

Use Cases

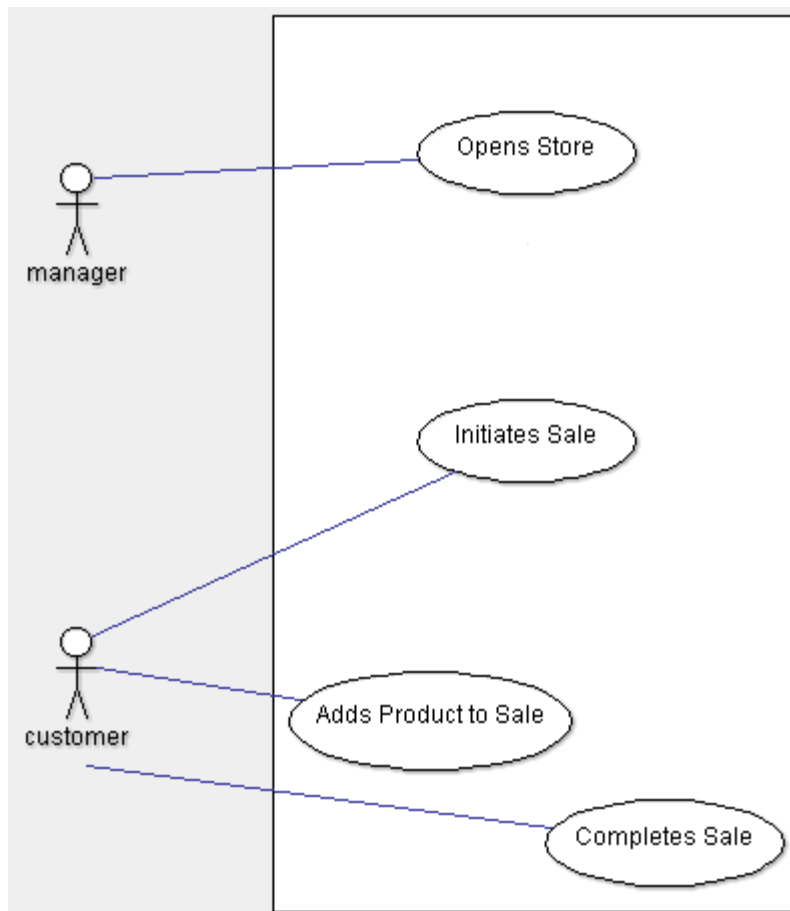
