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**CS6304 – SOFTWARE  
ENGINEERING**

**ASSIGNMENT**

**E - COMMERCE**

**USE CASE DIAGRAM**

## OVERVIEW:

The use cases which were defined in the previous (SRS) document have been refined here to further develop this system. The use cases have been divided into two different sections based on their levels of abstraction and also for better understandability. Use cases are explained using fully – dressed format.

## CASE STUDY:

### E - COMMERCE

## ACTORS:

ACTORS	DESCRIPTION
<b>Owner or Admin (User)</b> - Primary Actor	One who manages database and approves refund
<b>Manager (User)</b> - Primary Actor	One who maintains inventory and manages delivery
<b>User or Customer</b> - Secondary Actor	One who searches and orders products

## GOALS:

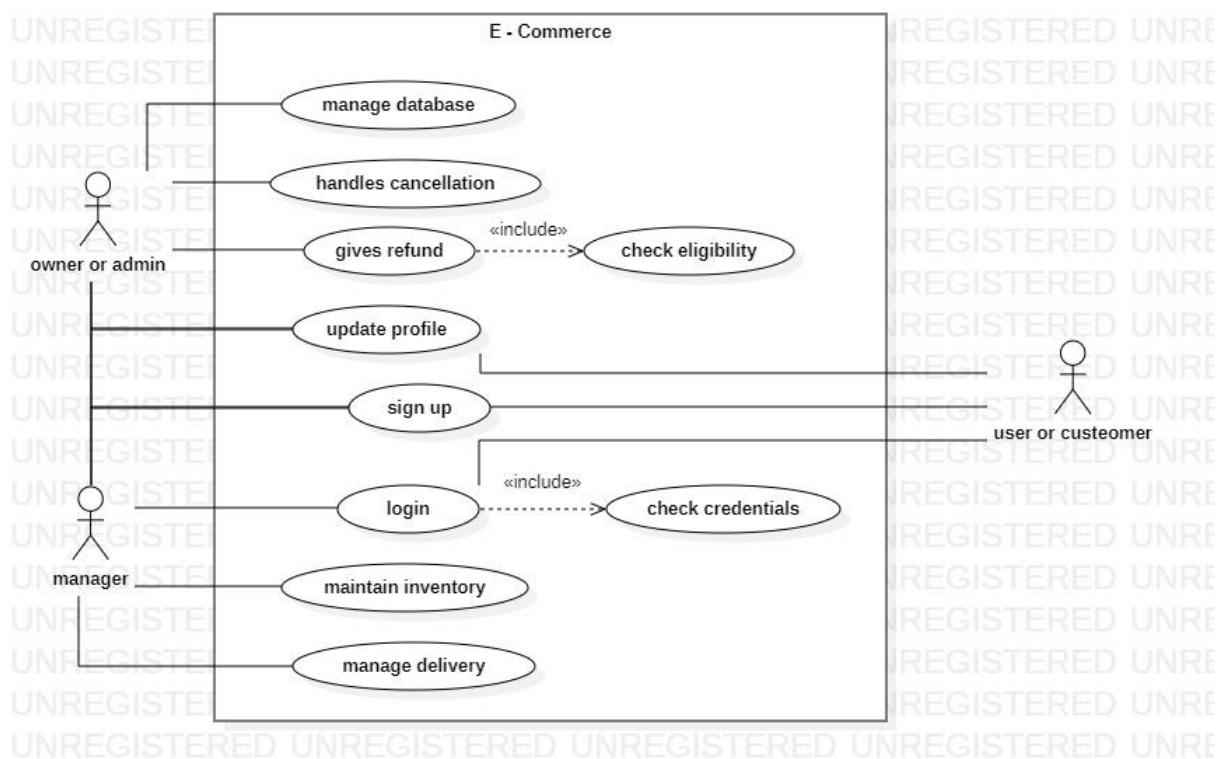
ACTORS	GOALS
<b>Owner or Admin</b>	<ul style="list-style-type: none"><li>• Manages database</li><li>• Handles cancellation</li><li>• Approves refund</li></ul>
<b>Manager</b>	<ul style="list-style-type: none"><li>• Maintains inventory</li><li>• Manages delivery</li></ul>
<b>User or Customer</b>	<ul style="list-style-type: none"><li>• Searches products</li><li>• Orders products</li><li>• Cancels order</li><li>• Makes payment</li></ul>

## USE CASE DIAGRAMS:

### 1) EXPLAINING LEVEL OF ABSTRACTION:

This use case diagram describes the functions which would be done by the admin and manager. Since the customer also performs sign up, login and update profile, it is mentioned in this diagram itself.

