# Defining Use Cases

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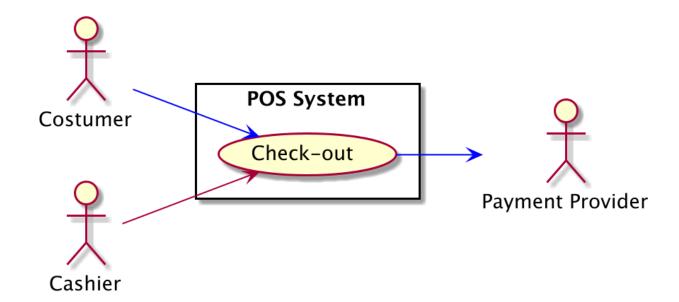
# 1 Use Case Template

Item	Content
ID	UC001
Name	Check-out
Actors	
	<ul><li>Customer</li><li>Cashier</li><li>Payment Provider</li></ul>
Data	
	<ul><li>POS DB</li><li>Payment Provider Service</li></ul>
Stimulus	Customer touch the screen and starts a checkout session
Response	The customer gets a receipt for the checkout session
Comments	<ul> <li>The costumer has enough funds to pay for the invoice</li> <li>All the system peripherals are working</li> <li>The payment provider is online</li> <li>The connection between the store and the payment provider is working</li> <li>All the items have their own unique barcode</li> <li>The screen as a touch screen and is working</li> <li>The POS have enough cash to give back change</li> <li>The POS system has a working connection with the POS DB</li> </ul>

#### Description

- 1. The costumer starts a checkout session
- 2. The system goes from idle mode to regular mode
- 3. The costumer scans the barcode of the item
- 4. The system checks if the barcode exists in the POS system, if the item doesn't exist, it displays an error that item is not found and goes to step 3.
  - a. The customer could reach out to the cashier which can determine if there is an issue with the barcode and replace it.
- 5. The system add the item to the bill
  - a. The cashier could remove an item from the bill if the customer request it
- 6. The costumer repeats from step 3 until all the items are added to the bill
- 7. The costumer sends a signal to the POS system that he is ready to pay
  - a. The system calculates the subtotal and taxes
  - b. The customer selects "Pay in cash"
    - i. The system enables the peripherals to accept cash
    - ii. The costumer puts the dollars and cents for the total amount of the order
    - iii. The costumer confirm the amount
      - A. If the customer overpays the system will dispense the change
      - B. If the customer underpay the system will prompt a message to the user that it needs to put more money and the system will repeat from step 7.b.i but the amount is going to be the missing amount
  - c. The customer selects "Pays with credit / debit card"
    - The system sends a signal that activates the payment terminal
    - ii. The payment terminal sends a message so the user inserts the card
    - iii. The costumer insert the card
    - iv. The terminal reads the card
      - If is invalid, the payment terminal display an error message to the user
    - v. The terminal connects to the payment provider service and make a charge
      - A. If the user doesn't have enough funds it will display an error message to the user and will send a signal to the POS system that the transfer was a failure.
      - B. The system will return to Step 7.a.
    - vi. The terminal sends a signal to the POS System that the transfer was successful and also display a message to the user
- 8. The systems prompts the user if they would like the receipt
  - a. If the costumer select yes, the costumer sends a signal to the system to print the receipt
  - b. If the customer selects no, the system goes to step 9
- 9. The system goes to idle mode

# 2 Use Case Diagram



#### 3 User Stories

#### 3.1 Costumer

- As a customer, I want to pay with credit card because i don't want to carry cash and i want the credit card rewards (Step 7.c)
- As a customer, I want to pay with debit card because i don't want to carry cash and also i don't want to spend more than i have available (Step 7.c)
- As a customer, I do not want to wait in long lines to checkout.
- As a customer, I want to pay in cash so i don't get in debt by using credit cards (Step b.c)
- As a customer, I would want the system to be able to apply any coupons I have or any current discounts on any of my items so I can save as much money as possible.
- As a customer, I would want the system to accurately calculate my owed change so that I don't overpay. (Step 7.a)

#### 3.2 Cashier

 As a cashier, I want to be able to override items in the order. (Step 5.a)