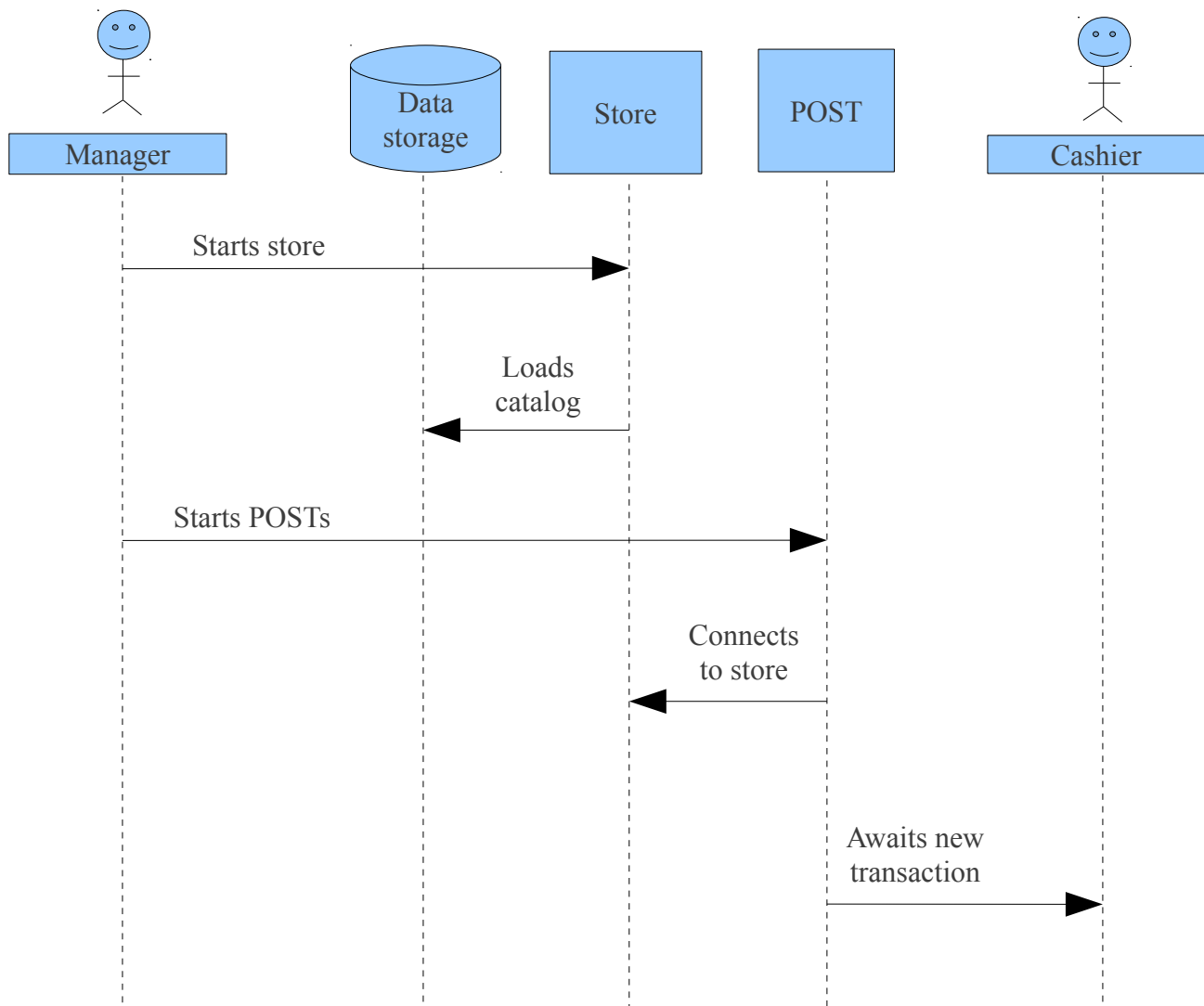
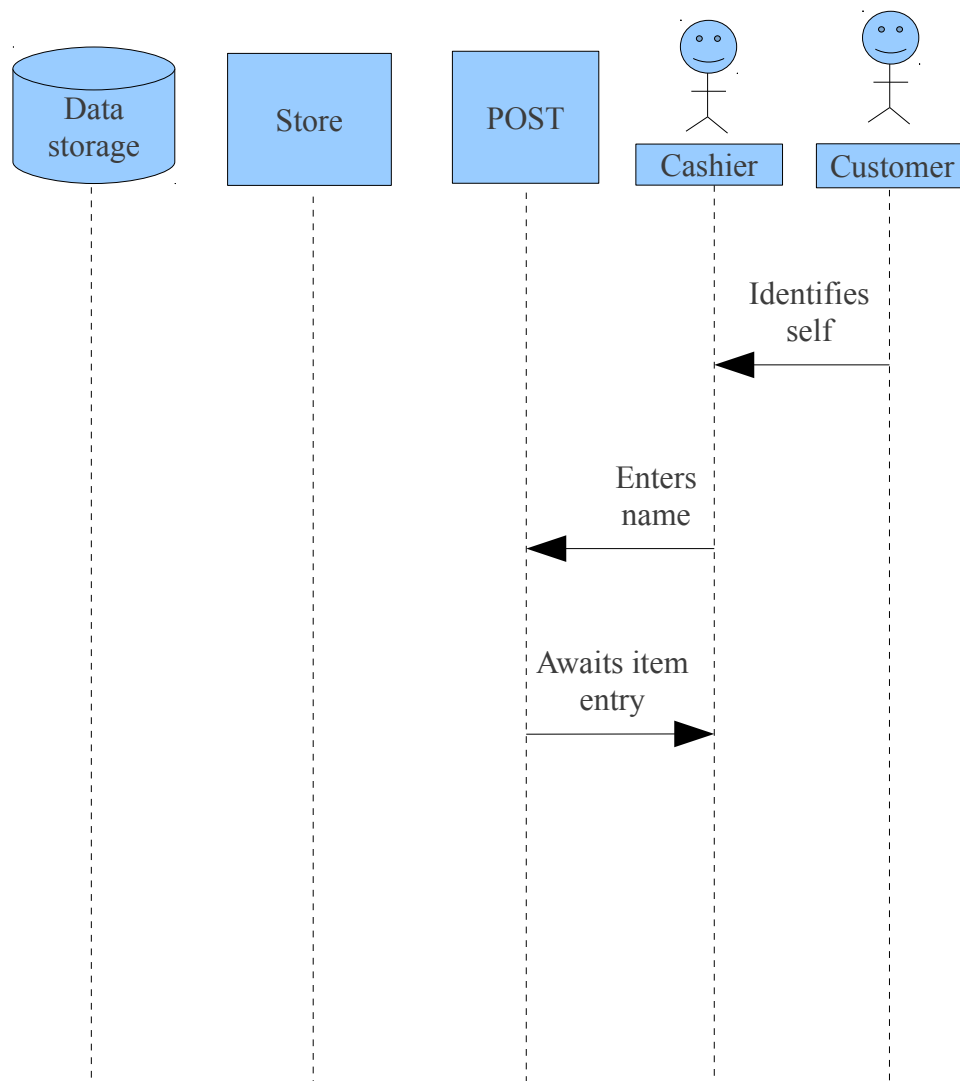


