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BNAI MIS 3504

Digital Design and Innovation Studio

Business Rules

Day 6

Photo: Installation by Jenny Holzer, US Pavillion, Venice Biennale 1990

AGENDA
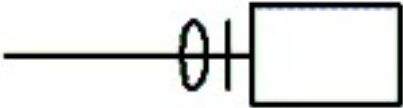
Quiz

New Material

Team Case

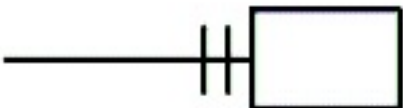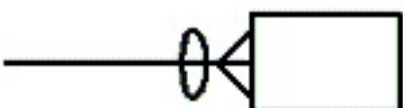Final Project

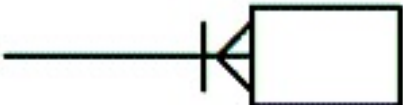TEMPLE UNIVERSITY

Review:
What are the Core Requirement Components?

PEOPLE, PROCESSES, & ....

Relationships (continued)

What is a entity relationship diagram (ERD)?

What relationship notation should you use?

Notation	Information Engineering
Multiplicities:	
- Zero or one	
- One only	
- Zero or more	
- One or more	

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Cardinality in Data Modeling: Relationships

Crow's foot notation can include a little circle, indicating a null value. This means that the related entity is not mandatory.

- 1:1 = a <u>one to zero or one</u> relationship
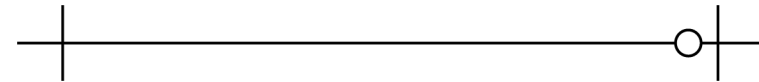
- 1:m = a <u>one to zero or many</u> relationship
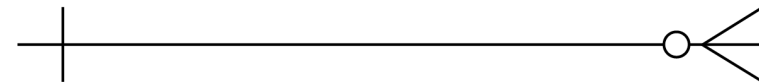
- m:m = a <u>many to zero or many</u> relationship

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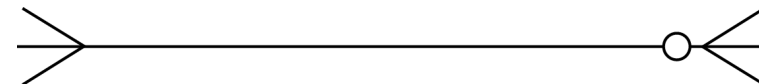
Entity Relationship Diagrams

