



## Software Engineering 2

### Team Members

	Name	ID
1	أحمد عبد الرشيد حسن	20210071
2	رمزي أشرف رمزي	20210333
3	آيات احمد محمد	20210196
4	الاء عاطف مصطفى	20210168
5	الاء مجدي بيومي	20210170
6	انجي موسى محمد	20210187

# E-commerce website:

## - Project idea and overview

E-commerce website specializing in electronic devices such as laptops, smartwatches, and mobile phones. This document aims to provide an in-depth understanding of the system's functionalities, user roles, features, and operational processes.

## Project Requirements:

### Functional Requirements:

#### 1. User Registration and Authentication:

- Users should be able to register for an account with a valid email address and password.
- Registered users should be able to log in securely using their credentials.

#### 2. Product Management:

- Admin should be able to add, edit, and delete product listings.
- Each product listing should include details such as name, description, price, image, and specifications.

#### 3. Shopping Cart Management:

- Users should be able to add items to their shopping cart and view the contents.
- They should be able to modify quantities, remove items, or proceed to checkout.

#### 4. Order Management:

- Users should be able to place orders securely.

- They should receive order confirmation emails upon successful completion of transactions.

### **5. User Reviews and Ratings:**

- Users should be able to submit reviews and ratings for products they have purchased.
- Reviews should include text feedback and a rating scale to indicate satisfaction levels.
- Users should have the option to edit or delete their reviews.

### **6. Review Moderation:**

- Admins should have the ability to moderate user reviews to ensure they meet community guidelines.
- Moderation actions may include approving, rejecting, or editing reviews as necessary.

### **7. Category Management:**

- Admins should be able to create, edit, and delete product categories.
- Each category should have a unique name and optional description.

### **8. Category Navigation:**

- Users should be able to navigate through categories and subcategories to explore products.
- Category navigation should be intuitive and provide clear paths for users to find relevant items.

# Non-Functional Requirements:

## 1.Performance:

- The website should load quickly and respond promptly to user interactions.
- Response times for search queries, page loads, and checkout processes should be minimal.

## 2.Security:

- User data should be encrypted and stored securely to prevent unauthorized access.
- Sensitive user data, including personally identifiable information and payment details, should be encrypted both in transit and at rest.

## 3.Usability:

- The website should have an intuitive and user-friendly interface that is easy to navigate.
- Usability testing should be conducted with representative users to identify and address any usability issues.

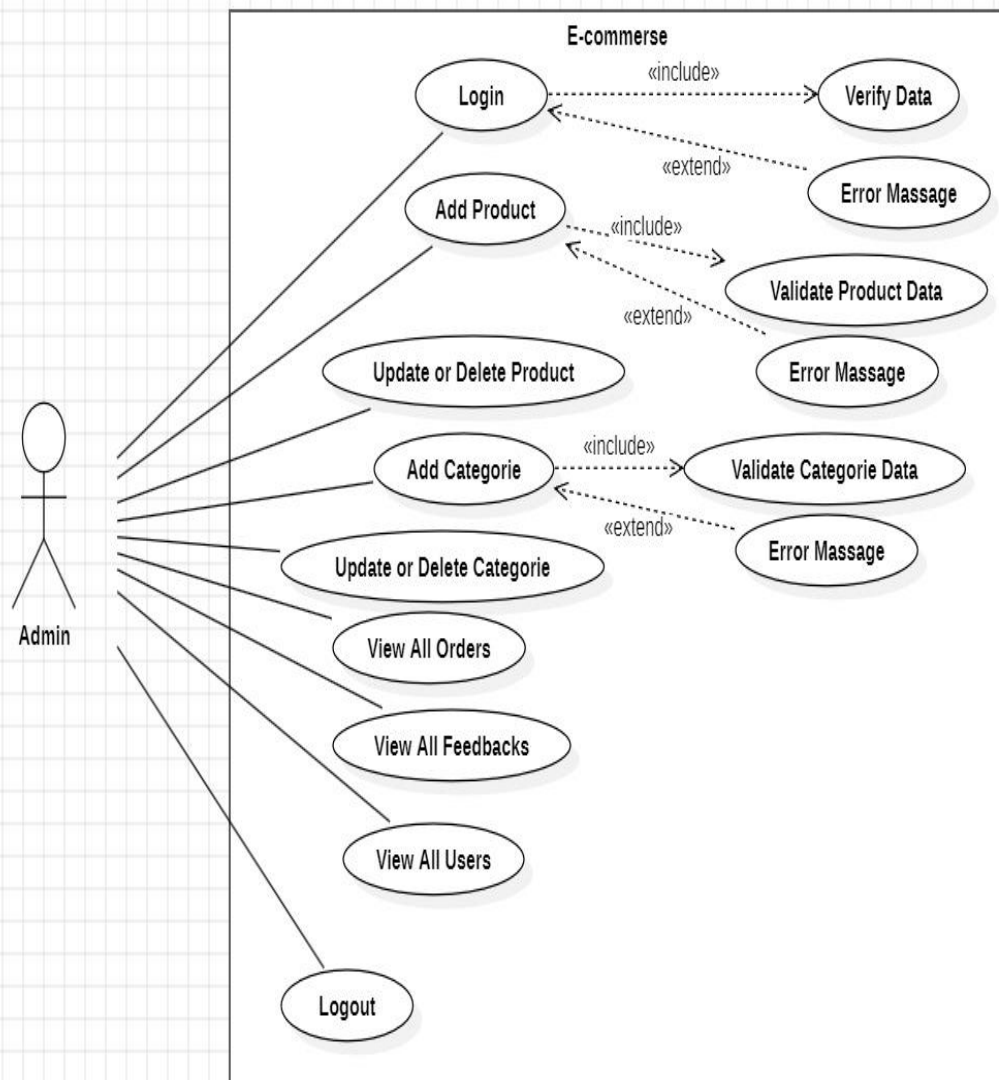
## 4.Availability:

