**Customer Rewards**

**App Name** : Customer Rewards

**Key Directories and Files**:

components : Contains React components.

rewards : Contains simulation API calls and functions for calculation.

tests : Contains test files for unit testing.

**Component Overview:**

**transactions.json**

This file contains mock transaction data used to simulate API responses. The data is structured as an array of customer objects each with an ID, Name and transaction list.

**App.js**

This is the main component of the application. It handles the fetching of transaction data, calculating rewards points, and rendering the output.

useState : to manage the state management for ‘loading’, ‘data’ state.

useEffect : it used to fetches the transaction data when the component mount.

Rendering logic : Display a loading state, error message or customer reward data based on a state.

**fetchTransaction.js**

This module simulates an API call by returning a Promise that resolve with mock transaction data after a delay.

**Points.js**

This function calculates the reward points based on the amount spent in a transaction, broken down by month.

**Testing**

**Unit Testing:**

Ensures that individual components and functions work correctly.

**Mocking:**

‘fetchTransaction’ API call is mocked during tests to return predefined data.

**Initial transaction.json data:**

**A screenshot of a computer screen

Description automatically generated**

**Final Output:**

**A white background with black text

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