Presents Entities, Attributes and Relationships visually

Used at different levels like logical and physical
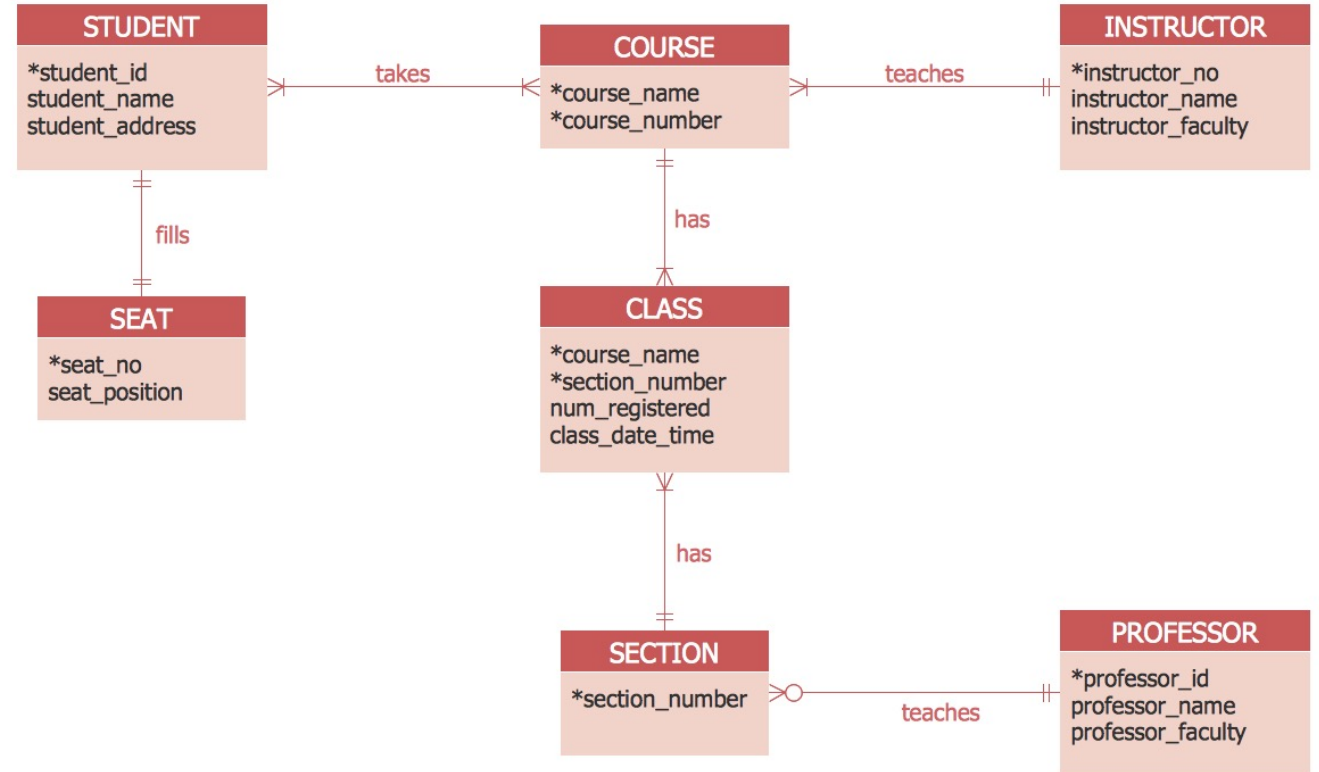
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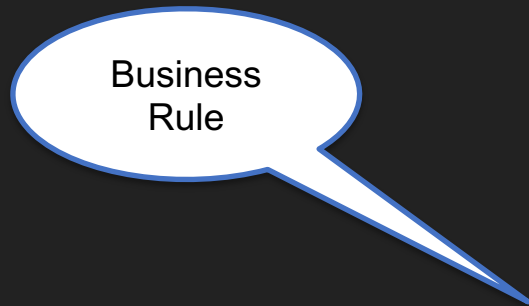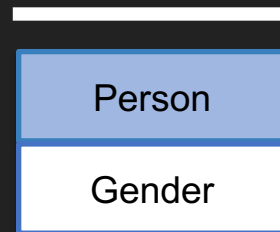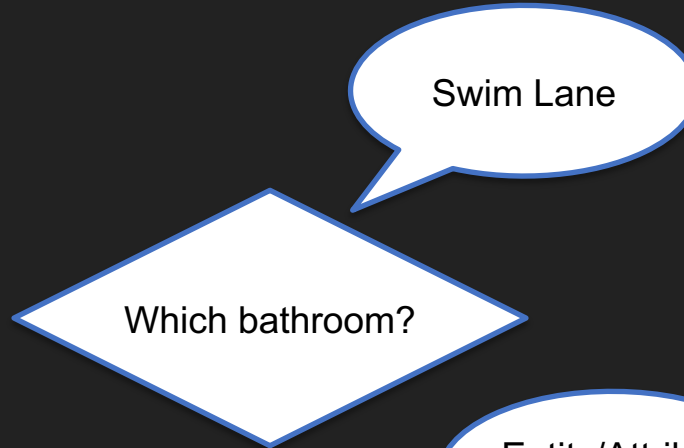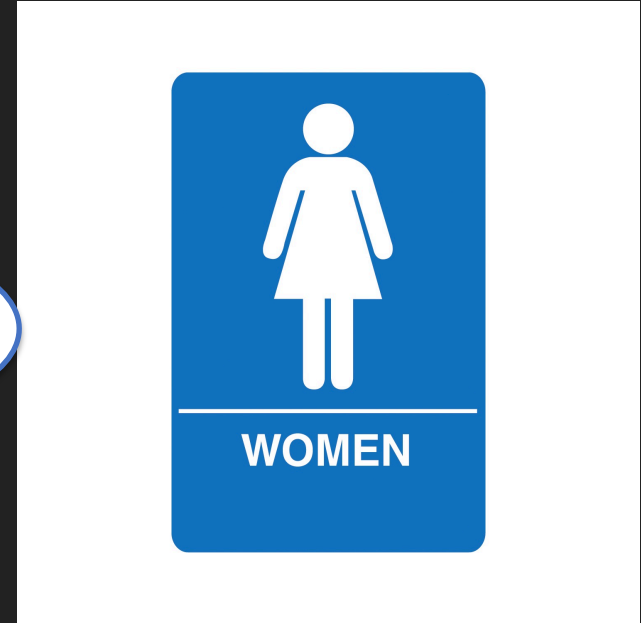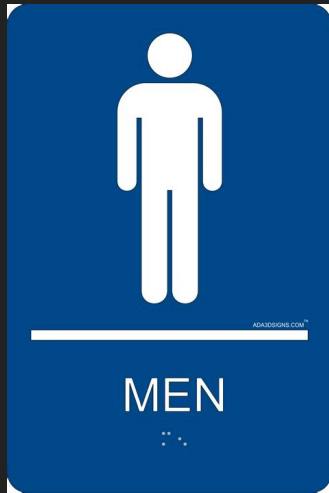
Business Rules