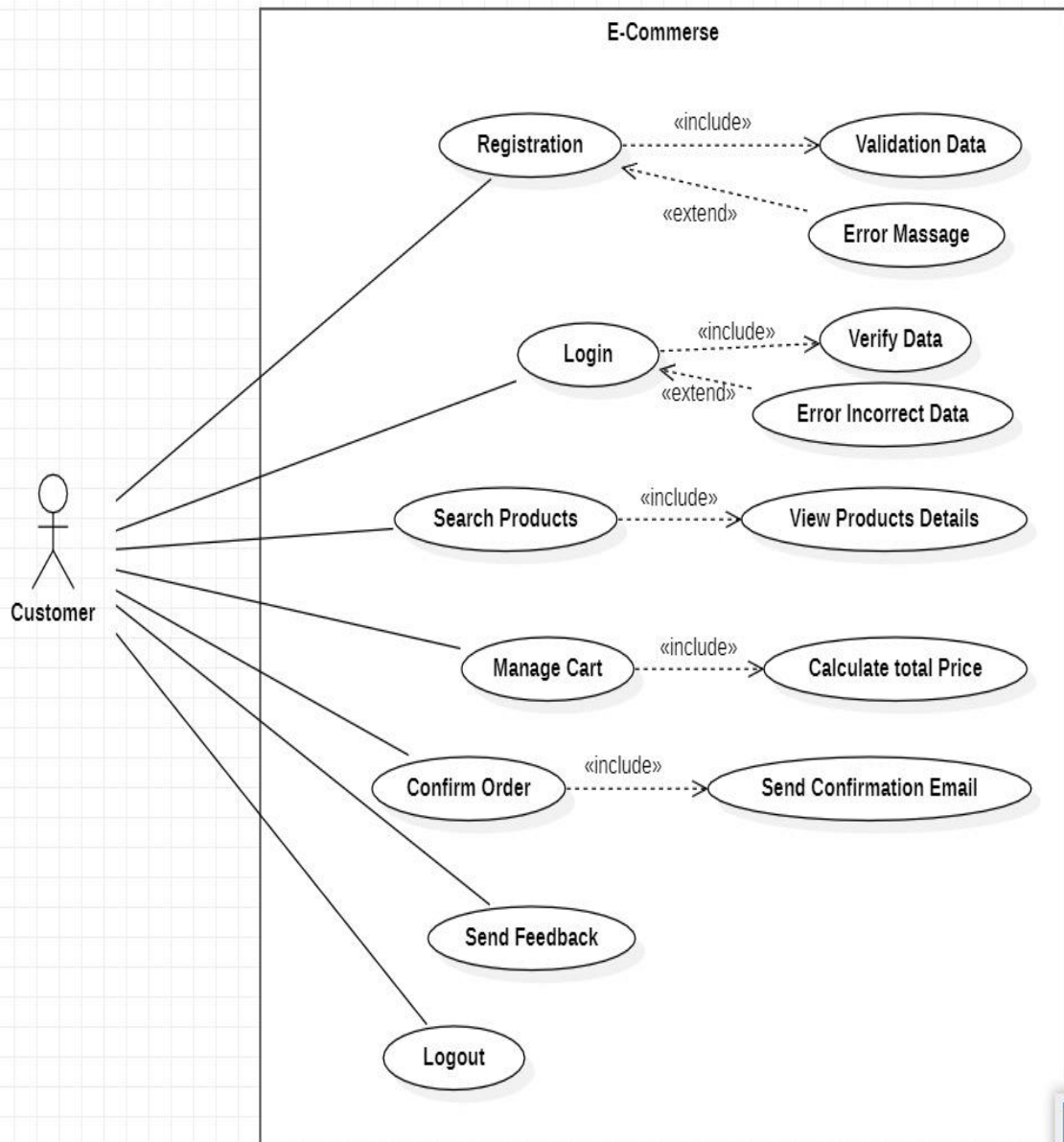
- The website should be available 24/7, with scheduled maintenance windows communicated to users in advance.