Figure 1: Use Case Overview

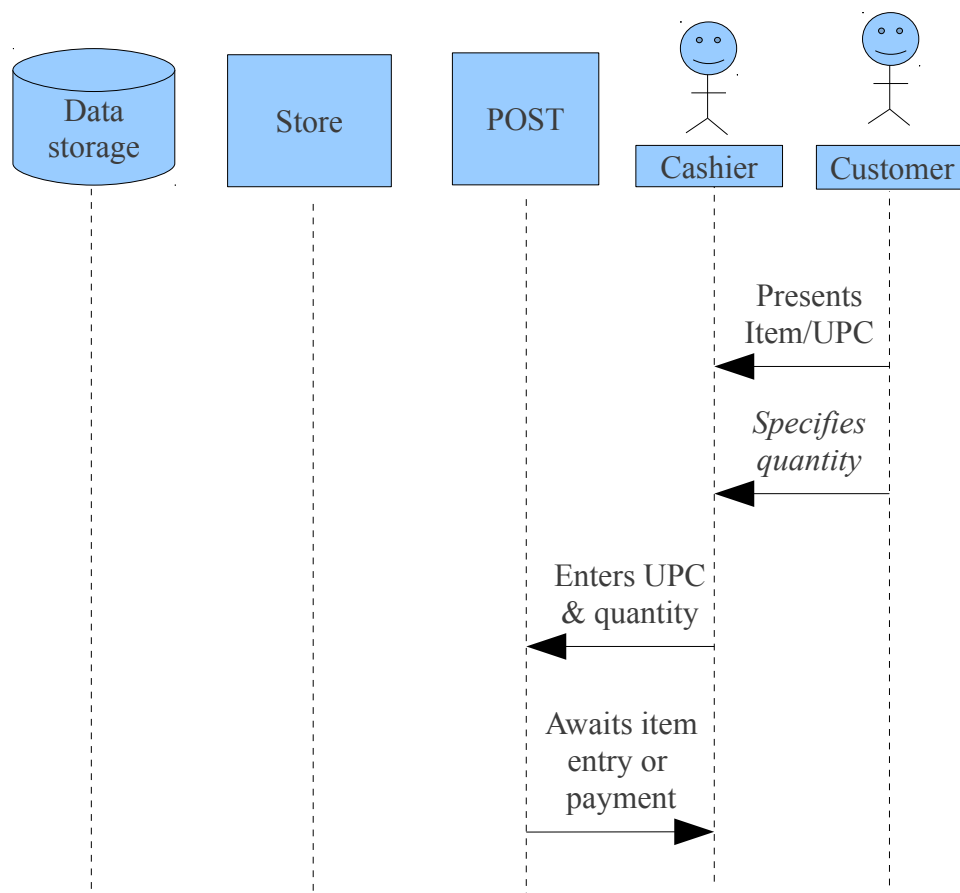
Use case #	1
Use case name	Store opens
Summary	The manager starts systems and opens the store.
Dependency	
Actor	Manager
Precondition	Store is closed.
Description	<ul style="list-style-type: none"> • Manager starts “store” software (server) <ul style="list-style-type: none"> ◦ Catalog is loaded. • Manager starts one or more POSTs. <ul style="list-style-type: none"> ◦ Each POST connects to the “store” (server)
Alternative	
Postcondition	Store is ready to record transactions. POSTs wait for sales to be initiated.