### USE CASE DIAGRAM:



### BRIEF DESCRIPTION:

Owner, manager and customer's profiles must be registered before using this software which can be done using sign up option. Then, they can just login and proceed. They can also update their profiles. Owner (for e.g., of a shop) or admin can manage the database. He also handles cancellation and gives refund by checking eligibility like the time of cancellation i.e., it should be within one hour from the time of payment etc. Manager maintains inventory which has stock information, etc. and also manages delivery once the orders are placed.

## EXPLANATION OF USE CASES:

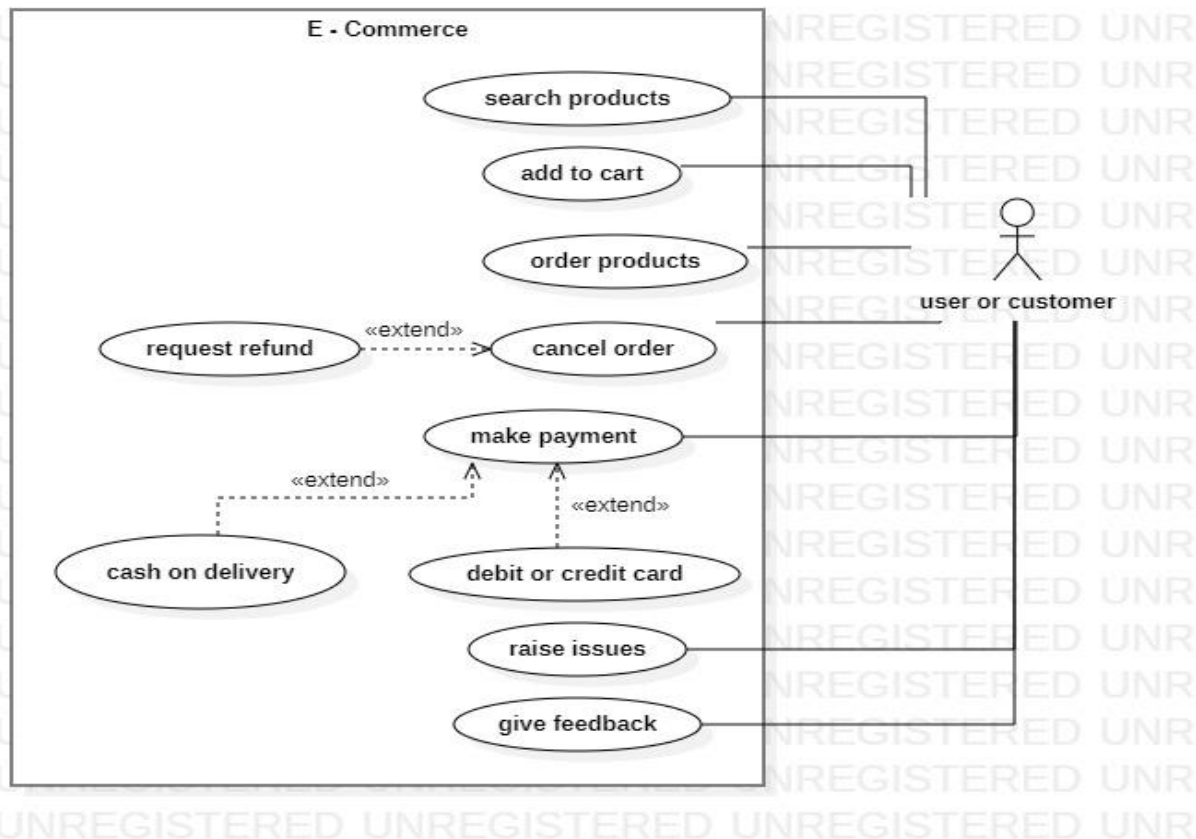
- **Manage database:**
  - **Scope:** E - Commerce
  - **Primary Actor:** owner or admin
  - **Stakeholders and Interests:**
    - owner or admin – wants to manage the database.
  - **Precondition:**
    - Owner or Admin must be logged in.
  - **Success Scenario:**
    - Database is updated like updating stock details.
- **Handles cancellation:**
  - **Scope:** E – Commerce
  - **Primary Actor:** owner or admin
  - **Stakeholders and Interests:**
    - owner or admin – processes order cancellation requests.
  - **Success Scenario:**
    - Owner or admin reads all cancellation request messages.
- **Gives refund:**
  - **Scope:** E – Commerce
  - **Primary Actor:** owner or admin
  - **Stakeholders and Interests:**
    - owner or admin – approves refund.
  - **Success Scenario:**
    - Eligibility is checked and refund is initiated.
- **Update profile:**
  - **Scope:** E – Commerce
  - **Primary Actors:** owner or admin and manager
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - owner or admin, manager, user or customer - wants to update profile details.
  - **Success Scenario:**
    - Owner or admin, manager and customer successfully update their profiles respectively.