## 5.Regulatory Compliance:

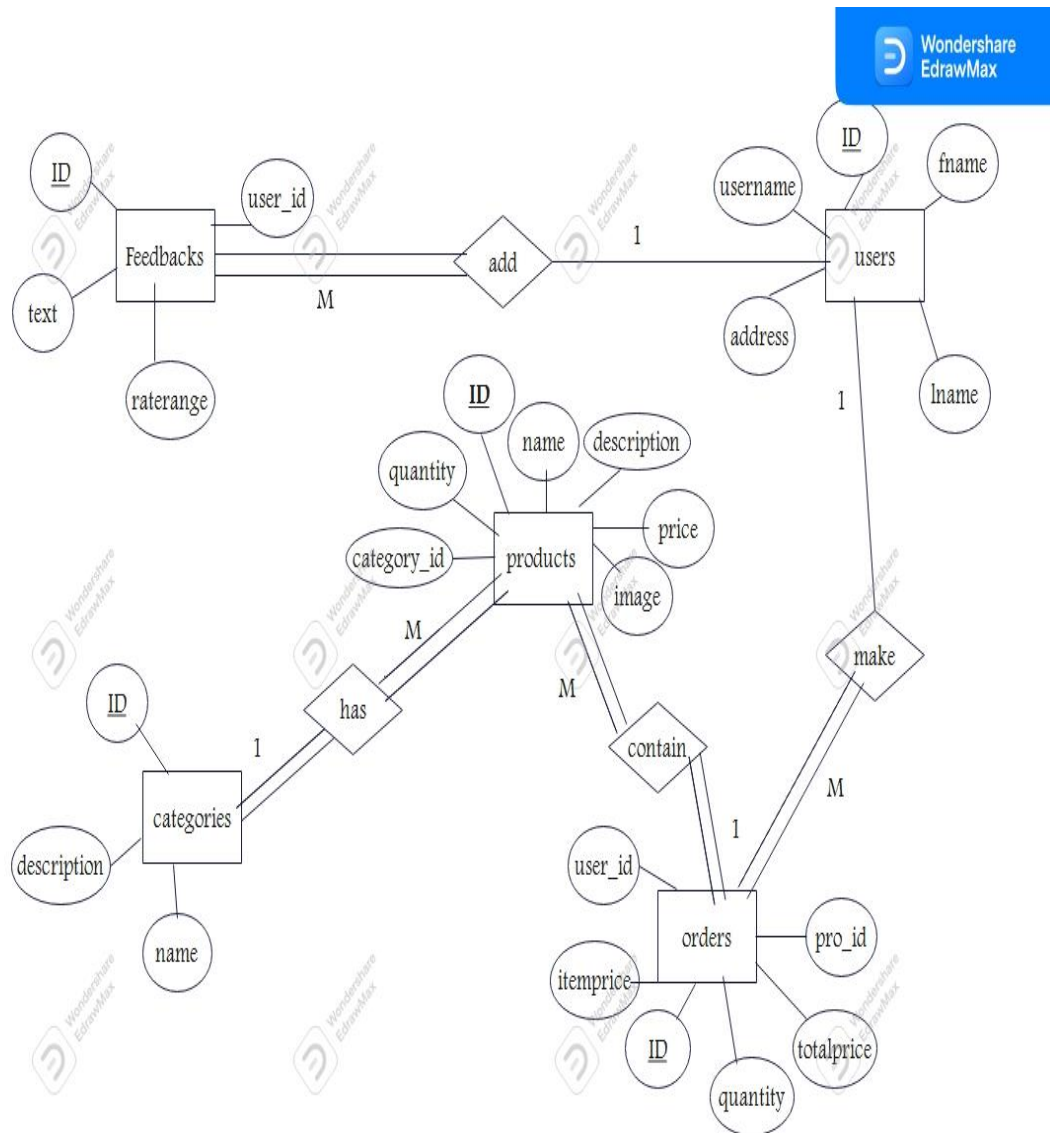
- Compliance measures should be implemented for user privacy and data security.

