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Group 19
Project 3 Test Specification

project name: RUBankGUI			
Test Case #	**Requirement**	**Test case description and Input Data**	**Expected result/output**
feature: open account			
1	If a field is left blank, an error message should be provided.	Enter the following inputs in the "Open" tab in TransactionManager window: Case 1: "First Name" is blank ● First Name: (blank) ● Last Name: Doshi ● DOB: 11/5/2003 ● Initial Deposit: 100 ● Account: Checking Case 2: "Last Name" is blank ● First Name: Haejin ● Last Name: (blank) ● DOB: 11/28/2003 ● Initial Deposit: 100 ● Account: Money Market Case 3: "DOB" is blank ● First Name: Deshna ● Last Name: Doshi ● DOB: (blank) ● Initial Deposit: 100 ● Account: College Checking/NB Case 4: "Initial Deposit" is blank ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Initial Deposit: (blank) ● Account: Savings Case 5: No account type is chosen ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/2003 ● Initial Deposit: 100 ● Account: none	"Missing data for opening an account."
2	If an unacceptable DOB is entered, the account should not be opened.	Enter the following inputs in the "Open" tab in TransactionManager	Case 1: "DOB invalid: 11/5/2023 under 16"

		window: Case 1: Age under 16 ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/2023 ● Initial Deposit: 100 ● Account: Checking Case 2: Age above 24 for a College Checking ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/1990 ● Initial Deposit: 100 ● Account: College Checking/NB Case 3: Cannot be a future date ● First Name: Deshna ● Last Name: Doshi ● DOB: 12/5/2023 ● Initial Deposit: 100 ● Account: College Checking/NB	Case 2: "DOB invalid: 11/5/1990 over 24." Case 3: "DOB invalid: 12/5/2023 cannot be today or a future day."
3	If an invalid initial deposit is made, the account cannot be opened.	Enter the following inputs in the "Open" tab in TransactionManager window: Case 1: Initial Deposit is $0 ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Initial Deposit: 0 ● Account: Checking Case 2: Initial Deposit is $-100 ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Initial Deposit: -100 ● Account: Checking	Case 1: "Initial deposit cannot be 0 or negative." Case 2: "Initial deposit cannot be 0 or negative."
4	If a campus is not chosen, a College Checking account cannot be opened.	Enter the following inputs in the "Open" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Initial Deposit: 100 ● Account: College Checking/(no campus selection)	"Invalid campus code."

5	Only numbers can be entered into the Initial Deposit field.	Enter the following inputs in the "Open" tab in TransactionManager window: • First Name: Haejin • Last Name: Song • DOB: 11/28/2003 • Initial Deposit: yeehaw • Account: Checking	"Not a valid amount."
6	A bank account with valid information can be opened.	Enter the following inputs in the "Open" tab in TransactionManager window: • First Name: Deshna • Last Name: Doshi • DOB: 11/5/2023 • Initial Deposit: 100 • Account: Savings	"Deshna Doshi 11/5/2003(S) opened."
feature: close account			
1	If a field is left blank, an error message should be provided.	Enter the following inputs in the "Close" tab in TransactionManager window: Case 1: "First Name" is blank • First Name: (blank) • Last Name: Doshi • DOB: 11/5/2003 • Account: Checking Case 2: "Last Name" is blank • First Name: Haejin • Last Name: (blank) • DOB: 11/28/2003 • Account: Money Market Case 3: "DOB" is blank • First Name: Deshna • Last Name: Doshi • DOB: (blank) • Account: College Checking Case 4: No account type is chosen • First Name: Deshna • Last Name: Doshi • DOB: 11/5/2003 • Account: none	"Missing data for closing an account."
2	If an unacceptable DOB is entered, the account cannot be closed.	Enter the following inputs in the "Close" tab in TransactionManager	Case 1: "DOB invalid: 11/5/2023 under 16"

		window:
		
		Case 1: Age under 16
		   ● First Name: Deshna
		   ● Last Name: Doshi
		   ● DOB: 11/5/2023
		   ● Account: Checking
		
		Case 2: Cannot be a future date
		   ● First Name: Deshna
		   ● Last Name: Doshi
		   ● DOB: 12/5/2023
		   ● Account: College Checking
			Case 2: "DOB invalid: 12/5/2023 cannot be today or a future day."

3	An account that does not exist, cannot be closed.	Enter the following inputs in the "Close" tab in TransactionManager window:
		
		   ● First Name: Deshna
		   ● Last Name: Doshi
		   ● DOB: 11/5/2003
		   ● Account: Money Market
			"Deshna Doshi 11/5/2003(MM) is not in the database."

4	An account that exists, can be closed.	Enter the following inputs in the "Open" tab in TransactionManager window:
		   ● First Name: Deshna
		   ● Last Name: Doshi
		   ● DOB: 11/5/2003
		   ● Initial Deposit: 100
		   ● Account: Money Market
		
		Enter the following inputs in the "Close" tab in TransactionManager window:
		
		   ● First Name: Deshna
		   ● Last Name: Doshi
		   ● DOB: 11/5/2003
		   ● Account: Money Market
			"Deshna Doshi 11/5/2003(MM) has been closed."

feature: deposit to account			

1	If a field is left blank, an error message should be provided.	Enter the following inputs in the "Deposit" tab in TransactionManager window:
		
		Case 1: "First Name" is blank
		   ● First Name: (blank)
		   ● Last Name: Doshi
		   ● DOB: 11/5/2003
		   ● Amount: 100
			"Missing data for making deposit in account."

