Customers Register

Name	Customers Register
Actors	Customers
Entry Conditions	The customer has the intention to buy the goods.
Event Flow	① Customers download the application from the website. ② Customers click on "Register" button. ③ Customers compete the whole registration information and set log-in password. ④ The system validates the certification. ⑤ The system confirms the registration. ⑥ The system saves customers' information.
Exit Condition	The systems save the information about customers who have been completed the registration.
Exception	① The customers' information has existed in the system. ② The customers' codes are invalid. ③ The customers didn't offer the full information about themselves. If one of the above situations happen, the application will retrieve error messages to customers.

Customers Login

Name	Customers login
Actors	Customers
Entry Conditions	The customers are already registered to the application.
Event Flow	① Customers open the system. ② Customers compiles the fields "Username" and "Password". ③ Customers clicks on "Login" button. ④ The system opens the main page.
Exit Condition	① The customers enter invalid Username. ② The customers enter invalid Password. If one of the above conditions is detected, the application notifies the customers taking it back to the login screen.

Make bookings

Name	Make bookings
Actors	Customers
Entry Conditions	The customers are already logged in the application successfully.
Event Flow	① Customers select stores in the application which they intend to purchase goods. ② Customers click on "XXstore" button to confirm their selections. ③ Customers enter the information page which request customers to write their locations. ④ Customers click on "Save" button. ⑤ The system saves customers' information. ⑥ The system send responses to customers to make confirmation.
Exit Condition	The customers receive their confirmations from system.
Exception	① Customers' information about their locations or expected visit duration is not complete. ② Customers forgot to click on "Save" button. If one of the above situations happen, the customers' bookings will not be successful.

Distribute numbers

Name	Distribute numbers
Actors	Store managers & customers
Entry Conditions	① Store managers open the door of store. (For the customers who can't use the system.) ② The customers are already booked the store in system.
Event Flow	① The system send alert to the customers whose information is already existed in the system offer their goods' lists and expected visit duration. ② Customers consider the time they need to get to the shop from the place they currently are by pop-up notification, expected visit duration and goods' lists, then send these to the store managers. ③ Store managers send some information about the current situation of store. ④ Customers see real-time estimation of waiting time and choose the expected concrete visiting time, then send to the store managers. ⑤ Store managers receive these confirmations and save to the system. ⑥ Store managers retrieve customers' QRs code and numbers by displaying in the system.
Exit Condition	The customers receive their numbers or tickets.
Exception	① Customers who can't use the application, they arrive at the store and offer their goods-list and expected visit duration to the store

	managers.
	② Store managers give the customers who can't use the application some tickets and arranger them to make some queues.
Special Requirement	Each QR matches only one number.

Make queues and enter the store.

Name	Make queues and enter the store.
Actors	Store managers & Customers
Entry Conditions	① Store managers open the door of store.
	② Customers arrive the store.
	③ Customers have numbers or tickets.
	④ Store sets the maximum number of people in store.
Event Flow	① Customers show their numbers or tickets to the store managers.
	② Store managers check customers' numbers or tickets and the number of people in store currently if it more than the maximum number of people in store.
	③ Store managers according to customers' goods list to arrange them make queues.
	④ Customers receive the suggestion of alternative slots for visiting stores from the store managers and follow the arrangement to enter the store.
	⑤ Customers stand the door of the store and show the ORs which are matched by customers' numbers to scan.
	⑥ Customers are allowed to enter the store by the store managers if their QR's state changes and the number of people currently in store is not more than the maximum number.
	⑦ Customers go to the different queues according to their list if the number of people currently in store is more than the maximum number.
	⑧ Customers who have the tickets insert the different queues according to their list.
	⑨ Customers scan their QR if they finish purchasing.
	⑩ Customers out of the store if their QRs' states change.
Exit Condition	The customer finished purchase goods.
Exception	① The customers who didn't arrive the store in time (the arrive time is more than 1 minute to their booking time), their tickets or numbers change to be invalid.
	② Customers can't enter the store if their QRs' states didn't change.
Special Requirement	① The length of queue is more than 5 meters for per person.
	② The time of purchasing time is less than 5 minutes.
	③ The QR code will be lost once the customers leave.

Cancel the bookings

Name	Cancel the bookings
Actors	Store managers & Customers
Entry Conditions	Customers have no time to the store in the booking duration time.
Event Flow	① Customers have other important things which make them have to cancel their bookings early. ② Customers send to the cancel-info to the store manager. ③ Store managers retrieve responses to let customers know that there is no booking with the store.
Exit Condition	The customers have no booking with the store in the system.
Exception	Customers who don't arrive at the store on time are considered to be automatic cancellations.