**USE CASE**



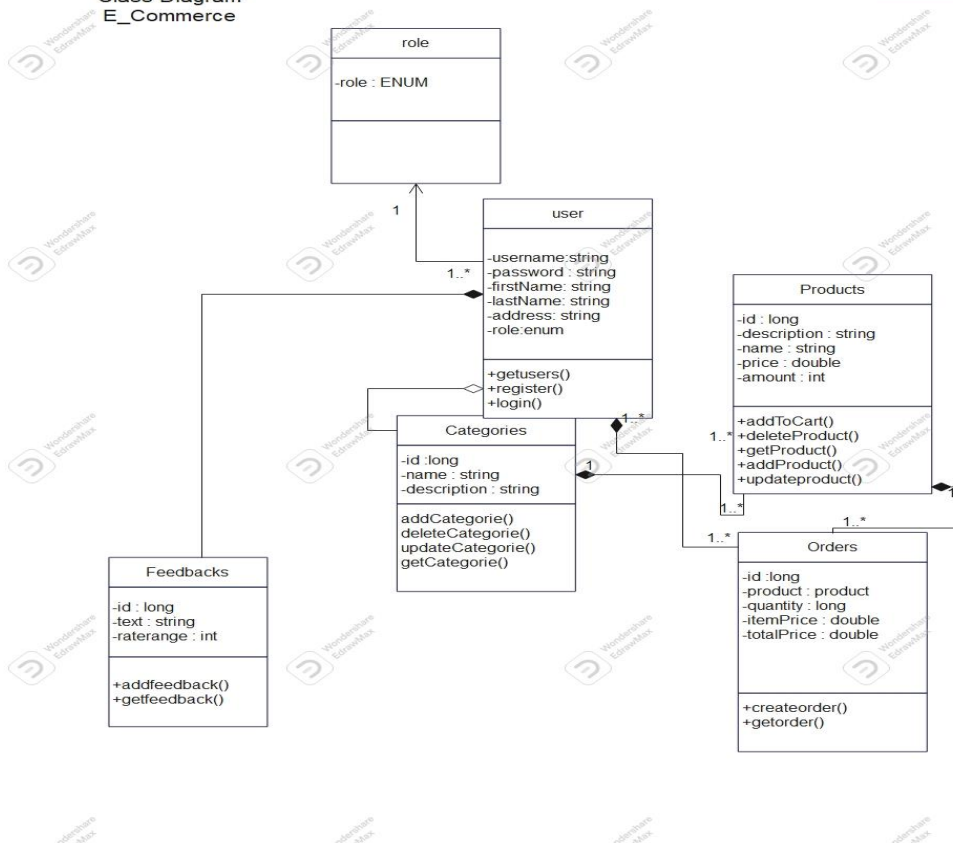


# ERD



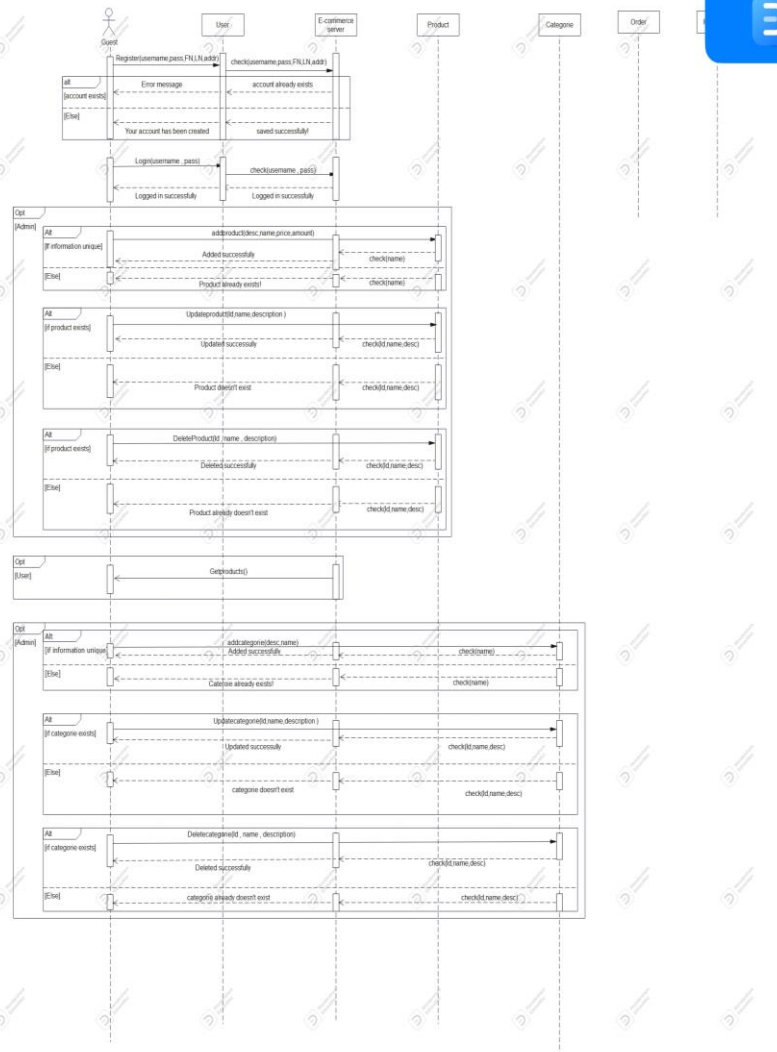
