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# **Software Requirements Specification**

**For**

**ONLINE KIDSWEAR SHOPPING SYSTEM**

**Version 1.0 approved**

**Prepared by : Nimrah Altaf Adam and**

**Fariya Khan**

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**Instructor : Dr. Shenila Zardari**

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## **Roles:**

### **Fariya Khan (SE-066)**

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- ☐ FUNCTIONAL REQUIREMENTS
- ☐ CONTEXT MODEL DIAGRAM
- ☐ USER INTERFACE
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### **Nimrah Altaf Adam (SE-077)**

- ☐ GENERAL DESCRIPTION
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# 1. Introduction

## 1.1 Document Purpose

This Online kidswear shopping system (OKSS) for kids clothes web application is meant to supply complete resolutions for vendors also as customers through one get method victimization the web. It'll permit vendors to rearrange online outlets, clients to flick through the search and get them online while not having a physical visit to the shop.. The administration unit can modify a supervisor/administrator to simply accept and refuse requests for brand new outlets and maintain many lists of shop categories

This system requirement document is supposed to demarcate the features of OKSS so as to aid as a guide to the developers on one hand and on the other hand a software system validation document for the potential shopper.

## 1.2 Scope

- Easy searching mechanisms for quick access to particular kids products and accessories.
- Browsing the e-store to see the items in different categories of products like garments and accessories.
- Quick and urgent delivery facility available for those indeed .
- This system permits the customers to take care and maintain their cart for either adding the product of their choice or remove and checkout finally with the entire shopping carts.
- 24/7 availability
- Secure access of confidential data of customer details.
- Shop employees are responsible for internal affairs like processing orders, getting customer's delivery-time feedback, assuring home delivery, answering client's queries online and updating order's status .
- Feedback mechanism, so that customers can give feedback for the product they purchased.

## 1.3 Definitions Abbreviations, and Acronyms

### 1.3.1 Audience Definitions

The intended readers of this document are the developers of the site, testers, website owners, managers and coordinators.

### 1.3.2 Acronyms and Abbreviations

**OKSS** : Online Kidswear shopping System

**GUI** : Graphical User Interface

**SRS** : Software Requirement Specification

**HTTP** : Hypertext Transfer Protocol

**HTTPS** : Secure Hypertext Transfer Protocol

**PHP** : Hypertext Preprocessor

**Ajax** : Asynchronous JavaScript And XML

**Stockholder** : the person who invest in the product

## 1.4 References

- IEEE 830-1998 standard for writing SRS documents.
- <http://srs-onlineshopping.blogspot.com/>
- [https://dipeshagrawal.files.wordpress.com/2018/07/docuri-com\\_online-project.pdf](https://dipeshagrawal.files.wordpress.com/2018/07/docuri-com_online-project.pdf)
- <https://t4tutorials.com/online-garment-shop-management-system-project-srs-download/>

## 1.5 Document convention

This document follows the IEEE 830-1998 standard format. It is written in Times New roman, font size 12. The main headings are bolded in font size 20 while subheadings are in font size 14 and 12 bolded. Document text is single spaced and alignment is justified.

## 1.6 Overview

- This system benefits the users to buy products through e-shop without going to the shop.
- This proposed system can be used by any users and it does not require any educational level, technical expertise or experience in the domain of computer science but it will be more efficient if the user has the good knowledge of how things work in the field of computer science.
- This system works on an internet server so it can be easily operated by any user for buying purposes .
- Parents with young kids are always in hussle and have no time to roam around markets carrying babies so this e-shopping will surely help them to buy products that are urgently needed.

