**BC 190402477**

**CS611 –Software Quality Engineering**

**Assignment No. 2**

**Solution:**

**Question 1:**

1. Identify functional requirements of user from the given scenario:

**Functional Requirement:**

Suppose we have a web-based application for grocery store. User can fill online shopping cart with the grocery items he/she wants to buy. User can choose the grocery items according to categories (cooking oils, Rice, flour, sugar, tea, shampoo, soup etc.) and select the quantity or weight. User have option of modifying the shopping cart at any time before making a purchase. Modifying means user can delete any selected items or change its quantity and weight before making the purchase. After user has filled the shopping cart with the necessary items then he/she can place order (by filling detail home address) and making the payments. There are number of online payment options are available to user. These options can include Jazz cash, Easy paisa, Credit card, Debit card and cash on delivery. User can track their orders with the order tracking available on the website. Keep this scenario in your mind and answer the following questions.

1. User can fill online shopping cart with the Grocery items He wants to buy.
2. User can choose the grocery items according to categories.
3. User can select the quantity or weights of each item.
4. User can modify the shopping cart at any time before making a purchase.
5. User can delete the selected items or change its quantity and weight before purchasing.
6. User can place order by filing in detail home address.
7. User can make payments using various online payment options including jazz cash, easy paisa, credit card, Debit card and cash on delivery.
8. User can track their orders with the tracking number available on website.

**Question 2:**

Continuing the above scenario, write any two functional requirements in given table for “**filling the shopping cart**” and “**online payment**”.

**Usage Scenario 1**:

|  |  |
| --- | --- |
| Use Case Name: | Filling the shopping Cart |
| Use Case ID | UC-01 |
| Actor: | User |
| Summary: | User is able to fill their online shopping cart with desired grocery items. |
| Pre-Condition: | User is logged in to the web based application. |
| Post-Condition: | User shopping cart is filled with the desired items. |
| Extend: | N/A |
| Normal Course of Events | 1. User navigates to the grocery items. 2. User selects items from the different categories available. 3. User selects the quantity or weight of each item. 4. User confirms the item selection and adds it to the cart. 5. User can repeat steps 2 and 4to add more items to the cart. 6. User can review and modify the cart before placing the orders. |
| Alternative Path: | 1. User can modify the shopping the shopping cart at any time before making a purchase. 2. User can delete any selected items or change its quantity. |
| Exception: | 1. If user is not logged in, they will be redirected to the login page. 2. F there is an error in adding the items into the cart; an error message will be displayed. |

**Usage Scenario 2:**

|  |  |
| --- | --- |
| Use Case Name: | Online Payment |
| Use Case ID | UC-02 |
| Actor: | User |
| Summary: | The user is able to make payments for their order using various methods. |
| Pre-Condition: | User can fill their shopping cart and is ready to make a purchase. |
| Post-Condition: | Payment has been processed and order is confirmed. |
| Extend: | N/A |
| Normal Course of Events | 1. User can navigate in the payment page. 2. User selects various online options (Credit card, Debit card, Easy paisa, Jazz cash and cash on delivery). 3. User enters the necessary payments details. 4. User confirms the payment method. 5. Payment is processed and order is confirmed. |
| Alternative Path: | 1. User can choose cash on delivery option. |
| Exception: | 1. If payment is not successful an error message will be displayed and user will be prompted to try again. 2. If the user does not have sufficient funds or the the payments details are incorrect, the payment will be declined and an error message will be displayed. |