

OOP Project Test Cases and Sample Data

Here we created some test cases and sample data for the main functions

1. Create customers as follows:

| Id | Name | address |
|----|-------------|----------|
| 1 | Tom | Seattle |
| 2 | Jerry | Kenmore |
| 3 | Adam | Redmond |
| 4 | Susan | Bellevue |
| 5 | Lisa Hiller | Kirkland |
| 6 | Sam Hiller | Kirkland |
| 7 | Alice | Seattle |

2. Create Accounts and then process transactions (deposit/withdraw)

| Customer id | Account type | Initial balance | Account-no (system generated) | Deposit/with drawal | Ending balance |
|--------------|--------------|-----------------|-------------------------------|---------------------|----------------|
| 1 | c | 500 | | | 500 |
| 1 | s | 2000 | | | 2000 |
| 2 | c | 200 | | | 200 |
| 2 | s | 1500 | | | 1500 |
| 2 | s | 600 | | | 600 |
| 3 | s | 1000 | 30714 | +500 +700 | 2200 |
| 4 | c | 500 | 20715 | +800 -100 | 1200 |
| 5 | s | 1999 | | | 1999 |
| (5 6) shared | c | 300 | 20719 | +500 -200 | 600 |

| | | | | | |
|---|---|-----|-------|---------------|------|
| 6 | s | 600 | | | 600 |
| 6 | s | 500 | 30718 | +1000 -400 | 1500 |
| | | | | | |

As a result, here is the saving accounts' total ending balance of the sample customer's (id = 1,2,3,4,5,6). This will be used in the test case for credit card application approval

| Customer ID | Account type | Total ending balance |
|-------------|--------------|----------------------|
| 1 | savings | 2000 |
| 2 | savings | 2100 |
| 3 | savings | 2200 |
| 4 | savings | 0 |
| 5 | savings | 1999 |
| 6 | savings | 1700 |

3. Credit card application approval (savings >2000)

- Assume all the sample customers (id = 1 to 6) have applied credit cards.
- Assume only customer whose total saving account balance is equal or great than 2000, , will be approved

The card_application queue will have entries for customer where id is between 1-6. Based on the total saving account balance obtained in step 2, the expected results will be as follows

| Customer_id | apply_date | Total ending balance | Expected approval result |
|-------------|------------|----------------------|--------------------------|
| 1 | 2022-02-12 | 2000 | approved |
| 2 | 2022-02-12 | 2100 | approved |
| 3 | 2022-02-12 | 2200 | approved |
| 4 | 2022-02-12 | 0 | rejected |
| 5 | 2022-02-12 | 1999 | rejected |

| | | | |
|---|------------|------|----------|
| 6 | 2022-02-12 | 1700 | rejected |
|---|------------|------|----------|