



Dhirubhai Ambani  
Institute of Information and Communication Technology



# Amazon.com Software Requirements Specifications

2 May 2023

---

Aditya Kumar

2022 12046

M.Sc. Information Technology (2022-24) | DA-IICT Gandhinagar

# Software Requirements Specifications

## Introduction

Amazon.com is a technology giant and the largest online retailer in the world, measured by revenue and market capitalization. With retail websites operating across various continents, such as the Americas, Europe, Asia, and Australia, Amazon.com is committed to simplifying its online shopping system to provide an excellent user experience for all its customers.

This document outlines the Software Requirement Specifications (SRS) for the online shopping system. The SRS will guide the development of the online shopping system, ensuring that it meets the desired functionality, security, and performance requirements.

By simplifying its online shopping system, Amazon.com aims to provide customers with an easy and seamless online shopping experience. This will help to maintain its position as the world's largest online retailer, providing customers across the globe with an efficient and user-friendly platform to purchase their favorite products.

## Purpose

The Software Requirement Specification (SRS) aims to create a well-defined and documented model of the requirements for the online shopping system. Its primary objective is to provide top-level use cases for web customers who make online purchases. This document will outline the functionality requirements for the online shopping system. By providing a clear and detailed description of the system's requirements, the SRS will guide the development team in building a user-friendly and efficient online shopping platform that meets the needs of Amazon.com's customers. The SRS will also help ensure that the final product meets the business objectives and requirements of the project stakeholders, including Amazon.com and its customers.

Amazon.com's E-commerce website implements the following Use Cases:

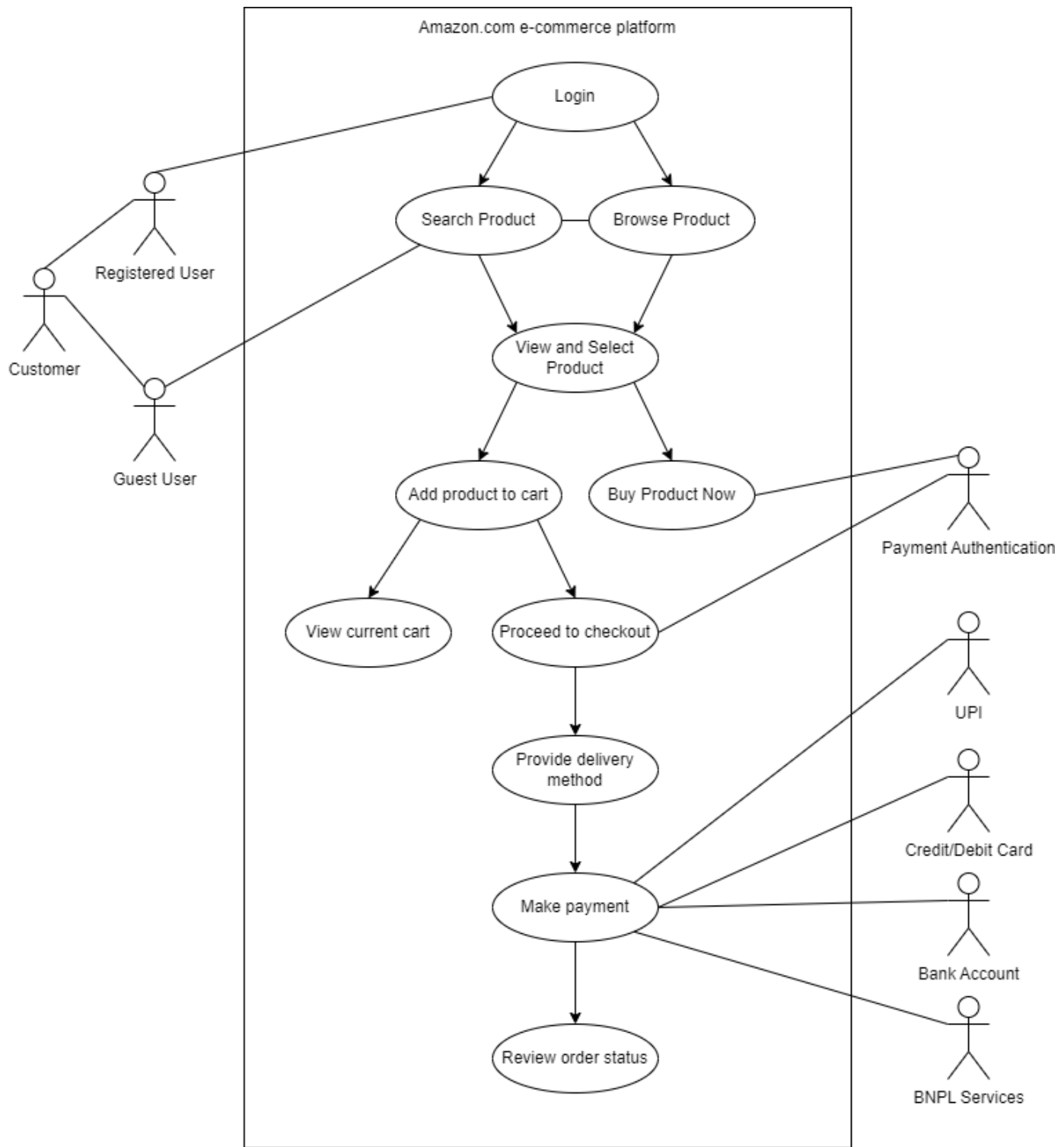
1. Login screen
2. Search available products
3. Browse products
4. View and select products
5. Buy product now
6. Add product to cart
7. View current cart
8. Proceed to checkout
9. Provide delivery method

