MIS 3504 Review Session

Exam 2
Core Requirement Components

- Business Rules
  - Data (Attributes Entities)
  - Processes (or Use Cases)
  - External Agents (or Actors)
Sales Order Swim Lane

Customer
- Buy?
  - Price Quote
  - Receive Order
    - Add Date
    - Credit?
    - Packing Slip Invoice
      - Pick, Pack, Ship
      - Prep Invoice
      - Accept Payment
    - Delivery Date
  - Credit Limit

External Sales
- Buy?
- Get Goods
- Pay Invoice

Internal Sales
- Buy?
- Get Goods
- Pay Invoice

Warehouse
- Buy?
- Get Goods
- Pay Invoice

Accounting
- Buy?
- Get Goods
- Pay Invoice

Books
- Posted
Sales Order Swim Lane

Customer

External Sales

Internal Sales

Warehouse

Accounting

Books

Buy?

Price Quote

Receive Order

Add Date

Credit?

Packing Slip

Invoice

Get Goods

Pay Invoice

Too many handoffs

Delivery Date

Credit Limit

Pick, Pack, Ship

Prep Invoice

Accept Payment

Share Data

Potential Bottleneck

Missing Branch

Posted
What data entities would be used in the sales order case?
Schema for Night Owl Ticket Purchases
(Tickets are purchased by customers using credit cards)
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(Tickets are purchased by customers using credit cards)
What business rules are important to the Night Owl case?
Gas Deposit Business Rules

• A customer with a good credit score is not charged a deposit.
• A customer wanting gas service pays a $150 “turn on” fee.
• A customer with a balance must pay that balance, in full, before “turn on”.
• A customer with new construction and 3 gas appliances has all fees waived.
• A customer with a poor connect/disconnect history must be charged a deposit of $400.
• A customer with poor credit score must be charged a $200 deposit.
Gas Deposit Decision Tree

- Credit?
  - Good
  - Bad

- New?
  - Yes
  - No

- History?
  - Yes
    - Good
    - Bad
  - No
    - Good
    - Bad

- 3 or More?
  - Yes
    - No Fee
  - No
    - $150
    - $150 + balance

- 3 or More?
  - Yes
    - No Fee
  - No
    - $150 + $200
    - $150 + $400 + balance
Gas Deposit Decision Tree

- Credit?
  - Good
  - Bad
- New?
  - Yes
  - No
- 3 or More?
  - Yes
  - No
  - More than one rule consolidated
- History?
  - Good
  - Bad
  - $150 + balance
- Outcomes not identified in rules
- Yes
  - No Fee
- No
  - $150
  - $150 + $200
  - $150 + $400 + balance

What is the order of the rules?

More than one rule consolidated
What role does process play in the gas works case?
The Hungry Owl Case

A Temple start-up wants to implement a new system that links all food trucks on campus to a single, electronic ordering and payment system called “Hungry Owls.” Customers place food truck orders through the website www.hungryowls.com that presents each truck’s menu. The ordered items are tallied up, the customer pays with a debit card and goes to the truck to pickup the food at the designated time. Each truck would have a laptop or mobile device with a wireless connection that would receive the orders. Each order is directed to the proper truck where it is accepted and given a “pickup time.” Payment is by Debit card only and is made through the site and automatically transferred into the vendor’s account. When the truck marks the order as “completed” the customer gets a receipt via email from the Hungry Owls system.
Case Analysis

Process
1. Customer looks at menu and places order
2. System tallies up total price and gives order number
3. System sends order to truck
4. Trucks receives and confirms order giving pickup time
5. Customer pays with debit card
6. System puts funds in trucks account
7. Customer picks up order
8. Truck confirms pickup
9. Receipt emailed to customer

Data
1. Customer: ID, name, email, debit card info? Cell?
2. Menu item: ID, description, price
3. Truck, ID, Name, location, phone, account number
4. Order Header: ID, customer ID, date, sum price, tax, total price, est-pickup, actual-pickup
5. Order Item: order ID, Item ID, Item Description, Price

Business Rules:
1. Orders must be paid by debit card.
2. A receipt is sent via email when the order is marked complete.
3. State tax will be collected on all orders.