

COMPUTER SALES MANAGEMENT SYSTEM

Project report in partial fulfillment of the requirement of Software Engineering Lab

In

Department of Computer Science and Engineering (I.O.T)

Submitted By

Kiran Das

University Roll No.: 12022002029104

UEM, Kolkata

Section: C, Class Roll No.: 25

Dept. of Computer Science and Engineering (I.O.T),

Suprim Maity

University Roll No.: 12022002029071

UEM, Kolkata

Section: C, Class Roll No.: 54

Dept. of Computer Science and Engineering (I.O.T),

Ankit Mishra

University Roll No.: 12022002023005

UEM, Kolkata

Section: C, Class Roll No.: 5

Dept. of Computer Science and Engineering (I.O.T),

Shubhranshu Ghosh

University Roll No.: 12022002029121

UEM, Kolkata

Section: C, Class Roll No.: 43

Dept. of Computer Science and Engineering (I.O.T),



UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA
University Area, Plot No. III – B/5, New Town, Action Area – III, Kolkata – 001

Computer Sales Management System

Sales

Inventory

Reports

Contact

Sales

Customer Name:

Product:

Laptop

Quantity:

Add Sale

Date	Customer Name	Product	Quantity
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Inventory

Reports

Contact

Software Requirements Specification (SRS)

Computer Sales Management System

1. Introduction : The Computer Sales Management System (CSMS) is a software solution designed to streamline the sales process of computers and related accessories for a computer retail store.

1.1 Purpose : The purpose of this document is to provide a comprehensive overview of the requirements for the Computer Sales Management System.

1.2 Scope : The CSMS will primarily focus on managing the sales process within the computer retail store. The system will be accessible to authorized users within the store premises.

1.3 Definitions, Acronyms, and Abbreviations :

- CSMS: Computer Sales Management System
- GUI: Graphical User Interface
- API: Application Programming Interface
- DBMS: Database Management System

2. Overall Description :-

2.1 Product Perspective : The CSMS will be a standalone software application integrated with a backend database to store information related to products, customers, and sales transactions.

2.2 Product Features :

- **Inventory Management:** Ability to add, update, and delete products in the inventory. Track product quantities, categories, and prices.
- **Customer Management:** Maintain customer records including contact information, purchase history, and preferences.
- **Sales Management:** Process sales transactions, generate invoices, and update inventory levels accordingly.
- **Integration with Hardware:** Interface with barcode scanners, receipt printers, and cash registers for seamless operations.

2.3 User Classes and Characteristics :

- **Admin:** Responsible for system setup, user management, and overall administration.
- **Sales Staff:** Process sales transactions, manage inventory, and interact with customers.
- **Manager:** Monitor sales performance, generate reports, and make strategic decisions.

2.4 Operating Environment :

The CSMS will be developed as a desktop application compatible with Windows, macOS, and Linux operating systems.

2.5 Design and Implementation Constraints : The system must be developed using a technology stack that supports cross-platform compatibility. Data security measures must be implemented to protect sensitive customer information and transaction data.

3. System Features

3.1 Inventory Management :

- Add, update, and delete products
- Track product categories, quantities, and prices
- Receive alerts for low stock levels
- Barcode scanning support for product identification

3.2 Customer Management :

- Add, update, and delete customer records
- Maintain customer contact information and purchase history
- Capture customer preferences and feedback

3.3 Sales Management :

- Process sales transactions
- Generate invoices and receipts
- Calculate taxes and discounts
- Update inventory levels upon sales completion

3.4 User Authentication and Authorization :

- Secure login with username and password
- Restrict access to sensitive functionalities based on user roles

4. External Interface Requirements :

4.1 User Interfaces : The CSMS will feature a user-friendly graphical interface with intuitive navigation and workflow.

4.2 Hardware Interfaces :

- Barcode Scanner: USB interface for product identification
- Receipt Printer: USB or network interface for invoice printing
- Cash Register: Integration with cash register systems for payment processing

4.3 Software Interfaces :

- Database Management System (DBMS): Interaction with backend database for data storage and retrieval
- Operating System APIs: Utilization of operating system APIs for hardware interaction and file management

5. Non-Functional Requirements :

5.1 **Performance** : The CSMS should be responsive and able to handle concurrent user transactions efficiently. Response times for critical operations should be minimal, even under peak load conditions.