Business Rule

Describes a policy, guideline, standard or regulation upon which the business operates

A statement that defines or constrains some aspect of the business

It is intended to assert business structure, or to control or influence the behavior of the business.

From Business Analysis Body of Knowledge (BABOK)

What does a Business Rule look like

TERM1 –FACT- TERM2

Business Rule Format

Textual statement that defines the rule   exactly and unambiguously

Each rule has a unique identifier (ex. BR125)

Usually documented or managed in a separate catalogue or table

From Business Analysis Body of Knowledge (BABOK)

Business Rule Examples
(Term - Fact - Term)

BR1 - Customer calls

must be returned

the same day.

BR2 - Expected contract value

is calculated as

the probability of signing the contract times the total value of the contract.

Why not if/then?

Using the if/then format may obscure the true subject of the business rule. The true subject should be at the start of each rule.

If the order is shipped then send the notification
Notification must be sent when an order is shipped.

Types of Business Rules

Restriction – must or must not happen

    An order must not have more than one ship-to address.

Heuristics – guidance on how to do something

    A customer is delinquent when their account is more than 30 days past due.

Inference – given a condition, assume other conditions

    A generic version of a prescription drug will be used when one exists.

Timing – activity based on elapsed time

    Each open compliant must be deleted when the root cause is identified.

Triggers – cause and effect relationship

    The product ship date must be agreed when an order is taken.

From Business Analysis Body of Knowledge (BABOK)

ACTIVITY

Spend 10 minutes writing five (5) examples of business rules:

Restriction – must or must not happen

Heuristics – guidance on how to do something

Inference – given a condition, assume other conditions

Timing – activity based on elapsed time

Triggers – cause and effect relationship

Topic: Local Accounting Laws
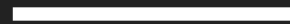
Decision Tree