# CLASS DIAGRAM

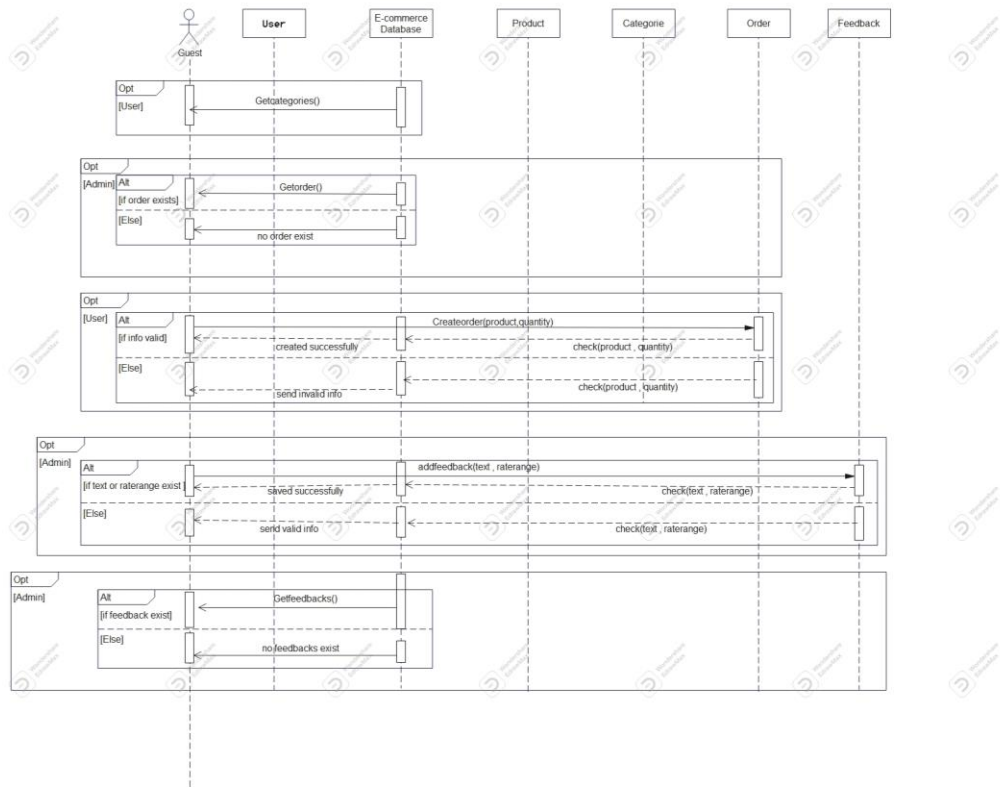
Class Diagram  
E\_Commerce



## SEQUENCE DIAGRAM

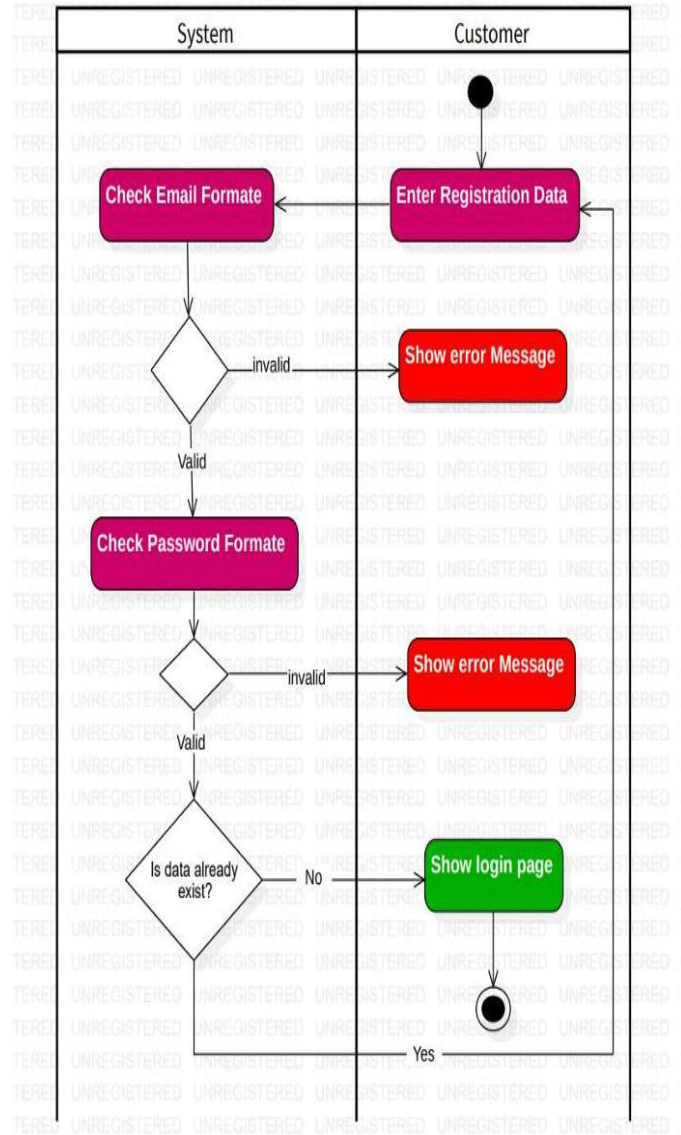