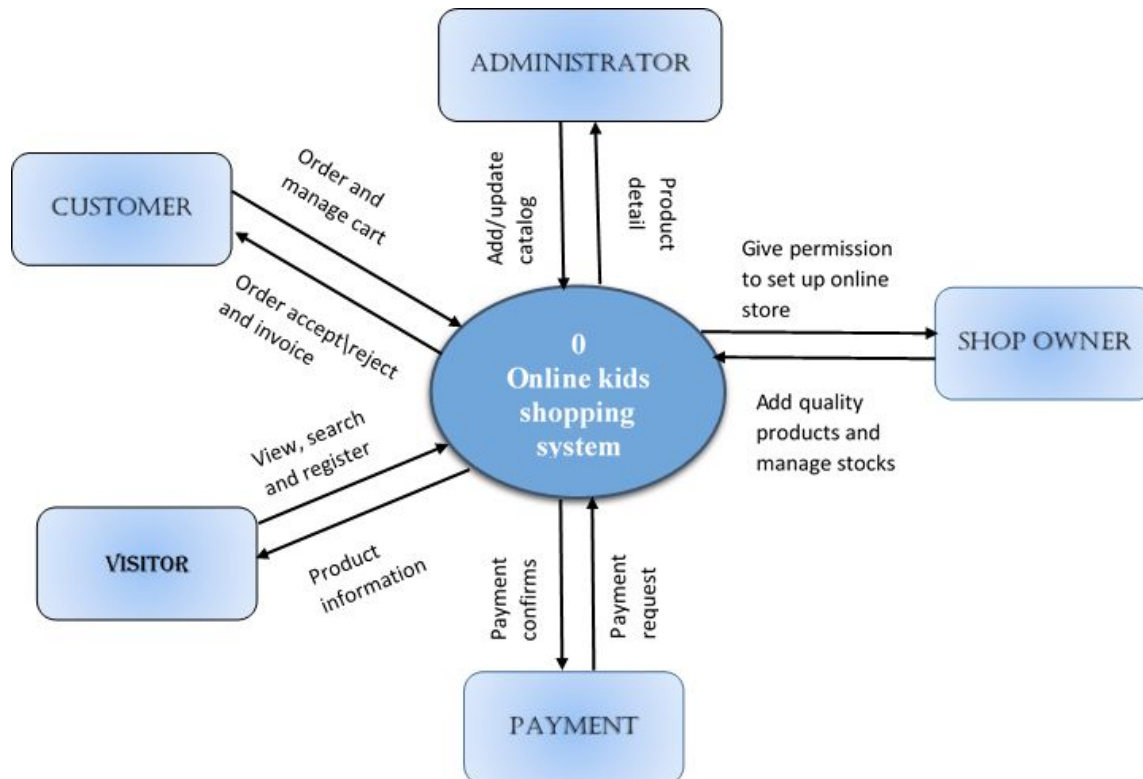
## 2. General Description

The Software provides retailers with the opportunity to start their own clothing line and sell their products online. Customers from all around the world can access their page and view their products. However before launching their venture they need to get approval from the system administrator who manages these online shopping outlets. Once they have received approval this system will help the vendors grow their business gradually as it will enable their customers to buy the products without physically visiting the shop. In this Business Internet plays a major role because it is the only available source for the merchandise to market and sell their products online.

### 2.1 Product Perspective

The system's main target are the customers who do not wish to visit the shop physically or simply do not have time for going out, especially mothers, senior citizens and all kinds of customers. The system will then facilitate such customers to browse and purchase clothes for their kids online without the hassle of visiting the brands outlets physically. The software should be user friendly and reliable.

#### System context diagram



## 2.2 Product Functions

- **User: Administrator**

**Functions:**

- The main user of the system is the administrator who controls and monitors all the activities that take place within the system. The administrator's work is to either approve or reject the vendor's request who wishes to start an online business. The software notifies the administrator whenever someone sends a request. In addition the administrator also maintains the list of products in stock.

- **User: Shop Owner**

**Functions:**

- The application allows any retailer to submit a request for starting an online clothing line. The administrator will go through the proposal and if the administrator approves it, the requester receives a notification of approval and is then given the title of an online shop owner.
- The shop owner's job is to not only set up their venture but also maintain it's products and other related services. The owner can also go through the reports which show records of all the orders made online and the sales made. If the shop owner decides to close the store he can easily remove it from the website at any time he wants.