- **Sign up:**
  - **Scope:** E – Commerce
  - **Primary Actors:** owner or admin and manager
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - owner or admin, manager, user or customer - wants to register.
  - **Success Scenario:**
    - Owner or admin, manager and customer successfully complete their sign up process by giving necessary details respectively.
- **Login:**
  - **Scope:** E – Commerce
  - **Primary Actors:** owner or admin and manager
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - owner or admin, manager, user or customer - wants to login.
  - **Success Scenario:**
    - Owner or admin, manager and customer login to their accounts respectively.
- **Maintain inventory:**
  - **Scope:** E – Commerce
  - **Primary Actors:** manager
  - **Stakeholders and Interests:**
    - Manager – wants to check the stock availability.
  - **Success Scenario:**
    - Manager orders stocks if stock is low in inventory.
- **Manage delivery:**
  - **Scope:** E – Commerce
    - **Primary Actors:** Manager
  - **Stakeholders and Interests:**
    - Manager - wants to update profile details.
  - **Success Scenario:**
    - Owner or admin and manager successfully update their profiles respectively.

## 2) EXPLAINING LEVEL OF ABSTRACTION:

This use case diagram describes the functions which would be done by the customer.

### USE CASE DIAGRAM:



### BRIEF DESCRIPTION:

Any customer's profile must be registered before using this software which can be done using sign up option. Then, they can just login and proceed. The customers can then search the available products, add them to cart and place the orders. Once the order is placed, they have to make the payment by choosing a payment mode (cash or card). They can also cancel the order and request for refund within one hour from the time of payment. They can also update the profile details. The customers can also raise issues and give feedback.

## EXPLANATION OF USE CASES:

- **Search products:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - user or customer – wants to search the available products.
  - **Success Scenario:**
    - user or customer searches all the available products.
- **Add to cart:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - user or customer – wants to add selected products to cart.
  - **Success Scenario:**
    - user or customer all the selected products to cart.
- **Order products:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - user or customer – wants to order the products.
  - **Success Scenario:**
    - user or customer orders the required products.
- **Cancel order:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - user or customer – requests to cancel the order.
  - **Success Scenario:**
    - user or customer successfully cancels the order and requests for refund.
- **Make payment:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**

- user or customer – wants to make payment for the order placed.
- **Success Scenario:**
  - user or customer makes payments successfully.
- **Raise issues:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - user or customer – wants to raise issues.
  - **Success Scenario:**
    - user or customer successfully raises issues regarding order or delivery etc.
- **Give feedback:**
  - **Scope:** E – Commerce
  - **Secondary Actor:** user or customer
  - **Stakeholders and Interests:**
    - user or customer – wants to give feedback.
  - **Success Scenario:**
    - user or customer successfully gives feedback for the placed order or the delivery etc.