10. Make payment through different modes

11. Review order status

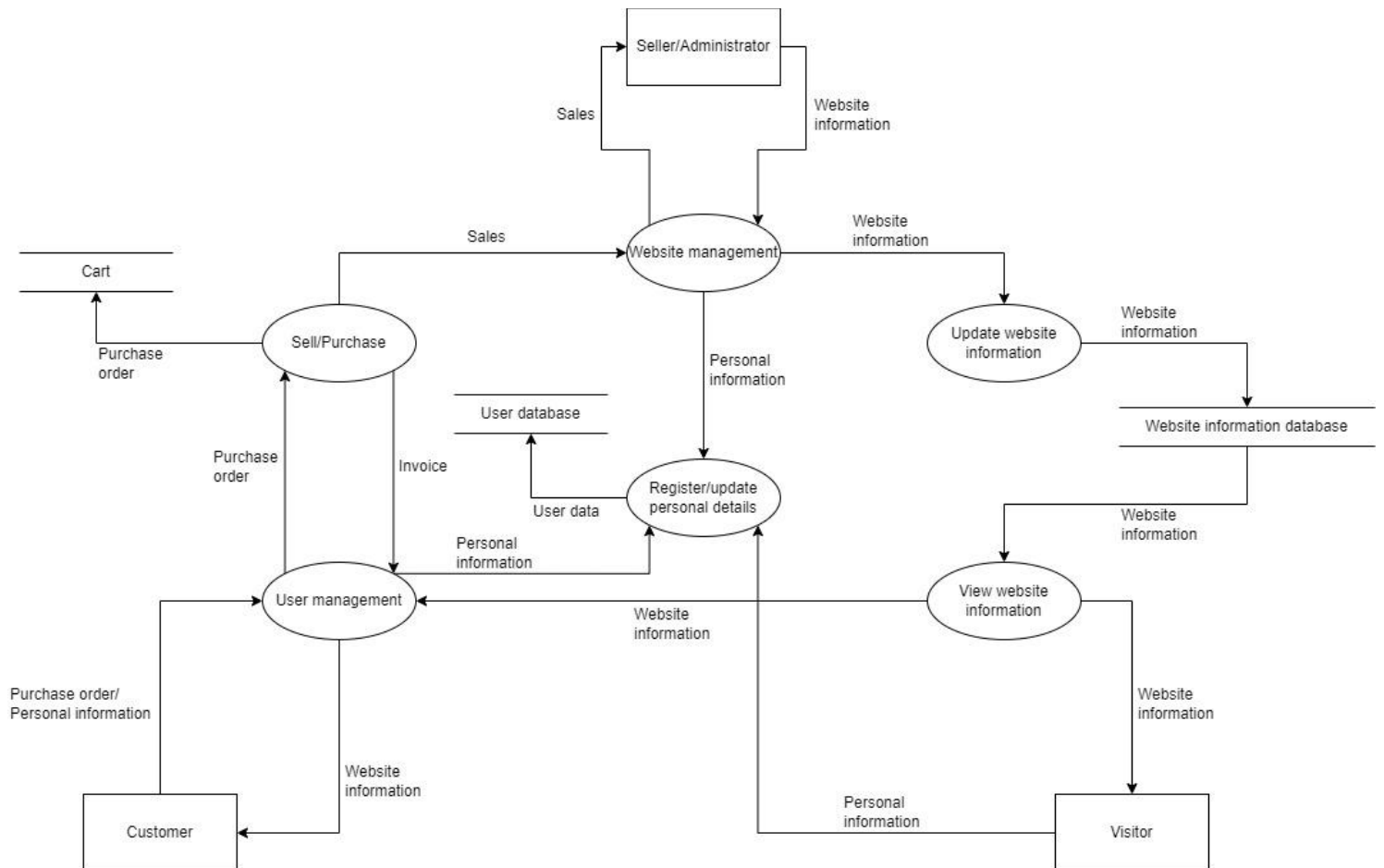
Use Case	Description
Login screen	Allow the user to log in or register on the platform
Search available products	It can be used when the user wants to find the items
Browse products	It can be used for browsing the available items
View and select products	It is used for finding the products and viewing the PDP page
Buy products now	It is a quick way for customers to buy the products
Add product to cart	The selected products can be added to the shopping cart
View current cart	View the current shopping cart
Proceed to checkout	The user can proceed to the checkout page to buy the product
Provide delivery method	The user can provide the delivery address
Make payments through different modes	The user can make the payments through their preferred method
Review order status	The order status is displayed to the user