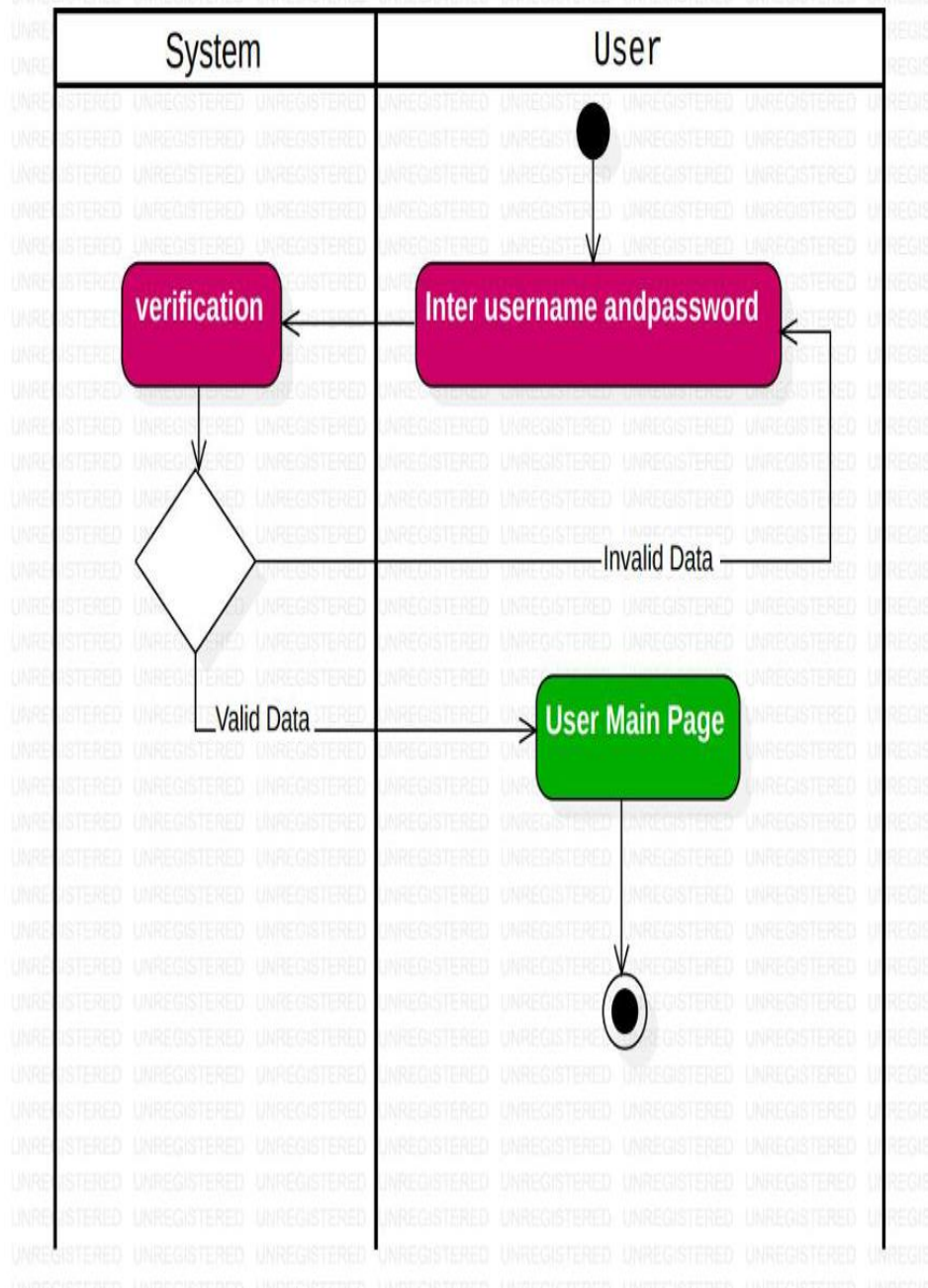


# ACTIVITY DIAGRAM

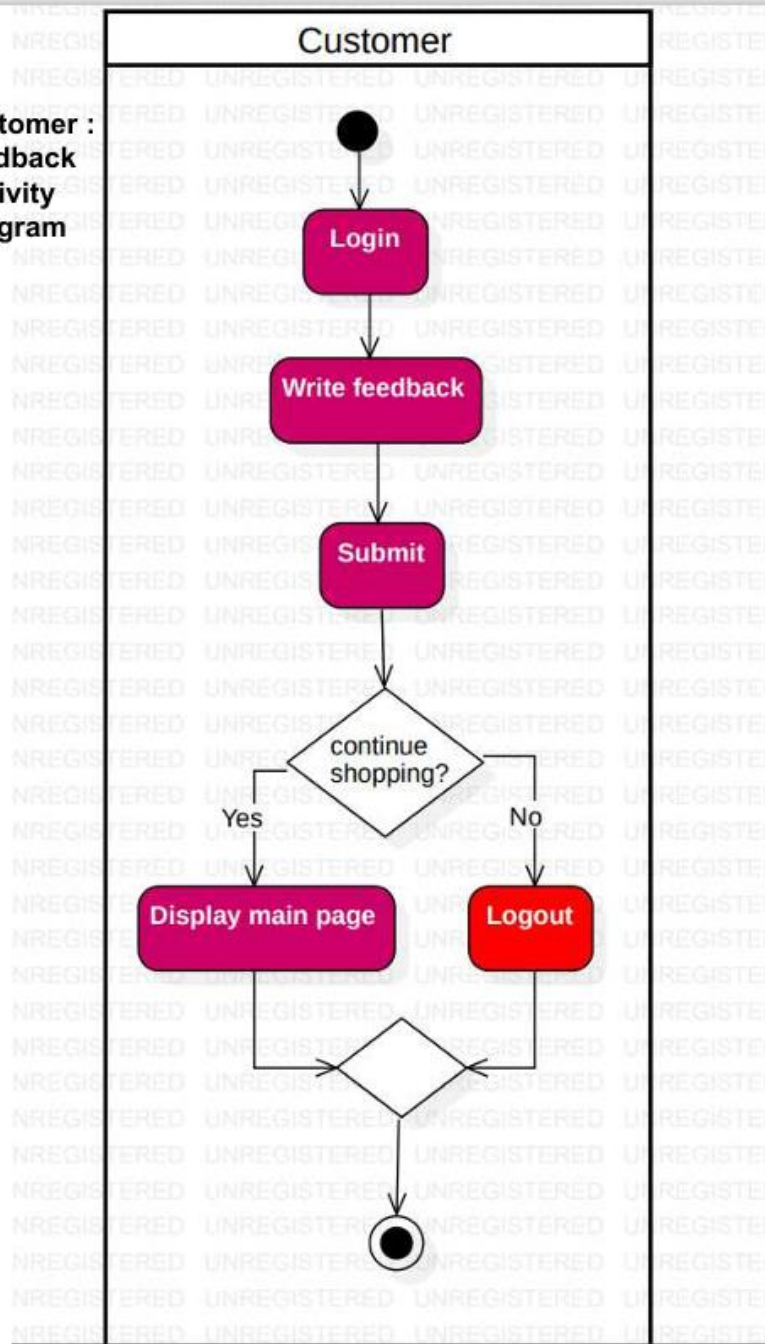
