Test Capabilities Requirements Document

Team One

CSC 406

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# User Interface Test Requirements:

1. Customer Interface
   1. To test the Customer Interface, we will first make sure customer data appears on the screen when selected. We will then update the ArrayList containing that customer with new data to ensure that the proper data is being shown. We will also make a payment, transfer money to an account, and deposit to an account. After those steps, we will check the ArrayList to see if the proper actions were taken. We expect new values for the different accounts after each action. We will also make a “purchase” with the credit card and the checking account to see if the statement updates.
2. Teller Interface
   1. From the teller interface, we will first try to search for a valid customer. From there, we will update the ArrayList for the searched customer to check and see if the view is working. . We will also make a payment, transfer money to an account, and deposit to an account. After those steps, we will check the ArrayList to see if the proper actions were taken. Once those changes are verified, navigate back to the teller main page.
   2. From the teller interface, we will try to open an account of varying types for the customer.
   3. From the teller interface, we will create a new account for the customer. We will test this by entering the required fields and ensuring a new customer object is created.
3. Manager Interface
   1. The manager interface will be tested the same way as the teller interface was above.
   2. The manager interface will be tested to close an account for a customer. We will test this by closing an account, then verifying in the ArrayList that the account is no longer present.

# Functionality Requirements Test

1. The system shall maintain customer account information
   1. Check the ArrayList that holds the customer information to ensure no data is lost.
2. The System shall calculate and charge transaction fees.
   1. Make a transaction and check to see if the transaction fee was applied.
3. The System shall calculate and apply interest to accounts
   1. Create a loan with an interest and, from the manager menu, look to see if the interest is added
4. The System shall charge overdraft fees and check for backup accounts
   1. Overdraw an account and see if the fees debit the account or see if the funds come out of the backup account
5. The System shall charge fees on late loan accounts
   1. Run a function that simulates a month that adds the interest to an account based on the amount that is currently in the account
6. The System shall calculate and send bills for loan accounts
   1. Use the manager function to notify customers.
7. The System shall send out roll over notices for CD’s
   1. Simulate the end of a CD by advancing the month to see if there is a notification given.
8. The System shall allow for management to be able to update rates
   1. Check to make sure that a new interest rate is available when changed.
9. The System shall allow saving accounts to have maintenance performed
   1. As a teller or a manager, go into an account and make changes without damaging the account.
10. The system shall allow the opening of an account
    1. Open an account and ensure it sticks
11. The system shall allow for the closing of an account
    1. Close an account and ensure that it is no longer in the ArrayList
12. The System shall define a user by using a SSN based on the type of account, and be able to deposit an amount for that user
    1. Add a user. Adding a user should create a new customer object that we can log into using the SSN. From there we can deposit monies for the customer.
13. The System shall be able to tell a user by private user information and to access their account if their information is lost
    1. Login to a customer account, or search for the customer account as a manager or a teller
14. The System shall allow interest rates to be set based on account
    1. From the manager menu, select a loan, and then set the desired interest rate.
15. The System shall allow Accounts to be chained together
    1. Open a checking account and make sure that on overdraft, we are taking from a linked savings account.
16. The System shall be able to charge overdraft fees
    1. Overdraw an account and see if the proper charge is added
17. The System shall allow three types of loans
    1. Open each type of loan.
18. The system shall generate a $75 fee for the month that is late, and if the loan payment is late on a long term mortgage loan
    1. Advance a month and see if the proper charges are added
19. The System shall flag late or problem accounts
    1. Advance a month without making payments and check to see if the account is flagged
20. The System shall allow for more monies to be paid to a loan, without increasing the loan amount for the customer
    1. Make a payment to the loan and make sure the total loan does not increase
21. The System shall have the ability for a short term loan that is approximate around 5 years for items that are expensive
    1. Create a short term loan
22. The System shall support credit cards
    1. Create a credit card and make a purchase with the card to view report
23. The system will check credit card limits at the time of a purchase.
    1. Preform a purchase with a credit card that is over it’s limit to ensure the purchase is not made.
24. The system will maintain records of purchases associated with each credit card account.
    1. Make a purchase and view the report
25. The system will generate credit card bill on the first of each month.
    1. Advance a month and check to see if there is any notifications for the customer
26. The system will calculate the finance charge for credit card bills.
    1. Advance a month to see if the charges are added to the account.
27. The system shall allow the use of an ATM for the customers with accounts.
    1. As a customer, access the ATM and make a withdrawal.
28. ATM cards will only apply to simple saving accounts (Not for complex saving accounts)
    1. Make an ATM withdrawal and check to see if the proper account is debited
29. ATM cards have a capped amount the user can withdraw at an ATM machine (the total value that is currently in the account).
    1. Withdraw for over the cap and see if the system will allow it.
30. ATM cards can’t be used more than 2 times a day for withdrawal from the account.
    1. Attempt to use the ATM more than 3 times in a session.
31. The system shall check for stopped checks
    1. Stop a check and see if the money is taken out or not.