

## Question 3

Use Case:	Make a purchase	
Triggering Event:	User want to buy a T-shirt	
Brief Description:	User browse website, choose desired T-shirt design, size and color, then add to cart and complete the purchase progress.	
Actors	User, System	
Pre-conditions:	User browse and select the desired T-shirt, size and color	
Post-conditions:	User bought T-shirt, system update stock and shop history	
Flow of Events:	User	System
	<ol style="list-style-type: none"> <li>1. Browse different T-shirt design.</li> <li>2. Choose a design, pick size, color and quantity.</li> <li>3. Add T-shirt to cart.</li> <li>4. Repeat step 1 to 3 until all the items has been added.</li> <li>5. If the user is logged in, go to step 6.</li> <li>5a. If the user is not logged in, but is a member, user enter login details.</li> <li>5b. If the user is not logged in, but is not a member, user can select register an account, or continue as a guest.</li> <li>5c. If the user is not logged in, and select to register, user enter account detail.</li> <li>5d. If the user is not login, and choose to continue as a guest, user enter email address to continue.</li> <li>6. Provide shipping address.</li> <li>7. Choose use credit/point to pay.</li> <li>8. If bill is split, choose payment method (credit card) and enter payment details.</li> <li>9. Confirm the purchase detail, including total price and shipping fee.</li> <li>10. Confirm and submit order.</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Show different T-shirt design.</li> <li>2.1 Update stock of T-shirt</li> <li>3.1 Update the current shopping cart by adding the item.</li> <li>4.1 Repeat 1.1 to 3.1.</li> <li>5.1 If the user is logged in, go to step 6</li> <li>5a.1 Verifies the login detail and log the user into the system.</li> <li>5a.2 Display the form for user to enter shipping address.</li> <li>5b.1 Display page to let user register or continue as a guest.</li> <li>5c.1 Collect account detail, create a database record for new member.</li> <li>5c.2 Log the user in, and display the form for user to enter shipping address</li> <li>5d.1 Collect user email address, display a form for user to enter the shipping address</li> <li>6.1 Collect shipping address and email address, process deliver fee.</li> <li>7.1 Show user credit/point, if pass the threshold, allow user to use credit/point to pay/split the bill.</li> <li>8.1 Provide payment method to choose, process the payment detail.</li> <li>9.1 Show order confirmation page, include total price and shipping fee.</li> <li>10.1 Verify payment details</li> <li>10.2 Create order transaction</li> <li>10.3 Update stock</li> <li>10.4 Send confirmation email to user.</li> </ol>
Exception Conditions:	5a.1 Account detail verification failed. 5d.1 Email address invalid 10.1 Credit card verification failed	



Assumption:

- The website is user-friendly, easy to navigate.
- The database is real-time updated, can show stock.
- The financial gateway is fast executing, can process payment in real-time.
- The website is configured an email server, can send email to user.

Database record action:

Create:

- When a new member created, create a member record.
- When user complete purchase, create a purchase record.

Update:

- When member completed a purchase, update its account credit/point if member choose credit/point to pay.
- When user complete purchase, update the stock of purchased T-shirt.