Customer :Registration Activity Diagram



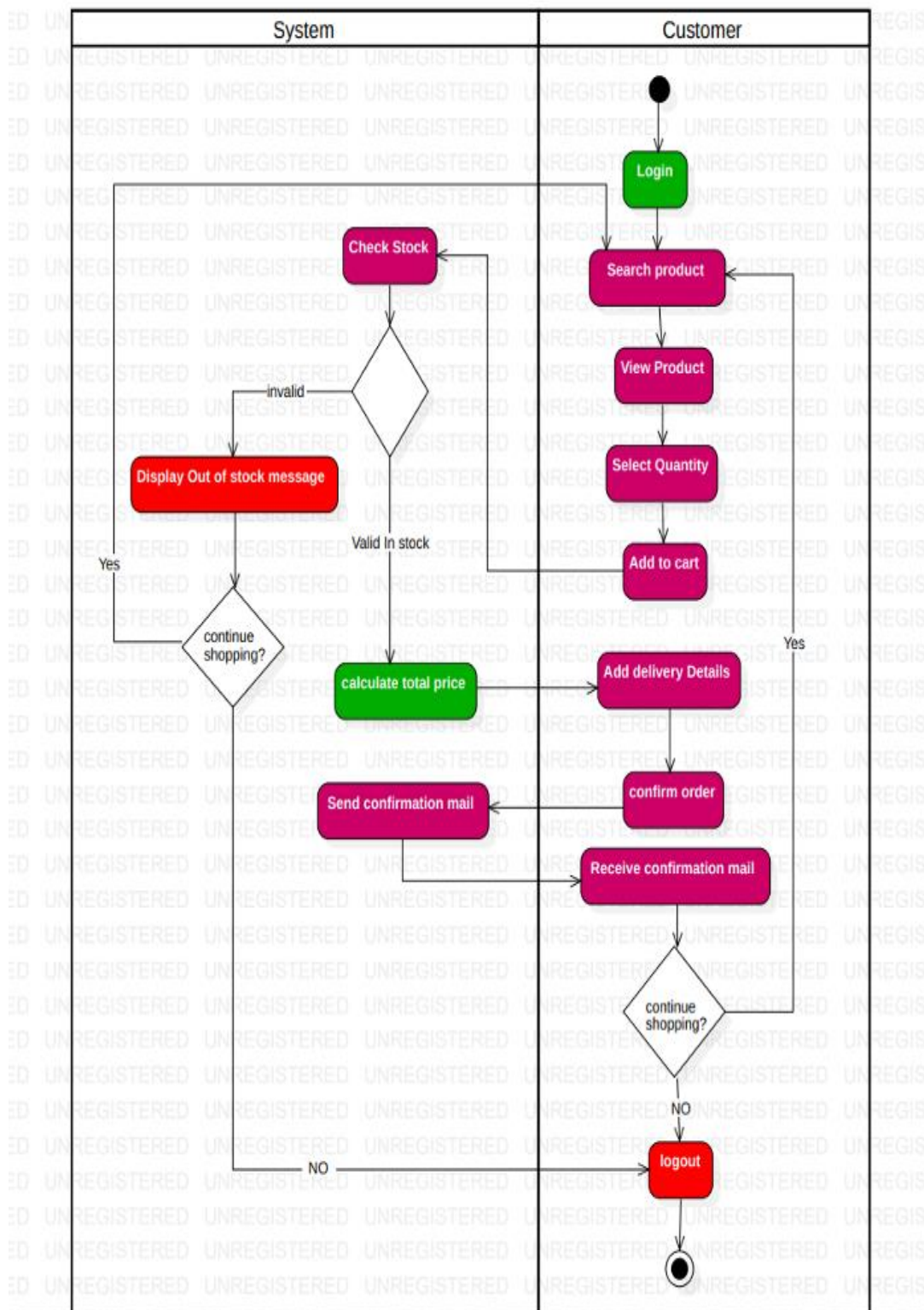
## User(Customer/Admin) :Login Activity Diagram