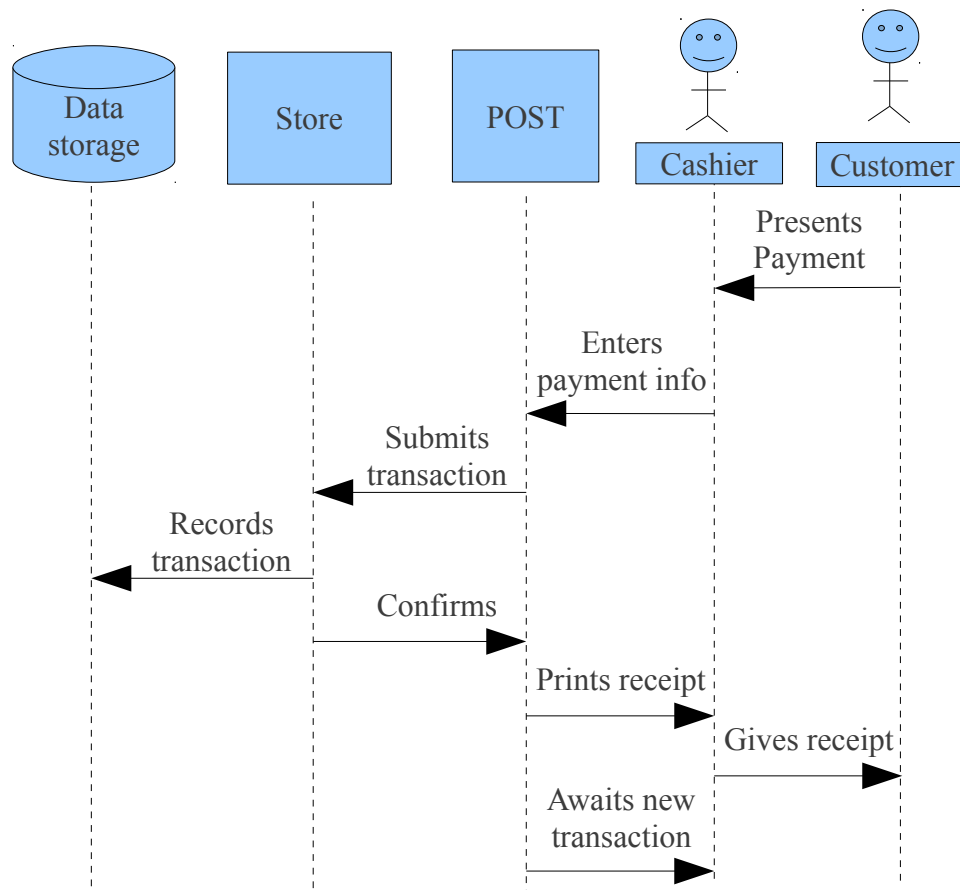
Use case #	2
Use case name	Sale initiation.
Summary	A customer approaches the POS to initiate a sale.
Dependency	Store opens
Actor	Customer
Precondition	The store is open, and no sale is currently in progress.
Description	<ul style="list-style-type: none"> The customer identifies him- or herself to the cashier / POST.
Alternative	
Postcondition	POST is ready to continue the sale (by adding products, accepting payment, or abandoning the sale); sale initially includes no products and no amount due.



Use case #	3
Use case name	Product addition.
Summary	A customer adds some quantity of product to a sale in progress.
Dependency	Sale initiation
Actor	Customer
Precondition	A sale is currently in progress.
Description	<ul style="list-style-type: none"> The customer presents the UPC for the product desired, followed by the quantity of product. System records the quantity of item as well as the new total amount due as part of the sale in progress.
Alternative	<p>No quantity specified.</p> <ul style="list-style-type: none"> Quantity is assumed to be 1. <p>Invalid UPC.</p> <ul style="list-style-type: none"> Warning is issued to the POST that the requested UPC is not recognized. Sale remains in progress, but no changes are made to the products involved or amount due.
Postcondition	Sale remains in progress.



Use case #	4
Use case name	Sale completion.
Summary	Customer issues payment for the products involved in the current sale.
Dependency	Sale initiation; one or more product addition.
Actor	Customer.
Precondition	A sale is currently in progress.
Description	<ul style="list-style-type: none"> The customer indicates their preferred payment type. <ul style="list-style-type: none"> If cash, the amount of cash is then indicated. If credit, credit card information is then given. If check, the check amount is assumed to match amount due.
Alternative	<p>No items have been added to sale.</p> <ul style="list-style-type: none"> Sale is abandoned. No transaction is recorded. POST returns to waiting state (no sale in progress). <p>Cash payment amount is less than amount due.</p> <ul style="list-style-type: none"> Sale remains open. Amount due is reduced by the amount of cash paid.
Postcondition	Transaction representing the sale is reported to store server and recorded in sales log. A receipt is issued listing all details from the transaction. The sale is closed and the POST returns to its waiting state (no sale in progress).