- **User: Customer/Guests**

**Functions:**

- A customer basically checks out all the products available on the page. if they like any product they can add it to their own personal virtual shopping cart and they can always view what they have added to their cart so far and remove any product if they decide not to buy it. Once the customer has selected all the items they want to buy, the system prompts them to login. The customer then adds their personal details like phone number, shipping address etc. in order to proceed with the order. the application facilitates the customers to change their personal details at any time they want. The software also allows the customer to view their previous orders and cancel any order that has not been shipped yet.

- **User: Employees**

**Functions:**

- If at any time a warehousing needs arises then a purchase manager is responsible for monitoring purchases made under the purchase department.
- Sales managers who are under the Sales department, overlook the sales made and related services, the most important activity.

- The Accounts department is under the supervision of an Accounts manager, who takes care of the accounting activities of the business.

### **2.3 User characteristics**

It is very important for the users to be familiar with terminologies like Shopping cart, login, register, check out, transaction methods like online billing etc. They should also have access to the internet.

### **2.4 General Constraints**

- One of the major constraints is to check the authenticity of a customer who intends to purchase products. Therefore the security might be at a risk at all times.
- The developed system should be executable on any platforms like Unix, Linux, Mac, Windows etc. it should also include a web browser that supports web development languages like PHP, JavaScript and AJAX.
- An internet with a strong connection is a must in order to process and make the orders.
- The system will be limited to the use of HTTP/HTTPS.

### **2.5 Assumptions and Dependencies:**

- It is mandatory for all the customers to have a computer or any other electronic device with access to the internet in order to browse and view the website. The software is dependent upon its hardware and the third party operating system for its web page to function properly without any errors.
- The information related to the products, customer and online transactions is provided manually.
- Not only the administrator for the system is created beforehand but the roles and activities are also predefined.



## 3. Specific Requirements

### 3.1 Functional requirements

#### 3.1.1 Administrator

- **Database Management :** Keep track of the record of customers and manage databases of customers and employees details.
- **Contact and Permission :** Contacting vendors and Giving permission to those vendors who wanted to sell their product at our website after quality check of the product.
- **View all details:** can view the employees and customer details, also control the whole site.
- **Advertising :** make advertisements of the site at different pages.

#### 3.1.2 Customers

- **Login:** Customers must have a valid login id to enter into the site.
- **Registration:** New users can sign up by creating a new ID.
- **Cart management :** Users can view and edit their product details, personal and payment details and also about details of services provided.
- **Payment :** Payment can be done using valid credit cards and also cash on delivery is available.
- **Logout:** Registered customers must log out of the site after product shopping.
- **Feedback service:** Give feedback to customer service provided about the product and delivery time and service.

#### 3.1.3 Visitors

- **Site Visit:** Users can visit the site only without any registration.
- **Register :** They can register themselves also.

#### 3.1.4 Shop Owner

- **Permission from Administrator:** Vendors should take permission from the Administrator for their product to sell under the site. Administrators can take a look at the product's quality in line with its market value to allow the seller for selling purposes.
- **Consulting with the Administrator:** owners can contact the Administrator concerning product's quality and commercials.

### 3.1.5 Sales Manager

- **View customer details:** Manage and View the personal details and other payment details of the customer.
- **Managing Sales to Customers:** Incharge for properly allotting the selected product according to the customer's choice and sending product to the customer.
- **Manage Product Stocks:** Manage the product stock and Keep track of each product item's stocks for vending purposes and responsible for informing the administration when any product goes out of stock or becomes demanding.

### 3.1.6 Accounts Manager

- **Regulating Payments:** Keep track of all the payment by the customers and update the payment details.
- **Consulting with the Banks:** Contacting the banks for the confirmation of the account number provided by the customer while purchasing and making the transaction for product and manage account details.
- **Consulting with the Administrator :** Consult with the Administrator about the payment method and details of customers so that he manages and the dates of the database.

### 3.1.7 Customer Care

- **Feedback from the Customers:** Responsible for getting queries, complaints, and responses from the customers.
- **Provide solutions to Customers:** Provide possible solutions to the customers on their queries and questions.

### 3.1.8 Report Generation

- After all transactions the system can create the transferrable document file i.e. pdf and then send one copy to the customer's Email-address and the other for the system database to compute the scheduled monthly transaction .

