

Class: Cashier	
Responsibilities	Collaborators
Prompt for input Validate input Start exchange Request receipt	Transaction, RateTable, ReserveManager, Receipt

Class: Transaction	
Responsibilities	Collaborators
Store exchange details Calculate converted amount Apply rounding Handle split/partial exchanges Write transaction log	RateTable, ReserveManager, Receipt

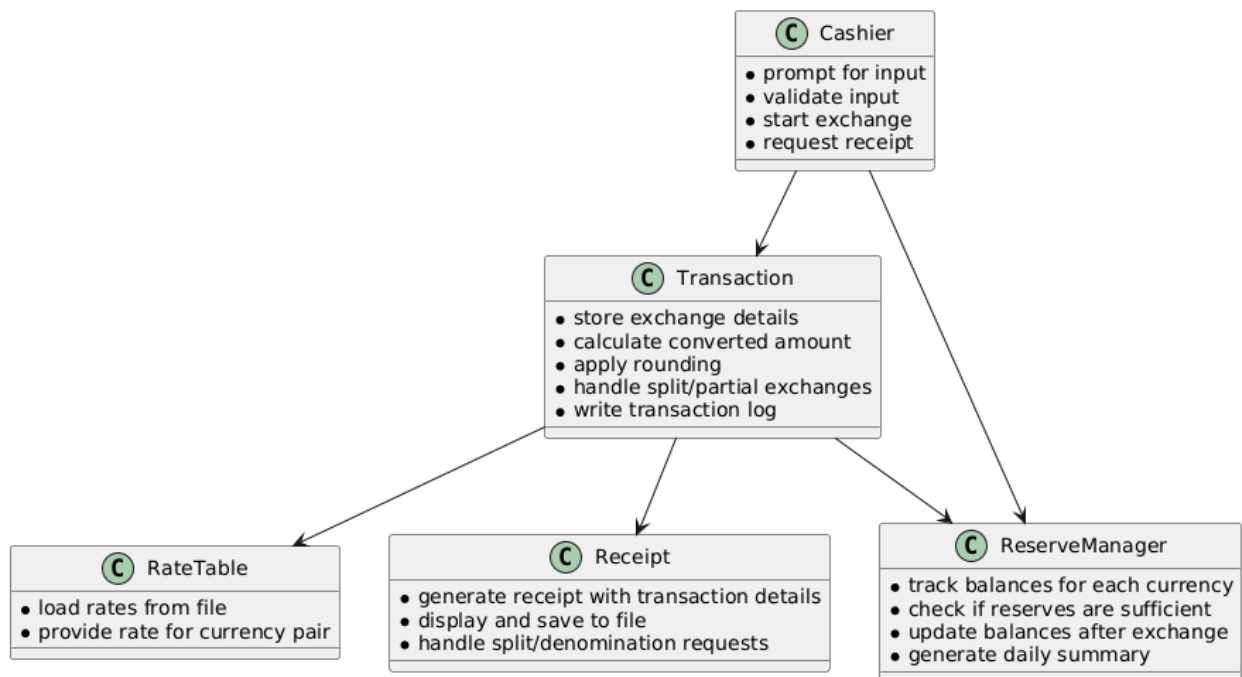
Class: RateTable	
Responsibilities	Collaborators
Load rates from file Provide rate for currency pair	Transaction, Cashier

Class: ReserveManager	
Responsibilities	Collaborators
Track balances for each currency Check if reserves are sufficient Update balances after exchange Generate daily summary	Cashier, Transaction

Class: Receipt	
Responsibilities	Collaborators
Generate receipt with transaction details Display and save to file Handle split/denomination requests	Transaction, Cashier

I am not sure about the diagram that i created, i think it might be more complicated than needed.

Simple Conceptual Class Diagram - Currency Exchange



Traceability Table

Traceability table for Release1. Prototype implements only Cashier, Transaction, RateTable and Receipt. I planned ReserveManager for the next release.

User Story	CRC Responsibility	Class Diagram Element	C++ Element
As a client, I want to exchange currency	Cashier: start exchangeTransaction: store details, compute result	Cashier - Transaction - RateTable	Cashier::exchange calls RateTable::getRate, returns a Transaction
As a client, I want to receive a receipt so that I have proof of the transaction.	Receipt: generate and display	Transaction - Receipt	Receipt::print
As a cashier, I want to enter the source/target currency and amount so that I can see the converted amount.	Cashier: prompt/start exchangeRateTable: provide rate	Cashier - RateTable	Cashier::exchange + RateTable::getRate