



Frequent Shopper Program

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BSA/375 Fundamentals of Business Systems Development

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Service Request SR-kf-013

- Description
 - Award loyalty points to customers
- Background
 - Track customer purchases.
 - Accumulate purchases as loyalty points
- Expected Results
 - Business/systems requirements document



Scope and Goals

- Estimated duration of four months.
- Connect all stores
- Keep track of customers' purchases
- Calculate loyalty points
- Loyalty programs vendor interface



Analysis

- Interviews
 - Key Stakeholders
 - Sales Representatives
 - Customers
-
- Review of systems
 - Point-of-Sale
 - Customer Database



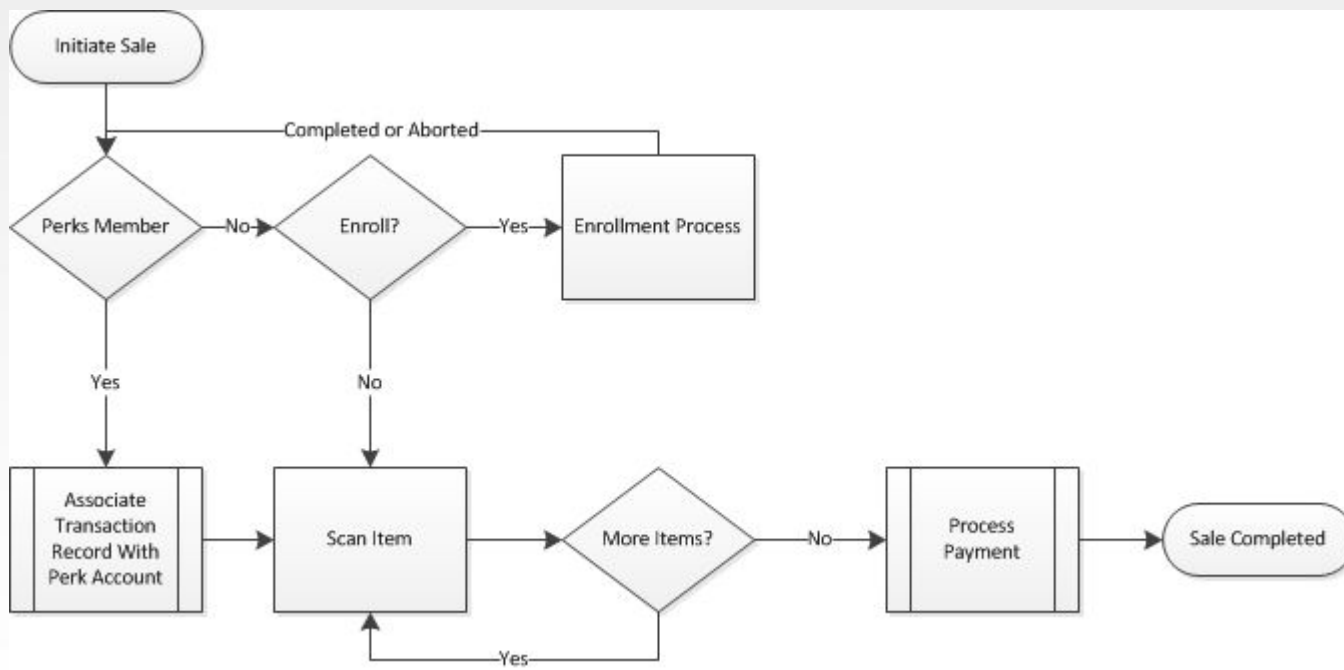
System Requirements

Mandatory

- A database management system
- Interface to add and retrieve customer profile data
- Track and maintain customer information and purchases
- Convert purchases into loyalty points
- External loyalty program interface