## **3.2 Nonfunctional Requirement**

### **3.2.1 Software System Attributes**

#### **3.2.1.1 Security**

- For the protection of the confidential user data the system makes use of SSL(secured socket layer) in all the transactions made online.
- If the customers are inactive on the website for a long period of time then the system must log out automatically.
- The system should remove all the cookies from the customer's computer that have customer personal detail like user password etc.
- Only the authenticated administrators shall be responsible and allowed access to the system's back-end servers.
- Confidential information like billing details must be encrypted before being sent over unreliable or publicly accessed connections like the internet.

#### **3.2.1.2 Reliability**

The system facilitates the storage of all databases used on a large number of computers and automated switchover. Databases are maintained and updated regularly as the system relies mainly on the backup of these databases since the data is continuously changing with every transaction made. The reliability of the overall system is dependent upon the reliability of the subsystems involved. Therefore the performance of the whole system is dependent upon the functionality of all subsystems and the main operating system.

#### **3.2.1.3 Availability**

The user shall be able to access the website 24 X 7 and access should only be limited when the server goes down for maintenance. The system shall have a backup page for situations like hardware failure or loss of data in the databases. In cases like these the backup page should be activated in place of the original page. Also in such situations it is the administrator's job to retrieve the backups of the database and keep them safe. Once the data has been secured the server shall be restarted.

#### **3.2.1.4 Maintainability**

- The system databases are maintained by using a commercial database while the application domain controls and monitors the web site.
- The system is set to restart in case of system and hardware failure.
- The system design is divided into many parts so that when the time comes to perform system maintenance, it can be done efficiently.

### **3.2.1.5 Portability**

All the systems using any web browser should be able to access all the features of the system. As the system is based on HTML and scripting languages, it should be completely portable for the end users. The system should be able to run smoothly on any electronic devices like smart phone, PC, laptop etc. with any OS Installed in them.

### **3.2.2 Performance Requirements**

- The system shall manage a large number of users and big orders without any error.
- The request made to view information about a product should not take more than 5 seconds to display the requested page.

### **3.2.2 Safety Requirements**

- The databases used in the system must be protected and secured.
- End users should not have any access to alter data present on the web page except at the time of placing orders where they need to fill in their order details.

### **3.2.3 Error handling**

- The system should be able to handle all kinds of errors to prevent the system from crashing and the data from being corrupted.

## **3.4 Interface Requirement**

### **3.4.1 User interface**

The user interface for the system has to be simple, clear and most important user friendly. It has to be easily understood and accessible. The color scheme should be appropriate and there should be no contrast issues and free from any viruses.

- **Login:**
  - This interface consists of two necessary fields first “User Name” and other “Password”. There is also a “Forgot Password” option in case a user forgets the password. If the password entered is correct the Main User Interface is open or else an error message occurs.
  - Then there is an option for “New User’s Registration” which will forward to the “Registration” page.

- **Registration Interface**

- The user enters his personal details like Name, User Name, Password, Date Of Birth, Address or location and those info which is required.
- Users get a warning message if any mistakes on data format occur .
- When the "save" button is pressed, the server checks whether the username or email is previously taken or not and then informs the user.
- In case of everything filled properly, new users will be created and saved.

- **Personal Data Editing**

- Users can change the personal information later if they want to modify it, simply going to the profile and edit the details on top right of the main page

- **Search**

- Customers can easily search for the specific type of clothes he or she is looking for their kids by simply entering in the “search bar” at the top of the page.
- They can also filter the product by specifying category, color, size, material, or even sort the product by price in ascending and descending order or by popularity.

- **Add as favorites**

- The user can choose his/her preferred product as a list for upcoming reference.

- **Cart**

- This option is for customers to store the items they wanted to buy. They can add or remove items and then proceed to check out. Once the user agrees to purchase the items in the cart, he is directed to the payment page for payment purposes.

### 3.4.2 Communication interface

The two parties i.e. user and system server should be connected by LAN or WAN or we can say by using browser and internet for the communication purpose. Once the user logs in, they can easily buy clothes.