5.2 **Reliability** : The system should be robust and reliable, with minimal downtime and data integrity issues. Regular backups and failover mechanisms should be in place to prevent data loss.

5.3 **Security**: Data security measures should be implemented to protect sensitive information such as customer data and transaction records. Encryption protocols should be used for data transmission over networks.

5.4 **Usability** : The CSMS should be intuitive and easy to use, with clear navigation and user-friendly interfaces. Training and documentation should be provided to support users in effectively utilizing the system.

5.5 **Scalability** : The system should be scalable to accommodate future growth in terms of data volume and user load. It should be capable of supporting additional stores or locations as the business expands.

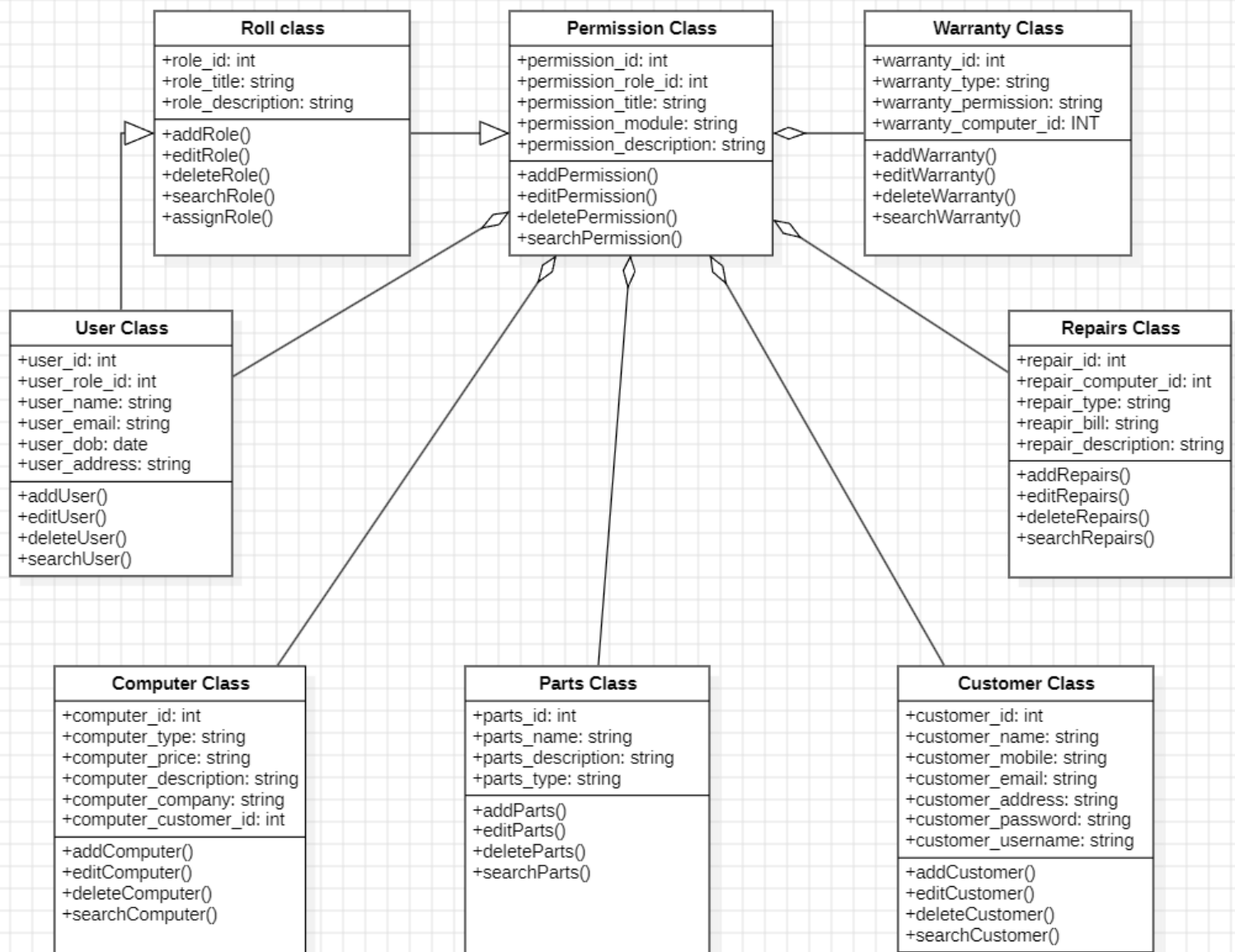
6. Other Requirements :