## Amazon.com UML Diagram



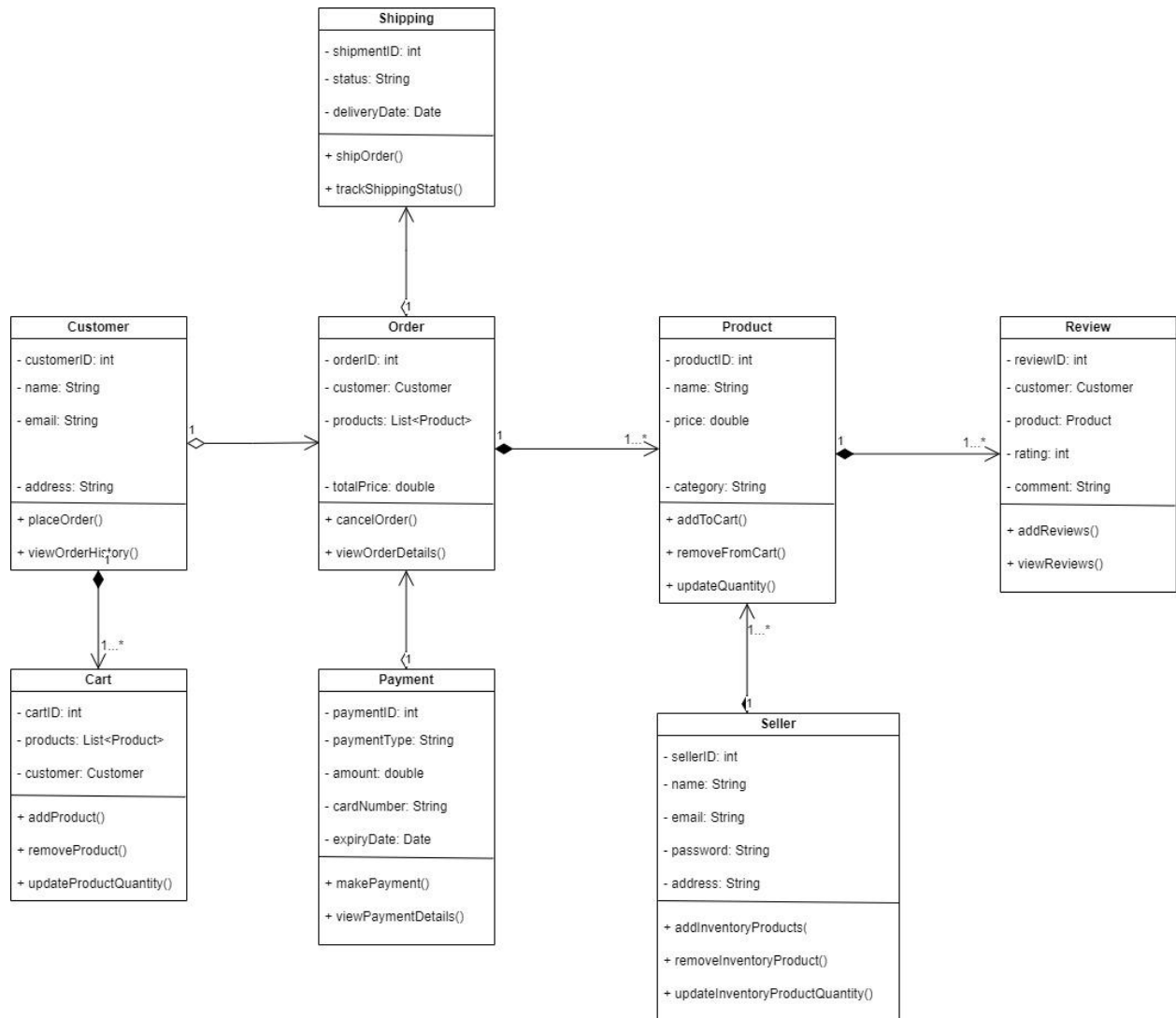
Amazon.com online shopping platform UML diagram

