Product Dissection For Digital Shopping via Amazon

Company Overview:

Amazon was founded on July 5, 1994 by Jeff Bezos. It's headquarter is located in Seattle, Washington, USA. It is a technology and e-commerce company and it is one of the largest online retailers in the world.
The Amazon shopping app is a mobile application that allows users to shop for a wide range of products of all categories like electronics,books,clothings,home appliances and many more. Users can browse,search and make purchases using the application.
Now, Amazon also expanding its businesses to providing payment gateway and other cloud services.

Product Dissection and Real World Problems Solved by Amazon:

Amazon, a global e-commerce platform, has adeptly navigated real - world challenges through its innovative services and products offerings. With a strong focus on simplifying the online shopping experience. Amazon empowers users to access a vast selection of products and services, bringing the gap between traditional retail and the convenience of e-commerce. By providing a user friendly platform for customers to search , purchase and track orders. Amazon offers a solution to the challenge of modern shopping demands, enabling people to find what they need with ease and speed.

Amazon's innovative features, such as one-click ordering, personalized product recommendations, and the utilization of customers reviews have transformed how users engage with online shopping. By addressing the challenge of decision making in the digital marketplace. Amazon streamlines the purchasing process, helping customers make informed choices. Furthermore, Amazon's introduction of Prime membership has redefined the concept of convenience by offering fast and reliable shipping, access to a wide array of digital content and exclusive deals. This innovative approach efficiently tackle the challenges the time saving and value added benefits making it more convenient for users to fulfill their shopping needs with confidence.

In conclusion, Amazon's product design has successfully tackled real-world problems by creating a platform that simplifies online shopping and meet the evolving demands of consumers.

Case Study: Real - World Problems and Amazon's Innovative Solutions

A leading social media platform Instagram, has not only revolutionized the way we share and consume content but has also addressed significant real - world challenges through its innovative features. By identifying user needs and leveraging technology. Instagram has positioned itself as a solution - driven platform that fosters connection, encourages self - expression and enhances digital interaction.

Problem 1: Convenience and Accessibility:

Real-World Challenge: Traditional shopping often requires physical presence, which can be time - consuming and less convenient.

Amazon's Solution: Amazon shopping allows users to shop for a wide range of products from the comfort of their homes or anywhere they have internet access. This convenience is especially valuable for people with busy schedules, mobility challenges or those living in remote areas.

Problem 2: Wide Product Selection:

Real-World Challenge: Local stores may have limited product collection, making it challenging to find specific items.

Amazon's Solution: The Amazon provides access to an extensive catalog of products, ranging from everyday essentials to niche items. Thus breadth of selection enables one to find and purchase a wide variety of products easily.

Problem 3: Secure Transaction:

Real-World Challenge: Concern about the security of online transactions can deter some consumers from shopping online.

Amazon's Solution: Amazon employees advanced security measures, including secure payment processing, data encryption and buyer protection policies to ensure that transactions are secure and protected.

Problem 4: Personalization:

Real-World Challenge: Customers also want more personalized shopping experience.

Amazon's Solution: Amazon uses algorithms to provide personalized product recommendations based on a user's browsing and purchase history, making it easier for users to discover new products of interest.

Conclusion:

In summary, the Amazon shopping platform addresses various real world problems by providing a convenient, accessible and efficient platform for online shopping. Offering a wide selection of products, facilitating price comparisons, ensuring reliable delivery and incorporating user review and personalized recommendations to enhance the online shopping for users. It also provides a secure way of payment facility.

Features Provided by Amazon for Online Shopping:

1. **Product Search:** We can use the search bar to look for products on Amazon by typing in the keywords and product names or even scanning barcodes. This feature make it easy to find the specific items you are looking for.

2. **Product Details:** When we select a product, we will see detailed information about it, including product description, images, customer reviews and pricing. This make you informed purchasing decisions.

3. **One-Click Ordering:** If one has saved their payment and shipping information, they can make purchases with just one click, which streamlines the checkout process and make it faster and more convenient.

4. **Wish List:** You can create lists of products you are interested in buying in the future. This helps you keep track of items you want and you can even share your list with others.

5. **Track Orders:** This platform lets you keep tabs on the status of your order. You can see when they have been shipped and receive notifications when they are out for delivery or have been delivered.

6. **Product Reviews:** We can read and write reviews for products we have purchased, helping other customer make informed decisions. It is a way for customers to share their experiences about the product.

Schema Design and Description:

The schema for Amazon involves multiple entities that represent different aspects of the platform. These entities include Customer, Order, Product, Shipment, Payment, Cart and more. Each entity has specific attributes that describe its properties and relationships with other entities.

Customer Entity:
Customers are at the core of Amazon. The customer entity contains information about each customer.

- **Customer_id(Primary Key):**A unique identifier for each customer.
- **Full_name:**The customer's full name is registered on the platform.
- **Email:**The customer's email address for account-related communication.
- **Phone_number:**The customer's contact number to contact that customer.
- **Address:**Customer address to deliver that order.

Product Entity:
Product entity contains information about all the products.

- **Product_id(Primary Key):**A unique identifier for each product.
- **Name:**Name of the product.
- **Price:**Price of the product.
- **Description:**Detailed about the product.
- **Stock:**Number of quantities.

Order Entity:
Customers placed orders. We will store order details in the order entity.