6.1 **Documentation** :Comprehensive documentation including user manuals, system architecture diagrams, and technical specifications should be provided to support system implementation, maintenance, and training.

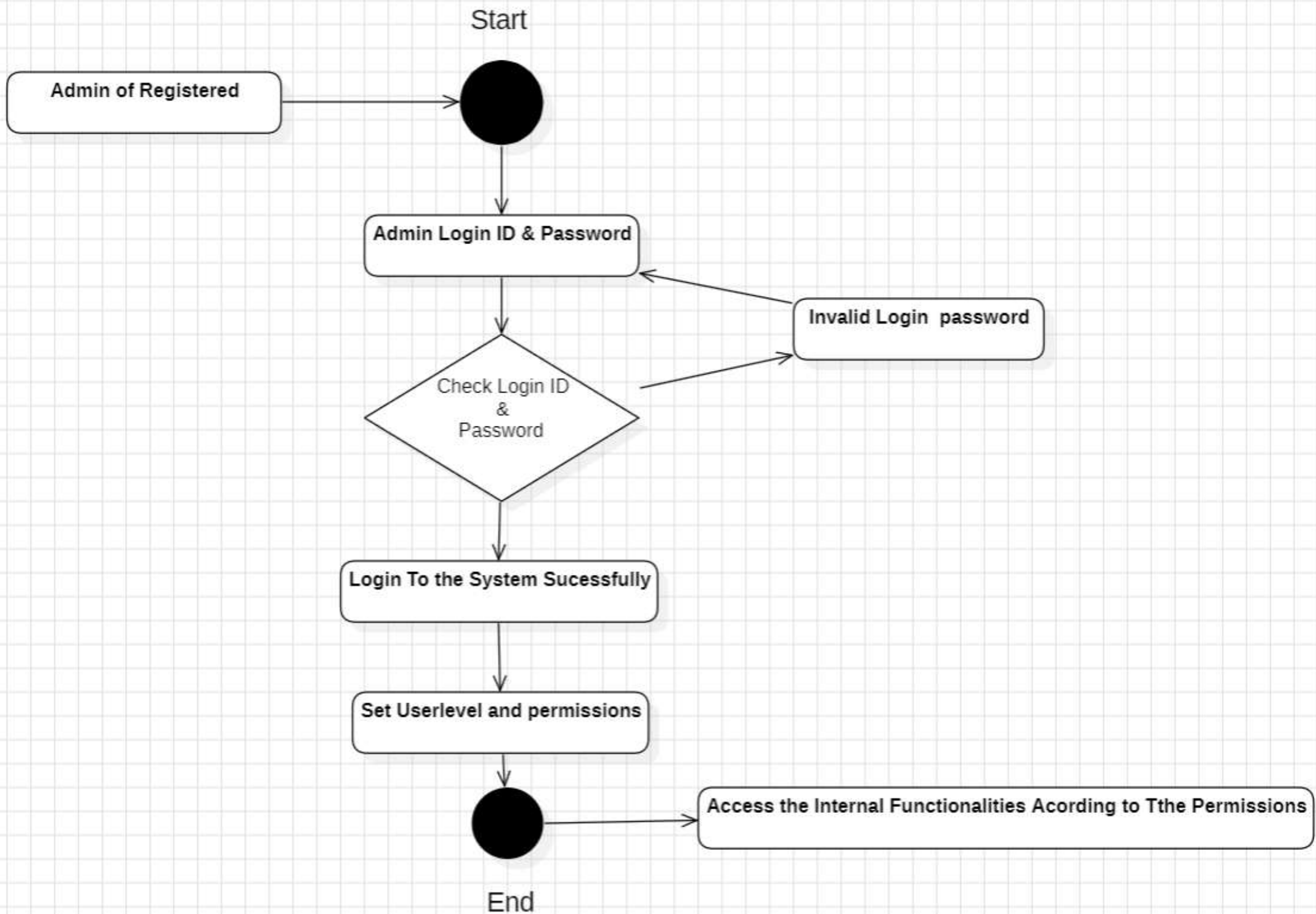
6.2 Training :