		● Account: Checking	

		Case 2: "Last Name" is blank ● First Name: Haejin ● Last Name: (blank) ● DOB: 11/28/2003 ● Amount: 100 ● Account: Money Market Case 3: "DOB" is blank ● First Name: Deshna ● Last Name: Doshi ● DOB: (blank) ● Amount: 100 ● Account: College Checking Case 4: "Amount" is blank ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: (blank) ● Account: Savings Case 5: No account type is chosen ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/2003 ● Amount: 100 ● Account: none	
2	If an unacceptable DOB is entered, error message should be displayed.	Enter the following inputs in the "Deposit" tab in TransactionManager window: Case 1: Age under 16 ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/2023 ● Account: Checking Case 2: Cannot be a future date ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/14/2023 ● Account: College Checking	Case 1: "DOB invalid: 11/5/2016 under 16." Case 2: "DOB invalid: 11/14/2023 cannot be today or a future day."
3	If an invalid deposit is made, error message should be displayed.	Enter the following inputs in the "Deposit" tab in TransactionManager window: Case 1: Deposit is $0 ● First Name: Haejin	"Deposit - amount cannot be 0 or negative."

		● Last Name: Song ● DOB: 11/28/2003 ● Initial Deposit: 0 ● Account: Checking Case 2: Deposit is $-100 ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Initial Deposit: -100 ● Account: Checking	
4	If an account does not exist, cannot be deposited to.	Enter the following inputs in the "Deposit" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Deposit: 100 ● Account: Checking	"Haejin Song 11/28/2003(C) is not in the database."
5	If an account exists, it can be deposited to.	Enter the following inputs in the "Open" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Deposit: 100 ● Account: Checking Enter the following inputs in the "Close" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Deposit: 20 ● Account: Checking	"Haejin Song 11/28/2003(C) Deposit - balance updated."
feature: withdraw account			
1	If a field is left blank, an error message should be provided.	Enter the following inputs in the "Withdraw" tab in TransactionManager window: Case 1: "First Name" is blank ● First Name: (blank) ● Last Name: Doshi ● DOB: 11/5/2003 ● Amount: 100	"Missing data for withdrawing from account."

		● Account: Checking **Case 2: "Last Name" is blank** ● First Name: Haejin ● Last Name: (blank) ● DOB: 11/28/2003 ● Amount: 100 ● Account: Money Market **Case 3: "DOB" is blank** ● First Name: Deshna ● Last Name: Doshi ● DOB: (blank) ● Amount: 100 ● Account: College Checking **Case 4: "Amount" is blank** ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: (blank) ● Account: Savings **Case 5: No account type is chosen** ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/2003 ● Amount: 100 ● Account: none	
2	If an invalid withdraw amount is entered, error message should be returned.	Enter the following inputs in the "Withdraw" tab in TransactionManager window: **Case 1: Withdraw is $0** ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: 0 ● Account: Checking **Case 2: Withdraw is $-100** ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: -100 ● Account: Checking	"Withdraw - amount cannot be 0 or negative."
3	If an account does not exist, cannot be withdrawn from.	Enter the following inputs in the "Withdraw" tab in TransactionManager window: ● First Name: Haejin	"Haejin Song 11/28/2003(C) is not in the database."

		● Last Name: Song ● DOB: 11/28/2003 ● Amount: 100 ● Account: Checking	
4	If an account exists, it can be withdrawn from.	Enter the following inputs in the "Open" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: 100 ● Account: Checking Enter the following inputs in the "Withdraw" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: 20 ● Account: Checking	"Haejin Song 11/28/2003(C) Withdraw - balance updated."

feature: account database

1	Print all the accounts with sorting.	Enter the following inputs in the "Open" tab in TransactionManager window: ● First Name: Haejin ● Last Name: Song ● DOB: 11/28/2003 ● Amount: 100 ● Account: Checking ● First Name: Deshna ● Last Name: Doshi ● DOB: 11/5/2003 ● Amount: 100 ● Account: College Checking/NB Click "Print Account Database" button in the "Account Database" tab.	"*Accounts sorted by account type and profile. Checking::Haejin Song 11/28/2003::Balance $100.00 College Checking::Deshna Doshi 11/5/2003::Balance $100.00::NEWARK*end of list."
2	Print all the accounts with interests/fees.	Enter the same information as Test Case 1, in the "Open" tab. Click "Print Interests/Fees" button in the "Account Database" tab.	"*list of accounts with fee and monthly interest Checking::Haejin Song 11/28/2003::Balance $100.00::fee $12.00::monthly

			interest $0.08 College Checking::Deshna Doshi 11/5/2003::Balance $100.00::NEWARK::fee $0.00::monthly interest $0.08 *end of list."
3	Print all accounts with updated balances.	Enter the same information as Test Case 1, in the "Open" tab. Click "Update Account Balances" button in the "Account Database" tab.	"*list of accounts with fees and interests applied. Checking::Haejin Song 11/28/2003::Balance $88.08 College Checking::Deshna Doshi 11/5/2003::Balance $100.08::NEWARK *end of list."
4	If no file is selected to read inputs from, error message should be displayed.	Click "Load Account from File." Do not select a file.	"File not found."