Business Problem

How can Amazon provide flexible and prominent services to end users to search an item to make an order as per their wish list, while maintaining customer satisfaction, loyalty, and profitability?

Business Requirements

1. **User Authentication and Authorization:**

    Description: The system must ensure that only authorized users can access and perform actions within the Amazon platform by using secure user authentication and authorization methods.

    Criteria: Users must register for an account with unique credentials. Passwords must be encrypted and stored using industry-standard methods. User roles and permissions must be specified to restrict access to certain features and data.

2. **Product Information Accuracy:**

    Description: The project must guarantee that product information is correct, current, and matches the preferences and wish lists of end users.

    Criteria: Instant synchronization with product databases. Frequent updates of product information based on user behavior and market trends. Accuracy verification through user feedback and system monitoring.

3. **Flexible User Profiles:**

    Description: The Amazon system should enable users to tailor their profiles to suit their individual preferences and needs.

    Criteria: Users can customize their profiles, including preferences for recommendations and communication. Profile settings should be easily reachable and changeable. Adaptive features that learn and adapt based on user interactions.

4. **Legal and Regulatory Compliance:**

    Description: The project must adhere to all applicable laws, regulations, and industry standards related to e-commerce and data privacy.

    Criteria: Regular audits to confirm compliance with regional and international regulations. Data protection features compliant with GDPR or other relevant standards. Clear communication with users about privacy policies and terms of service.

5. **Intuitive User Interface:**

    Description: The Amazon system must have an intuitive and user-friendly interface to improve the overall user experience.

    Criteria: Simple and easy-to-navigate website layout. Consistent design elements for coherence across pages. Accessibility features for users with diverse needs.

6. **Efficient Ordering Process:**

   Description: The ordering process should be simplified to provide a smooth and efficient experience for users.

   Criteria: One-click ordering option for registered users. Secure and user-friendly checkout process. Order tracking and modification features.

7. **Wishlist Functionality:**

   Description: The system should offer powerful Wishlist management features for users.

   Criteria: Users can create, edit, and organize Wishlist with ease. Wishlist sharing and collaboration options. Automated notifications for Wishlist item changes.

8. **Enhanced Search Functionality:**

   Description: The search functionality should be fast and effective, helping users find products quickly.

   Criteria: Precise and relevant search results. Advanced search filters based on various criteria. AI-driven recommendations for better discovery.

9. **Performance and Scalability:**

   Description: The system must keep optimal performance, even during high usage, and be scalable for future growth.

   Criteria: Regular performance testing to detect and resolve bottlenecks. Scalability features to handle increased user traffic. Monitoring tools for performance analysis.

10. **Feedback Mechanism:**

    Description: The system should include a feedback mechanism for users to share reviews and ratings.

    Criteria: User-friendly feedback submission forms. Review moderation to ensure authenticity. Utilization of feedback for continuous improvement.

11. **Integration with Third-Party Services:**

    Description: Seamless integration with third-party services to enhance the overall user experience.

    Criteria: Secure and reliable integration with payment gateways. Effective collaboration with shipping services for timely deliveries. Integration with customer support platforms for issue resolution.

12. **Mobile Responsiveness:**

    Description: The Amazon system should be responsive and provide a consistent user experience across different devices.

Literature Survey

The Amazon project aims to develop a scheduling/appointment system that can optimize the use of resources and improve customer satisfaction. To achieve this goal, the project needs to conduct a literature survey to understand the current state of knowledge and practice in this domain. The literature survey will cover the following aspects:

- **Current scheduling/appointment systems:** This survey will explore the existing systems and methods for scheduling and managing appointments in various settings, such as healthcare, education, and service industries. The survey will compare and contrast the features, advantages, and disadvantages of these systems and methods, such as their efficiency, flexibility, reliability, and usability. The survey will also identify the challenges and limitations of these systems and methods, such as their scalability, security, and compatibility.
- **Methods and techniques for classification:** This survey will examine the methods and techniques for classifying and grouping customers, resources, and tasks based on various criteria, such as their preferences, needs, availability, and priority. The survey will review the applications and outcomes of these methods and techniques in previous classification projects, such as product recommendation, customer segmentation, and resource allocation. The survey will also discuss the benefits and drawbacks of these methods and techniques, such as their accuracy, complexity, and interpretability.
- **Relevant data and findings:** This survey will collect and analyze the data and findings from previous studies, articles, and publications that are relevant to the project topic. The survey will synthesize the data and findings to identify the best practices, trends, and gaps in the literature. The survey will also evaluate the quality and validity of the data and findings, and highlight the implications and recommendations for the project.

Impacts

Social Impact:

By providing accurate and up-to-date information on the latest products as per end user search history, an Amazon project can enhance the end user interface and satisfaction. This can also increase the trust and loyalty of end users towards Amazon, and encourage them to share their positive experiences with others. Additionally, by offering a variety of products that cater to different needs and preferences, an Amazon project can promote diversity and inclusion among end users.

Business Impact:

By providing information about the availability of latest products in different ways, an Amazon project can increase the sales and revenue of Amazon. This can also reduce the costs and risks associated with inventory management, product delivery, and customer service. Furthermore, by sending new notifications as per end user search history, an Amazon project can improve the retention and engagement of end users, and create more opportunities for cross-selling and up-selling.