

Money Module

Victoria's business is taking off and she's trying to decide whether she should quit her salon day job and focus solely on her baking business. Her bank account looks good but at a glance, she cannot easily see which transactions are related to her bakery business or her day job. She finds that at the end of the week, she's using excel to record details from her bank account and credit card to figure it out.

Victoria would like to record a description of the transaction indicating whether or not the transaction was income or an expense, and more details of what the transaction was for.

Victoria usually pays for supplies using her credit card. Victoria's clients usually pay her in cash or by e-transfer.

Once Victoria's business grows to \$30,000 in sales, Victoria will be required to collect and pay HST. For this reason, Victoria would like to know how much she's paid and collected in HST.

She'd like a more robust system than Excel to manage these details.

Tasks

1. Read the *User Story* below and add to your model by creating a class diagram and sequence diagrams to support the scenario. Copy your diagrams to a document.
2. Your submission should include the PDFdocument containing your diagrams and the.vpp file with these diagrams included.

User Story

As the owner of this business, I would like to record my financial transactions so that I can quickly see how much money I've made and what I owe the government in HST. For my purposes, my expenses are subtracted from my income.

Acceptance Criteria:

1. Must be able to query transactions by date and provide a total profit and total HST.
2. Differentiate between expenses and sales – provide a running total of sales – expenses.
3. Calculate the HST owed to the government by subtracting HST paid on expenses from HST collected on income.

Use Case Descriptions

Use Case Name	Create an income transaction	
Triggering Event	Money coming into the business.	
Brief Description	Allows the Owner to record an income transaction.	
Actors	Owner	
Related Use Cases		
Preconditions	Owner has opened the Main Menu.	
Post Conditions	Income transaction is saved and added to financial totals.	
Flow of activities	Actor	System
	1. <ul style="list-style-type: none">• Requests to add a new income transaction	<ul style="list-style-type: none">• Displays a calendar• Prompts for description, transaction amount and HST amount
	2. <ul style="list-style-type: none">• Selects the transaction Date• Enters the transaction description• Enters the transaction amount	<ul style="list-style-type: none">• Verifies that date is selected• Verifies that description and amount have been entered• Calculates HST• Displays financial transaction• Prompts to save
	3. <ul style="list-style-type: none">• Request to save	<ul style="list-style-type: none">• Saves the transaction and returns to the main menu
Exception Conditions	<ul style="list-style-type: none">• Owner chooses to cancel adding the transaction	

Use Case Name	Create an expense transaction		
Triggering Event	Money leaving the business.		
Brief Description	Allows the Owner to record an expense transaction.		
Actors	Owner		
Related Use Cases			
Preconditions	Owner has opened the Main Menu.		
Post Conditions	Expense transaction is saved and added to financial totals.		
Flow of activities	Actor		System
	1.	<ul style="list-style-type: none"> Requests to add a new expense transaction 	<ul style="list-style-type: none"> Displays a calendar Prompts for description, transaction amount and HST amount
	2.	<ul style="list-style-type: none"> Selects the transaction Date Enters the transaction description Enters the transaction amount 	<ul style="list-style-type: none"> Verifies that date is selected Verifies that description and amount have been entered Calculates HST Displays financial transaction Prompts to save
	3.	<ul style="list-style-type: none"> Request to save 	<ul style="list-style-type: none"> Saves the transaction and returns to the main menu
Exception Conditions	<ul style="list-style-type: none"> Owner chooses to cancel adding the transaction 		

Use Case Name	Query Financial Transactions (Income and Expense Transactions)		
Triggering Event	Owner requires a list of transactions for a date period including Total Income, Total Expenses, Total Profit, Total HST collected, Total HST Paid, HST Owed		
Brief Description	Allows the Owner to retrieve financial totals for a specified date range		
Actors	Owner		
Related Use Cases			
Preconditions	Owner has opened the Main Menu.		
Post Conditions	Financial transactions are retrieved, totaled and displayed		
Flow of activities	Actor		System
	1.	<ul style="list-style-type: none"> Requests to query financial transactions 	<ul style="list-style-type: none"> Displays a calendar
	2.	<ul style="list-style-type: none"> Selects date range 	<ul style="list-style-type: none"> Verifies that dates are selected Retrieves income transactions in the specified date range Retrieves expense transactions in the specified date range Calculates and displays total sales, total expenses, Profit, total HST Owed. Prompts to exit
	3.	<ul style="list-style-type: none"> Request to exit 	<ul style="list-style-type: none"> Returns to the main menu
Exception Conditions			