### 3.4.3 Software Interface

The system needs multiple databases to store information related to the sales of the products and customer transaction details whenever an order is placed. A domain name service is also required for creating a name of the virtual shop. Scripting languages like PHP, VBScript are a prerequisite to provide an interface for the software. The Client's server will need a web browser to interact with the system.

Some of the requirements needed to provide a software interface are mentioned below:

1. Apache should be used as the Web server software.
2. For databases MY SQL is the application recommended
3. It is better to use Operating systems like Linux and Windows which are quite compatible with most systems.
4. Development toolkits like JAVA, Ajax should be used.

### 3.4.4 Hardware Interface

All the hardware devices like the Modem, WAN – LAN, Ethernet Cross-Cable must have a connection to the internet as the system relies largely on the internet for its functionality. The hardware interfaces for both parties involved are mentioned below:

#### I. Server side hardware

- A. The system should be connected to all the hardware interfaces that are required by the software.
- B. It is very important to have a communication hardware for serving the client requests.

#### II. Client side hardware

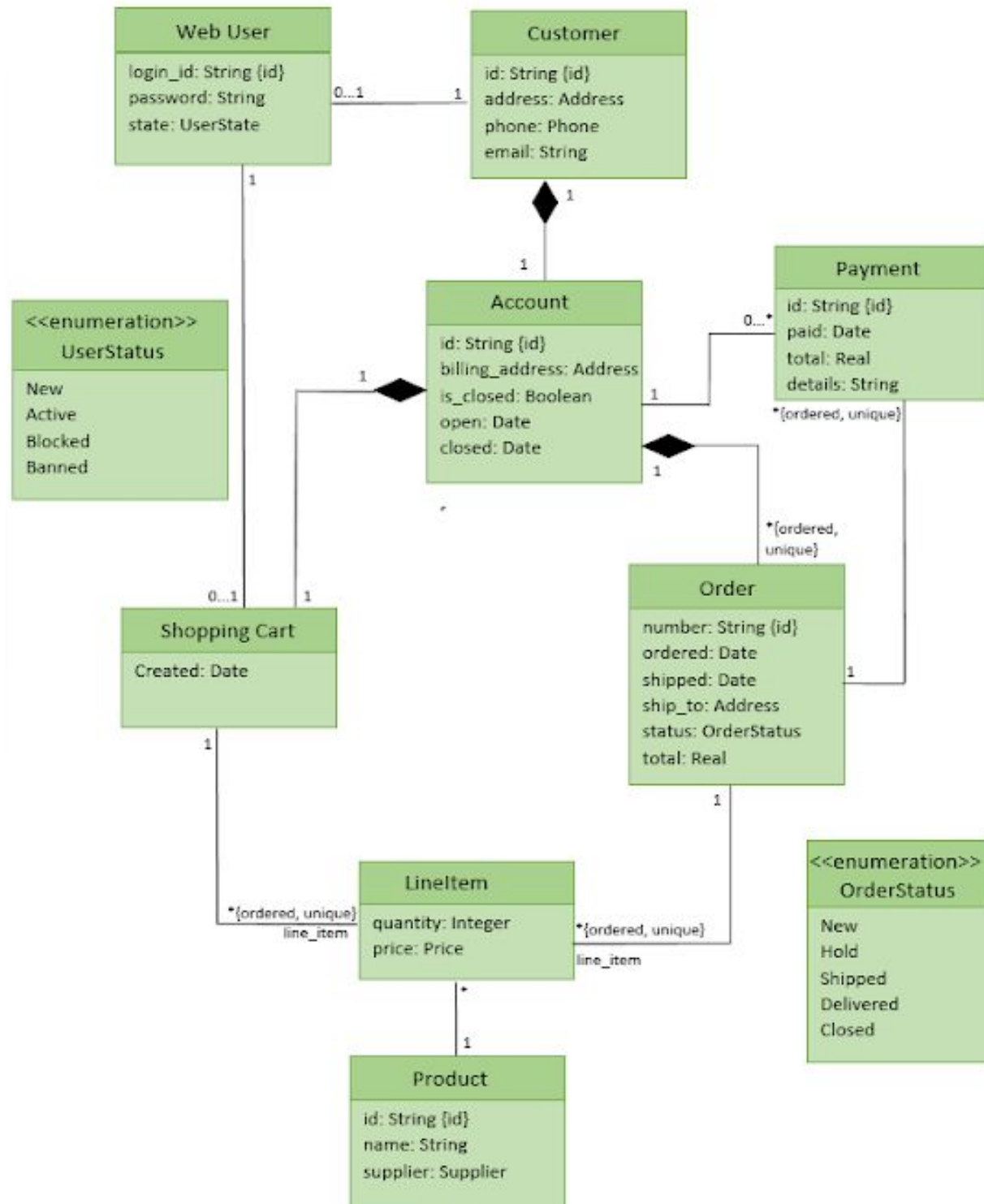
- A. The system should be designed in a manner that it can communicate and interact with client's hardware.
- B. On this side a communication hardware is also needed to provide an interface with the server.

