthlyRewardPoints: {

February: {

amount: 100,

points: 50,

} },

totalRewardPoints: 50,

totalAmount: 100

}

]

Test Steps

1. Execute the reward points calculation function with the provided input.

2. Verify that the total points earned for customer match the expected value.

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Test Case 3 : Customer Earned Reward Points for no transactions.

Description

Test the calculation of earned reward points for no transactions.

Input

[ ]

Expected Output

[ ]

Test Steps

1. Execute the reward points calculation function with the provided input.

2. Verify that the total points earned for customer match the expected value.

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Test Case 4 : Customer Earned Reward Points for transactions a customer for below $50 amount.

Description

Test the calculation of earned reward points for transactions a customer for below $50 amount.

Input

[

{

custid: 1,

customerName: "Ram",

transactionDate: '2024-02-05',

amount: 30

},

{

custid: 2,

customerName: "Rohan",

transactionDate: '2024-02-05',

amount: 40

}

]

Expected Output

[

'1': {

monthlyRewardPoints: {

February: {

amount: 30,

points: 0,

} },

totalRewardPoints: 0,

totalAmount: 30

},

'2': {

monthlyRewardPoints: {

February: {

amount: 40,

points: 0,

} },

totalRewardPoints: 0,

totalAmount: 40

}

]

Test Steps

1. Execute the reward points calculation function with the provided input.

2. Verify that the total points earned for customer match the expected value.