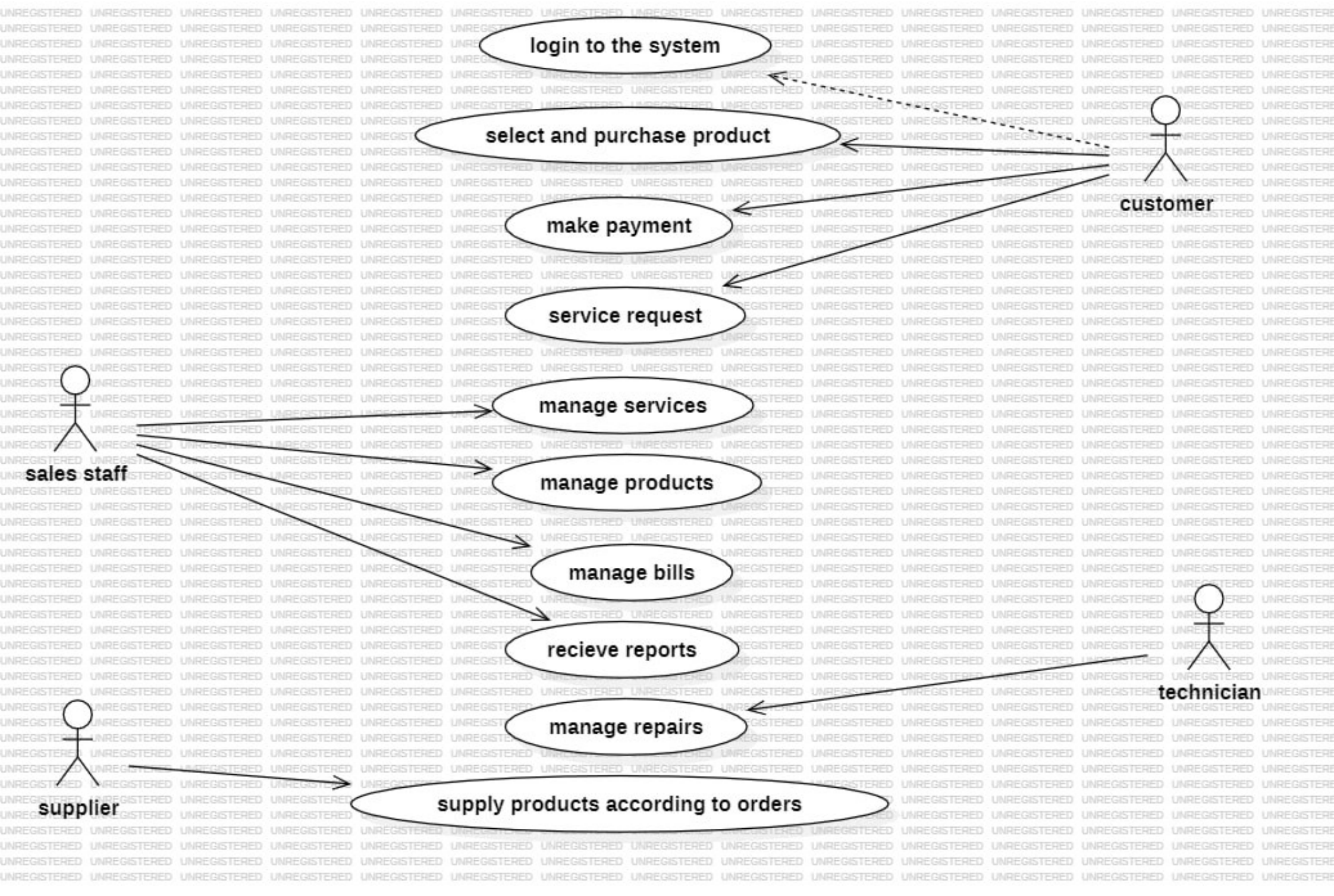
Training sessions should be conducted for users to familiarize them with the functionalities and workflows of the CSMS. Training materials and resources should be made available for ongoing learning and support.