However the hardware specifications required for inter connecting over the internet are the same for both parties. The specifications include:

- **Processor:** Servers on both sides must use a Dual Core or higher quality processor.
- **RAM:** A 2 GB ram is one of the basic requirements.
- **Hard Disk:** 320 GB or higher GB hard disk should be installed in servers of both parties.
- **NIC:** A network interface controller must be present on both sides.

# CLASS DIAGRAM

## Online Kidswear Shopping System



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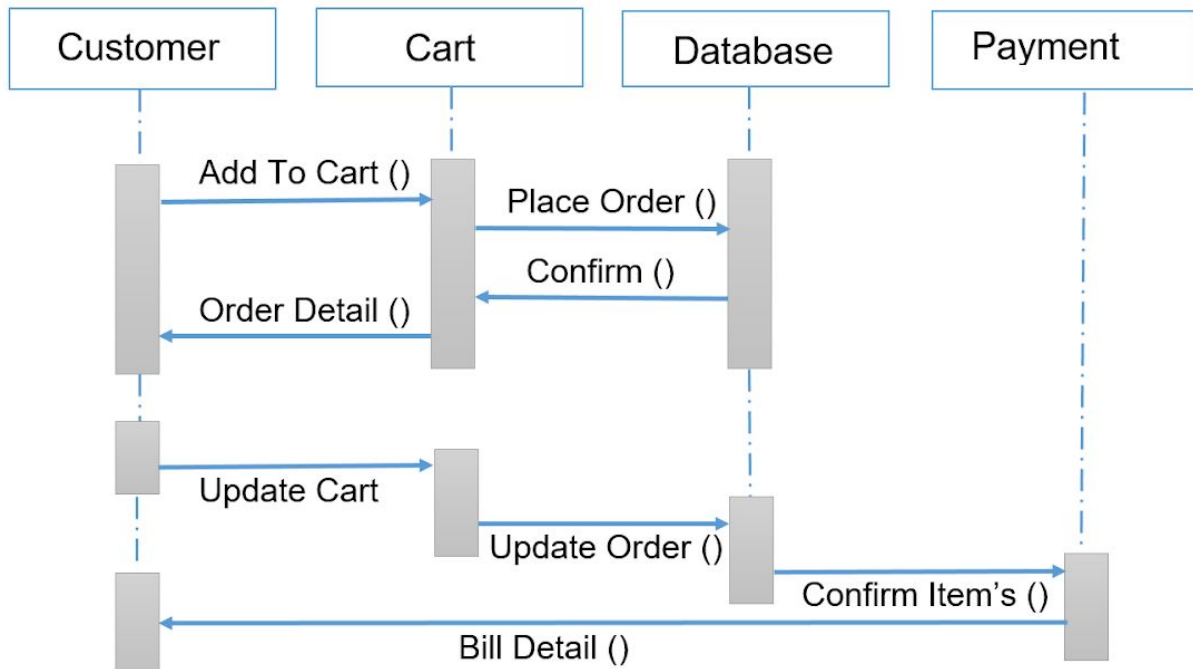
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## 5. Appendix: Sequence Diagrams

### Customer Cart



### Login

