# Use Case: Order Processing – Online shopping

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| Use Case name | **Order Processing** | |
| Actors | Customer, Clerk, Courier | |
| Pre-conditions | Products have been selected in shopping cart; Customer has proceeded to checkout | |
| Post-conditions | A receipt has been printed; Transaction has been approved | |
| Frequency | Approx. 20 orders/day | |
| Flow of events | **Actor** | **System** |
| 1. The customer adds a product to the cart. | 2. The system updates the current order list and subtotal price, including delivery fees (if any). |
| *Steps 1-2 are repeated until the customer is satisfied.* | |
| 3. The customer proceeds to checkout. | 4. The system prompts the user to input data like phone number, address, etc. |
| 5. The customer inputs the requested data. | 6. The system prompts the user to pay the displayed amount. |
| 7. The customer pays the displayed amount. | 8. The system notifies the clerk that there is a new online order. |
| 9. The clerk dispatches an available courier. | 10. The system resets and is ready for a new order. |
| 11. The courier notifies the clerk that the order has been delivered. | 12. The system sends a message to the customer that their package has been delivered. |
|  |  | 13. The courier is marked as available for new deliveries. |
| Alternative flows | **1a. The customer decides to remove an item from the shopping cart.** | |
|  | 1. The system removes the product from the customer’s shopping cart and updates the subtotal. |
| **1b. The customer’s order exceeds 250DKK.** | |
|  | 1. The system notifies the user that delivery fees are lifted. |
| **3a. The customer applies a voucher.** | |
| 1. The customer inputs a voucher code. | 2. The system reads the code, finds the corresponding discount percentage, and subtracts the calculated amount from the total price. |
| **3b. The voucher is expired, invalid, or it has been already used.** | |
|  | 1. The system displays an error message to the user and the price is not updated. |
|  | **4a. The customer orders for the first time.** | |
|  |  | 1. The user’s information is persisted for further orders. |
|  | **11a. The delivery address is not available or invalid.** | |
|  | 1. The courier sends the new delivery address (a nearby kiosk, for example). | 2. The system sends an email to the user, informing him that the package has been delivered to the new address. |
| Special Requirements | * There has to be at least 1 product before the customer can proceed to checkout. * The customer may use only 1 voucher per order. | |