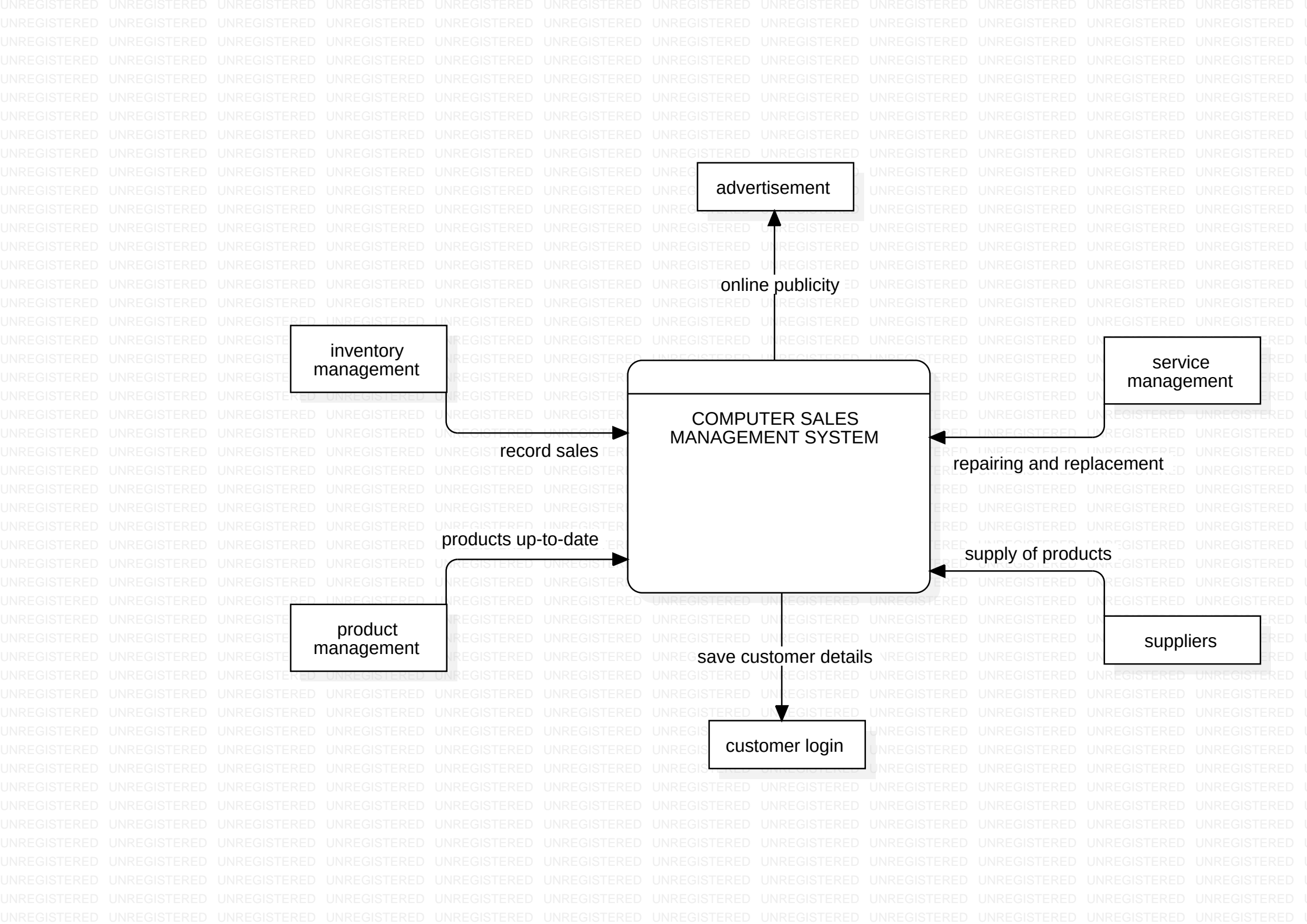
6.3 **Maintenance and Support** : Regular maintenance activities such as software updates, bug fixes, and database optimizations should be performed to ensure the smooth operation of the CSMS. Technical support should be available to address user queries and issues promptly.