- **Order_id(Primary Key):**A unique identifier for each order.
- **Customer_id(Foreign Key):**The customer who ordered.
- **Product_id(Foreign Key):**The product that has been ordered.
- **Shipment_id(Foreign Key):**The order goes for shipment.
- **Payment_id(Foreign Key):**The payment details for that order.
- **Order_date:**The date when customer makes order.
- **Total_price:**Price after discount and shipment charge.

Payment Entity:
Provides gateway to make payment for that order.

- **Payment_id(Primary Key):**A unique identifier for each payment.
- **Customer_id(Foreign Key):**The customer who pay.
- **Payment_date:**The date of payment.
- **Payment_method:**The type of making payment.
- **Amount:**The amount that has been paid.

Shipment Entity:
Shipment is final task to do.

- **Shipment_id(Primary Key):**A unique identifier for each shipment.
- **Customer_id(Foreign Key):**The shipment of that customer.
- **Shipment_date:**Date of shipment.
- **City:**City of that customer.
- **State:**State of that customer.
- **Country:**Country of that customer.
- **Zip_code:**ZIP code of that city.

Cart Entity:
Customers have added items to their cart for their future purchase.

- **Cart_id(Primary Key):**A unique identifier for each cart.
- **Customer_id(Foreign Key):**The cart of the customer.
- **Product_id(Foreign Key):**The items that are added are linked to the product.
- **Quantity:**Number of items in the cart.

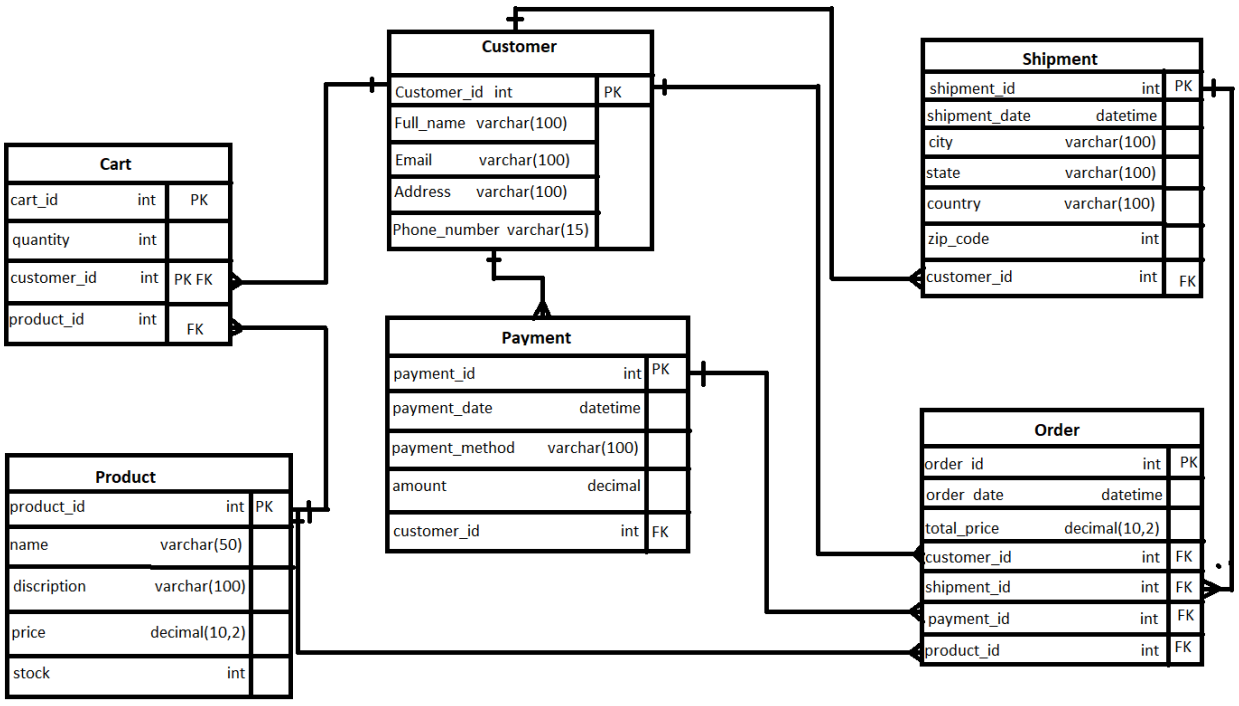
Relationships are:

- Each customer can have one or more carts (one-to-many relationship).
- Each customer can place one or more orders (one-to-many relationship).

- Each order can have one or more payments (one-to-many relationship).
- Each order can have one shipment (one-to-one relationship).
- Each product can be included in one or more carts (one-to-many relationship).
- Each product can be part of one or more orders (one-to-many relationship).

ER Diagram:

Let's construct an ER diagram that portrays the relationships and attributes of the entities within the Amazon schema. This ER diagram will serve as a visual representation. By employing this diagram, you will gain a clear grasp of the intricate interactions and connections that define the platform's dynamics.



Conclusion:

In this case study, schema diagram for Amazon shopping include several key entities such as Customer, Product, Order, Payment, Cart and Shipment. Each with its set of attributes and relationships. These entities work together to model the core functionality of the application allowing customers to shop for products, place order, make payments, manage their shopping

carts and track shipment. The diagram provide a simplified representation of the database structure and in practice, a real world database for a platform as comprehensive as Amazon would be more intricate, incorporating additional tables and attributes to support its extensive feature and services.