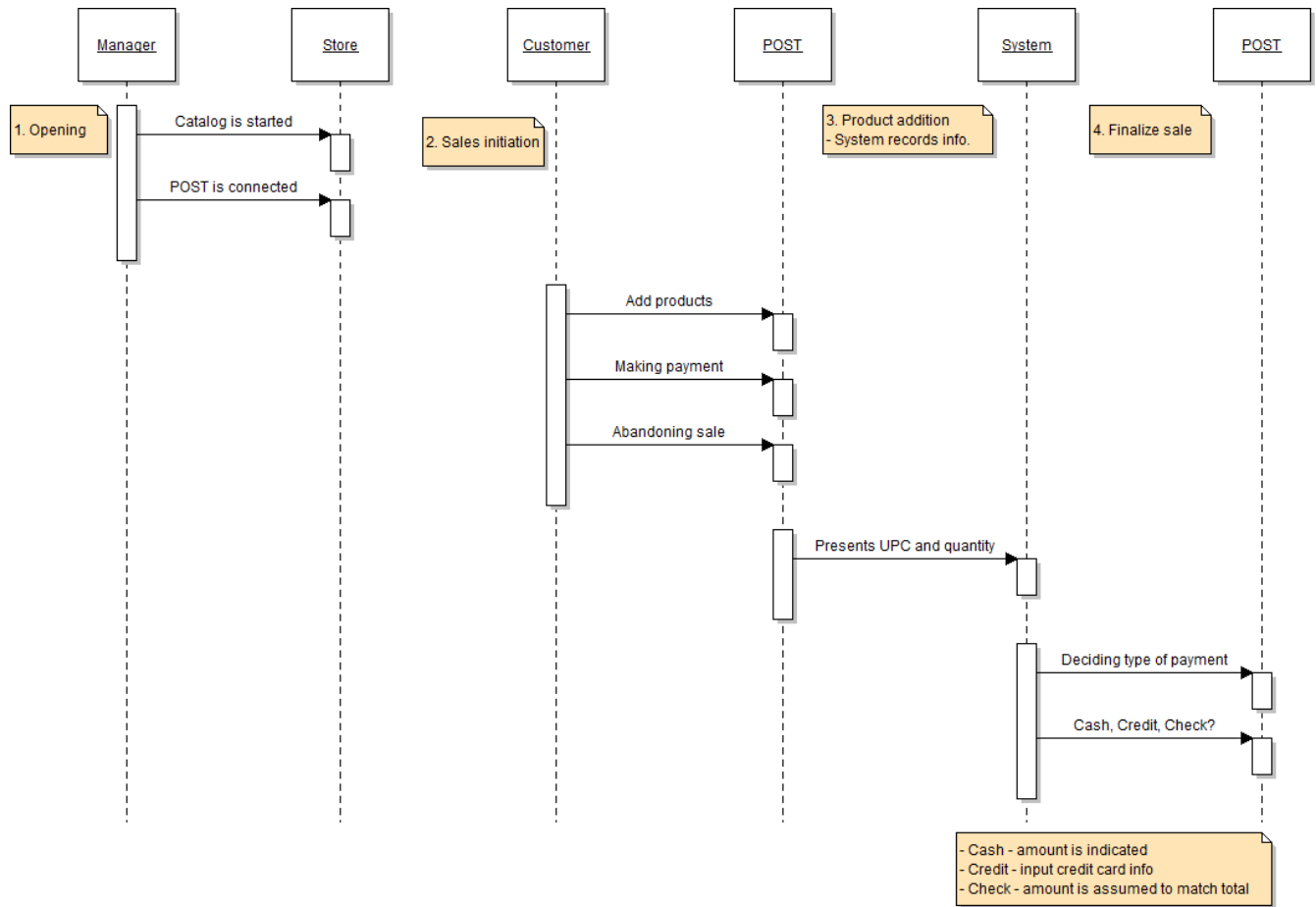


Figure 2: Sequence Diagram (summary)