**Customer :  
Feedback  
Activity  
Diagram**

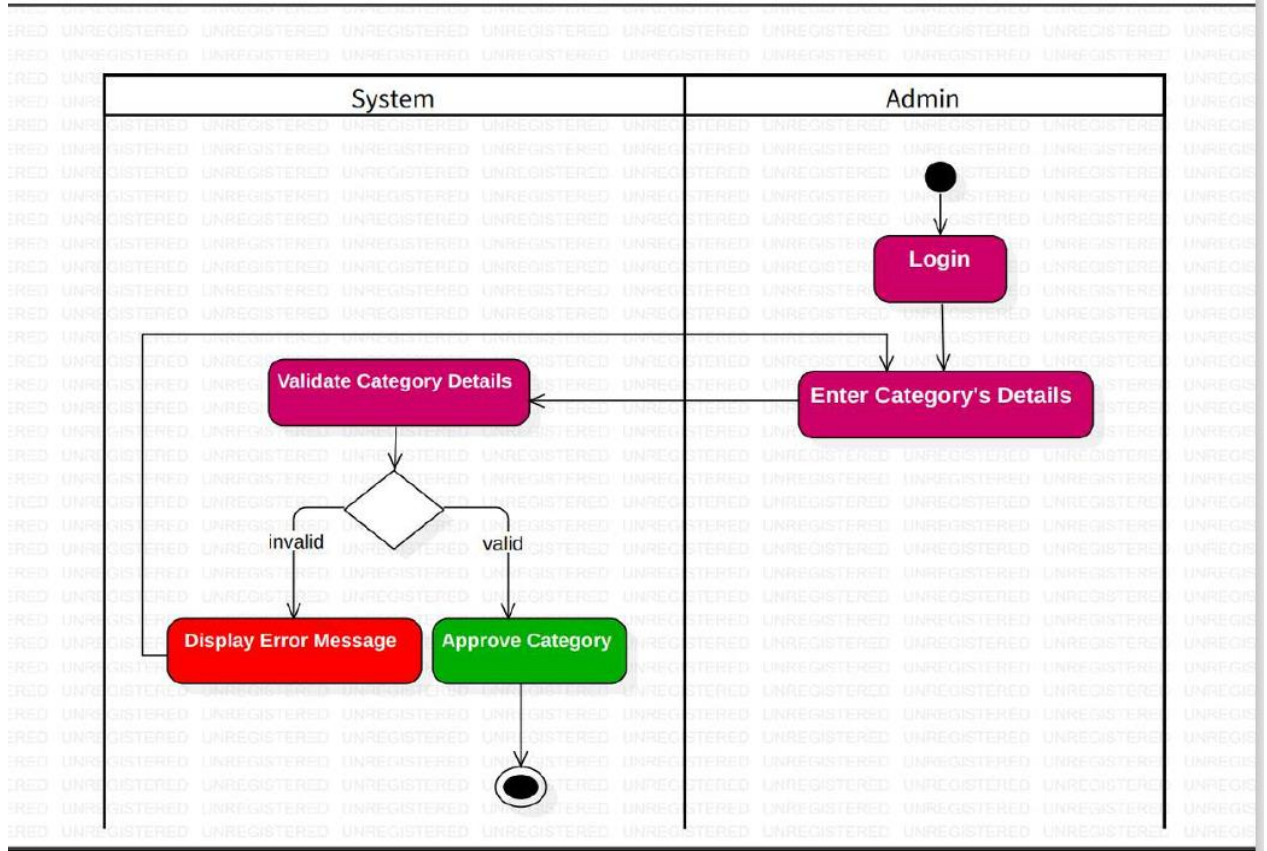


## Customer:Order Activity Diagram

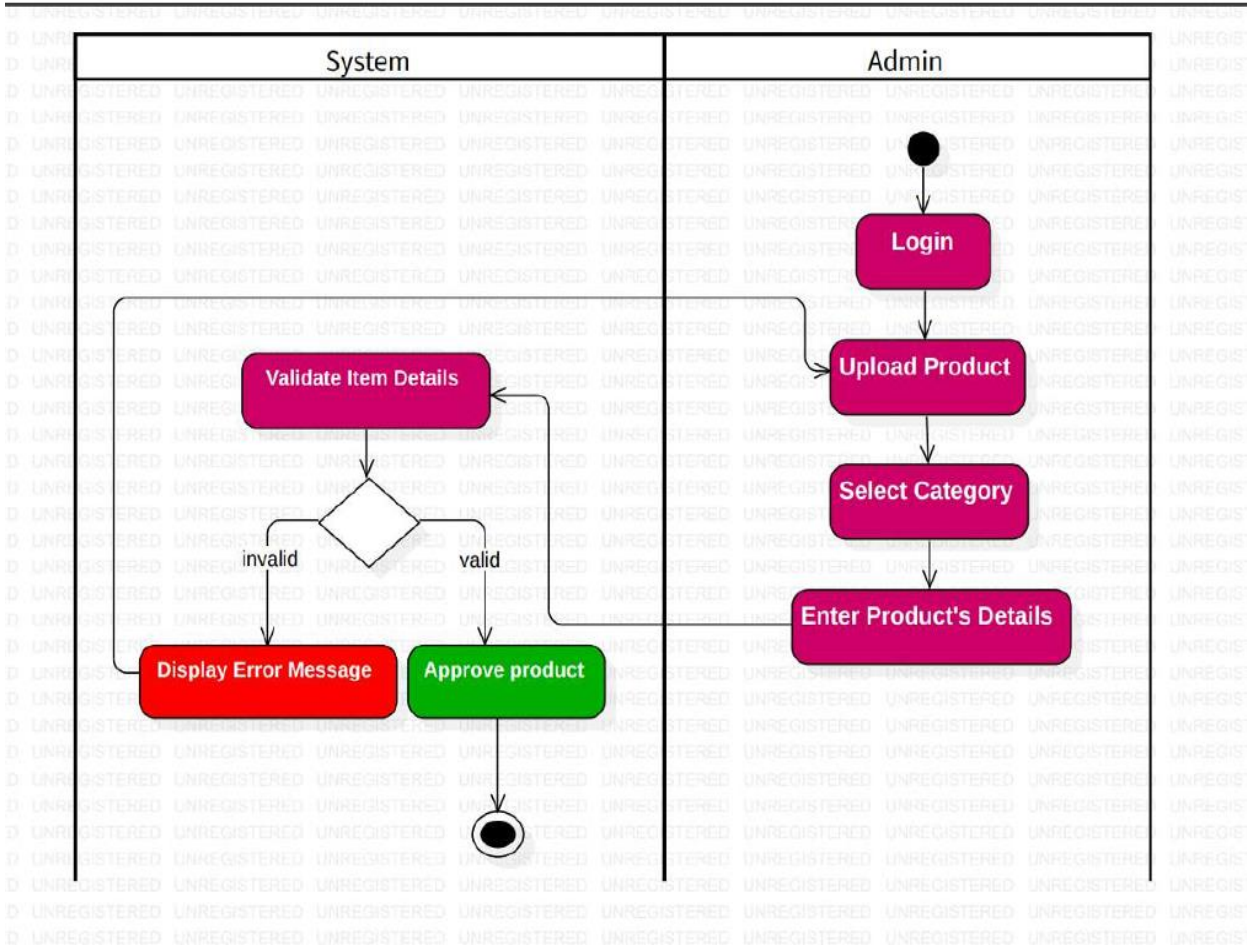




## Admin:Add Category Activity Diagram



# Admin:Add Product Activity Diagram





# OCL