Decision Tree

Decision Tree
Limitation of Contractor Liability
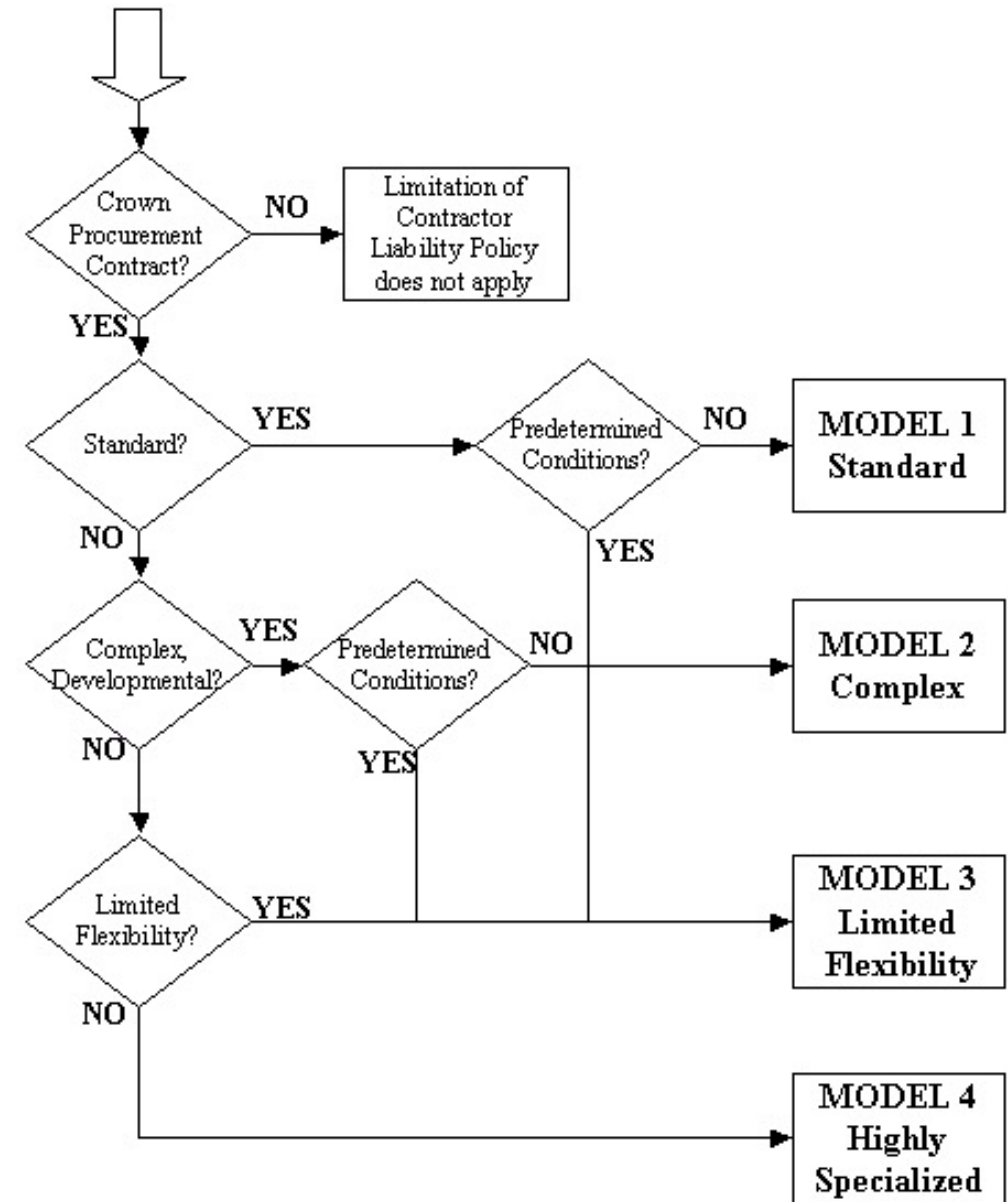
SHOULD I DO LAUNDRY?

ARE YOU AN ADULT?

YES — Are you a dirtbag?
- NO → Do you have a demanding career?
  - YES → At a laundromat?
    - YES
    - NO
  - NO → Are you broke?
    - NO → YES
- YES → **DON'T DO LAUNDRY.**

NO — Are you a child?
- YES → **DON'T DO LAUNDRY.**
- NO → Are you in high school?
  - YES → Do your clothes smell somewhat unusual?
    - NO
    - YES
  - NO → College?
    - YES
    - NO

ARE YOU AN ADULT?