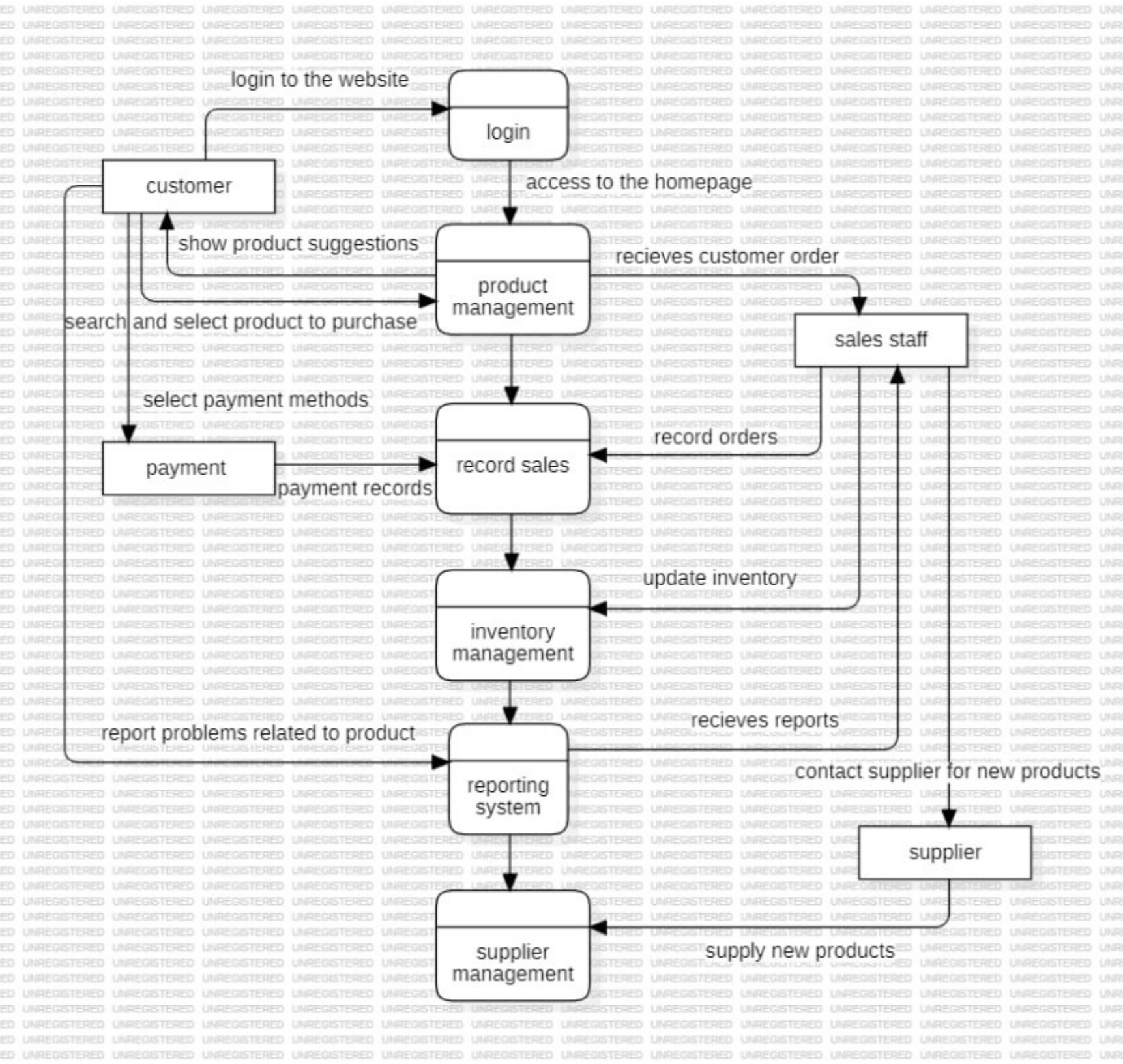


Class Diagram of Computer Sales Management System

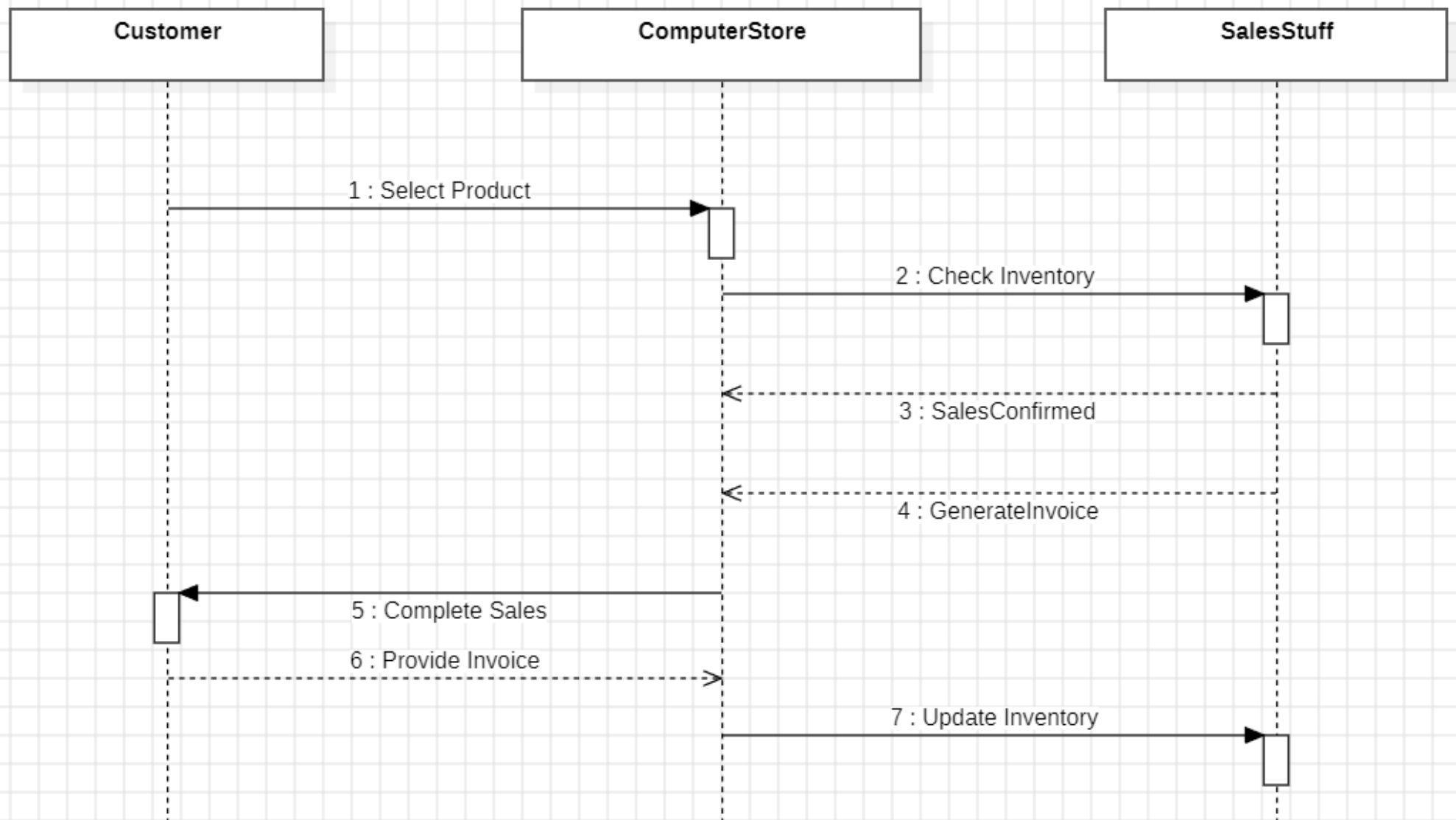








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Sequence Diagram of Computer Sales Management System