## Amazon.com Data Flow Diagram



Amazon.com online shopping platform Data Flow diagram

## Amazon.com Class Diagram



Amazon.com online shopping platform Class diagram

## Functional requirements

### User Account Management

1. Allow users to register for an account
2. Allow users to log in and log out
3. Allow users to view and edit their account information
4. Allow users to track their orders
5. Allow users to view their purchase history
6. Allow users to write reviews for products

### Product Catalog

1. Users can search for products by name, category, brand, and price range.
2. Users can filter products by various attributes, such as size, color, and material.
3. Allow users to view product details, including descriptions, images, customer reviews, and related products.
4. Allow users to add products to their cart and proceed to checkout.
5. Allow users to view recommended products based on their browsing and purchasing history.

### Checkout and Payment

1. Allow users to provide delivery information, such as address and preferred delivery time.
2. Allow users to select a delivery method, such as standard or expedited shipping.
3. Users can enter payment information like credit card details or gift card codes.
4. Allow users to apply discounts and promotions to their orders.
5. Provide a secure checkout process to protect user information.

### Order Management

1. Allow users to view the status of their orders, including estimated delivery dates and tracking information.
2. Allow users to cancel or modify their orders before shipment.
3. Allow users to initiate returns and refunds for products that are eligible.
4. Allow users to view and manage their digital content, such as e-books and music downloads.

## Non-functional requirements

1. Performance: The website must handle a high volume of users and transactions without significant delays or crashes. It should load quickly and provide a seamless experience for the user.
2. Reliability: The website must always be highly reliable and available to users. Any downtime or system failure can result in significant revenue and customer trust losses.
3. Security: The website must protect customer data, payment information, and intellectual property. It should comply with industry-standard security protocols and provide features like two-factor authentication and secure payment gateways.
4. Scalability: The website must be scalable to increase users and transactions over time. It should handle sudden spikes in traffic without affecting performance or reliability.
5. Usability: The website must be user-friendly and intuitive, with easy navigation and clear labeling. It should provide a consistent user experience across different devices and platforms.
6. Accessibility: The website must be accessible to users with disabilities, with features like screen readers, text-to-speech, and keyboard navigation.
7. Compatibility: The website must be compatible with different browsers, operating systems, and devices to ensure a broad reach and maximum usability.
8. Maintainability: The website must be easy to maintain and update, with clear documentation and support resources for developers and administrators.
9. Legal and regulatory compliance: The website must comply with all relevant legal and regulatory requirements, including data privacy laws, consumer protection laws, and industry standards.