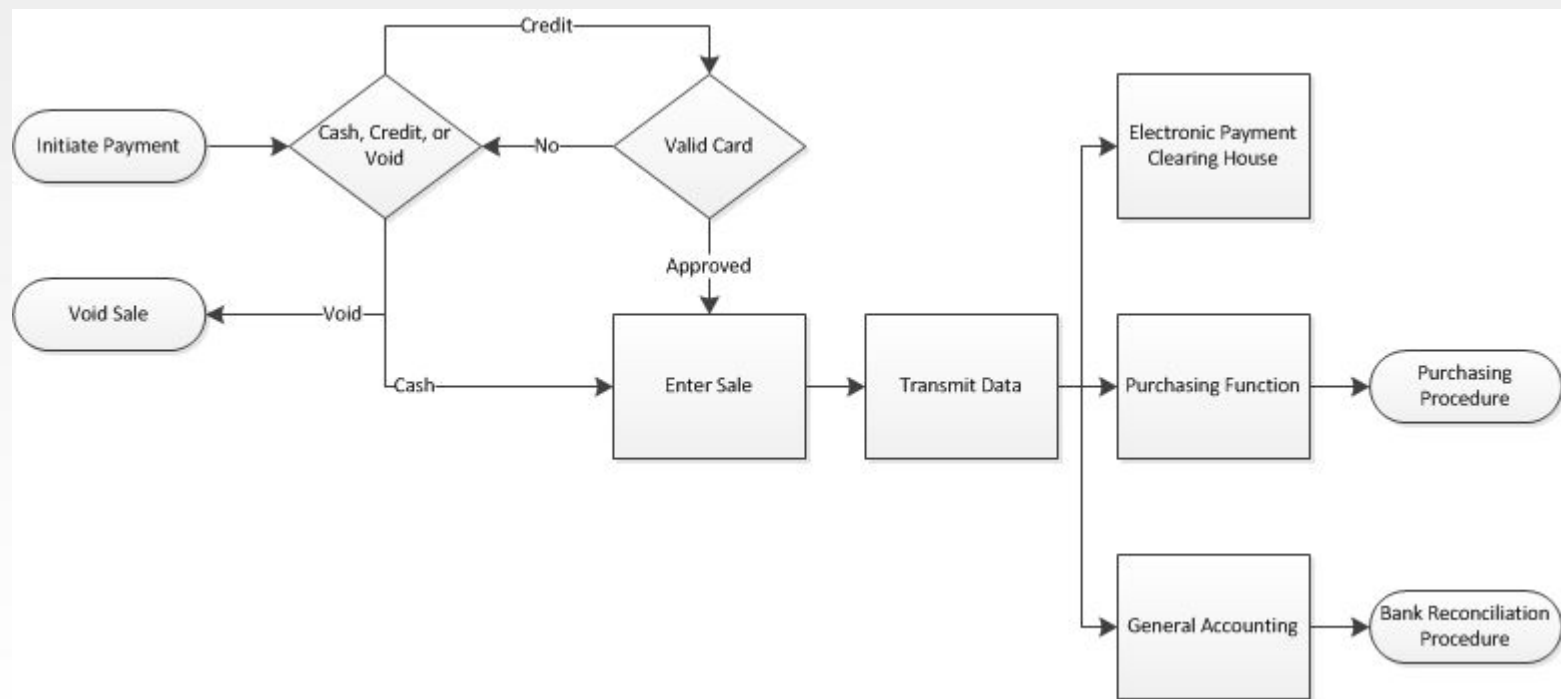


Process Flow - Enrollment



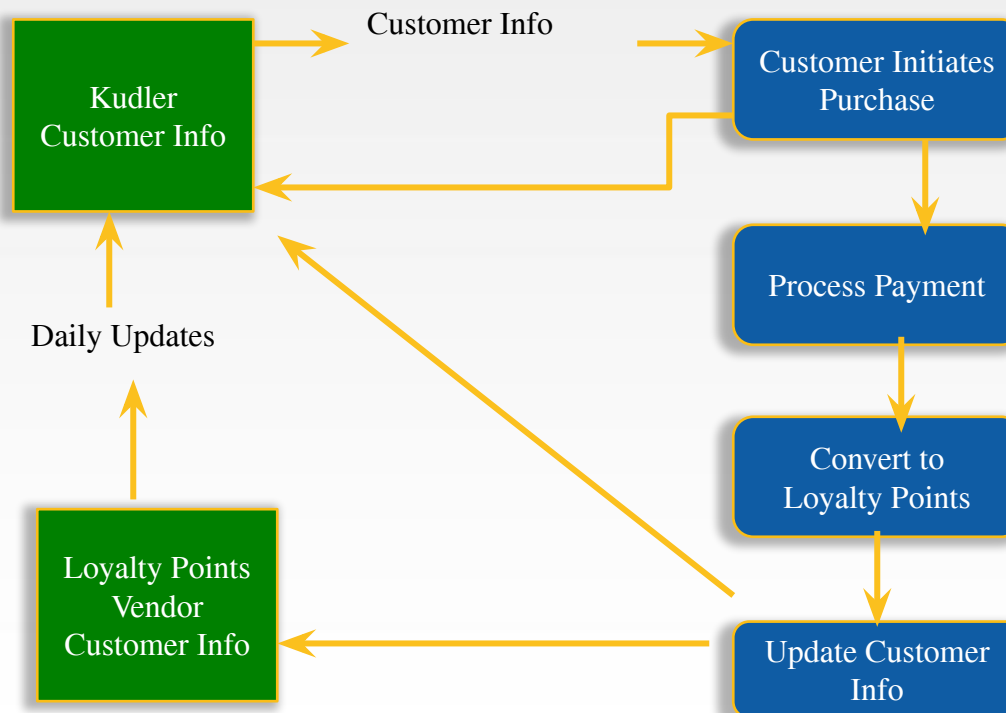


Process Flow – Payment





Data Flow





Security

- Database Security
- Multiple access level permissions
- User authentication
- Firewall
- Encryption
- Backup
- Use MS SQL Server database framework
- Specific read/write access
- Individual usernames and passwords
- Prevent hacking from the Internet
- Secure data and transmissions
- Ensure system recovery



Software Specifications

- Database Server
- Antivirus protection
- Web Services communications link
- Secure Socket Layers
- VPN connections for remote access



Hardware Specifications

- Database Server
- Firewall
- High Speed internet connection
- Web Server



References

Dennis, A., Wixom, B. H., & Roth, R. M. (2012). *System Analysis and Design* (5th ed.). Hoboken, NJ: John Wiley & Sons.

Valacich, J. S., George, J. F., & Hoffer, J. A. (2012). *Essentials of System Analysis & Design* (5th ed.). Upper Saddle River, NJ: Pearson Education.