YES → Are you a dirtbag?

NO → Are you a child?

Are you a dirtbag?
- **NO** → Do you have a demanding career?
- **YES** → DON'T DO LAUNDRY.

DON'T DO LAUNDRY.

Are you a child?
- **YES** → DON'T DO LAUNDRY.
- **NO** → Are you in high school?

Do you have a demanding career?
- **YES** → At a laundromat?
- **NO** → Are you broke?

Are you in high school?
- **YES** → Do your clothes smell somewhat unusual?
- **NO** → College?

At a laundromat?
- **YES** → DO LAUNDRY.
- **NO** → As a nudist?

Are you broke?
- **NO** → (to As a swim instructor or lifeguard?)
- **YES** → DON'T DO LAUNDRY.

Do your clothes smell somewhat unusual?
- **NO** → DON'T DO LAUNDRY.
- **YES** → Use some eyedrops, swish with mouthwash, open a window, take a shower, say you were burning incense, and do laundry.

College?
- **YES** → Do you have enough money for laundry?
- **NO** → Are you a sasquatch?

DO LAUNDRY.

As a nudist?
- **YES** → DON'T DO LAUNDRY.
- **NO** → As a musician?

Are you a sasquatch?
- **NO** → Are you a hygiene freak?
- **YES** → DON'T DO LAUNDRY.

DON'T DO LAUNDRY.

As a musician?
- **YES** → Are you on tour?
- **NO** → As a swim instructor or lifeguard?

Do you have enough money for laundry?
- **YES** → Buy beer.
- **NO** → Are you a hygiene freak?

Are you on tour?
- **YES** → DON'T DO LAUNDRY.
- **NO** → DON'T DO LAUNDRY.

As a swim instructor or lifeguard?
- **YES** → DON'T DO LAUNDRY.
- **NO** → As the leader of a biker gang?

Buy beer.

Are you a hygiene freak?
- **YES** → Do underwear and socks in the sink.
- **NO** → DON'T DO LAUNDRY.

Do underwear and socks in the sink.

DON'T DO LAUNDRY.

As the leader of a biker gang?
- **YES** → DON'T DO LAUNDRY.
- **NO** → DO LAUNDRY.

DO LAUNDRY.

DON'T DO LAUNDRY.

Individual Exercise

Fly by Night Part #2

Self Assessment: The Fly By Night Case Part 2

Instructions:

1. Work by yourself
2. Read the case thoroughly.
3. The questions force you to analyze the data and business rules. Do this first.
4. Only then should you answer the questions.
5. These questions are difficult so don't be discouraged if you don't get them right the first time.
6. We will go over them.

20 minutes individually.

Review Answers

Break 15 minutes

Team Exercise

Swiss Banking Company

Directions:

1. **Read through the case**

2. **Work with your team**

3. **Write out 5 business rules.**

4. **Create a decision tree.**

5. **You have 40 minutes total.**

Group Survey

10 minutes

Team Exercise: Business Rules

Until the end of class

Final Group Project-Deliverables

<u>In-Class Exercises:</u>

1. Understand the activities done in CBH's current process.

2. Understand the data used in CBH's current process.

3. Identify the business rules used in CBH's current process.

4. Recommend the control objectives and controls that CBH should use insure positive outcomes from the credit approval process.

<u>Additional Deliverables:</u>

1. A swim-lane diagram of the process

2. An ERD of the data involved in the process

3. A list of business rules for the process

4. A list of the control objectives for the process and what controls you recommend for each objective

5. A presentation of your findings (no more than 8 slides)

Reminders

Class tomorrow: 8:30AM start

1 more quiz tomorrow

You will have 1-1.5 hours tomorrow to work on everything for your final project

Review for final exam tomorrow

Final Exam Sunday (8:30-9:30AM)

Group Presentation (9:45AM-12PM)

Group Project due to Professor by Sunday Night-22-Oct