



MIS 2101

Exam 1 Review

Advice

How to prepare...



Review the slide
decks



Review the assigned
readings/videos



Review MaxLabs

Introduction & Systems Analysis

- **Topics and Required Reading**
[Acquiring Information Systems And Services](#)
[Systems Architecture](#)
[Systems Analysis](#)

Collection of Systems

Systems = People + Process + Technology

- Manipulation of information = value
- Managed by MIS professionals
- Systems surround us 24/7
- Application Program Interface (API's)

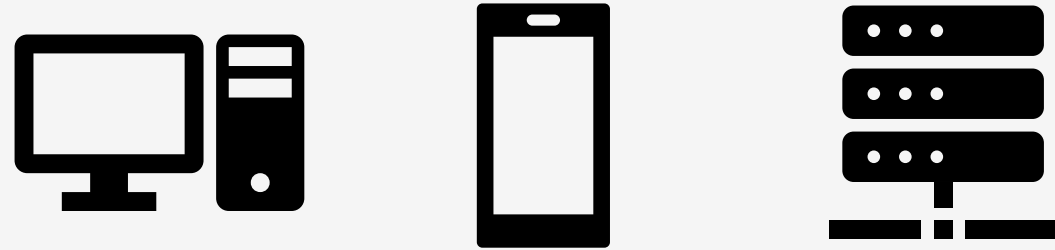


- “Information System – an integrated set of components for collecting, storing, and processing data and for providing information, knowledge and digital products.”

Collection of Technologies

Including:

- Hardware
- Software
- Policies
- Education Tools
- API's



Designing UX (User Experience)

Four Steps

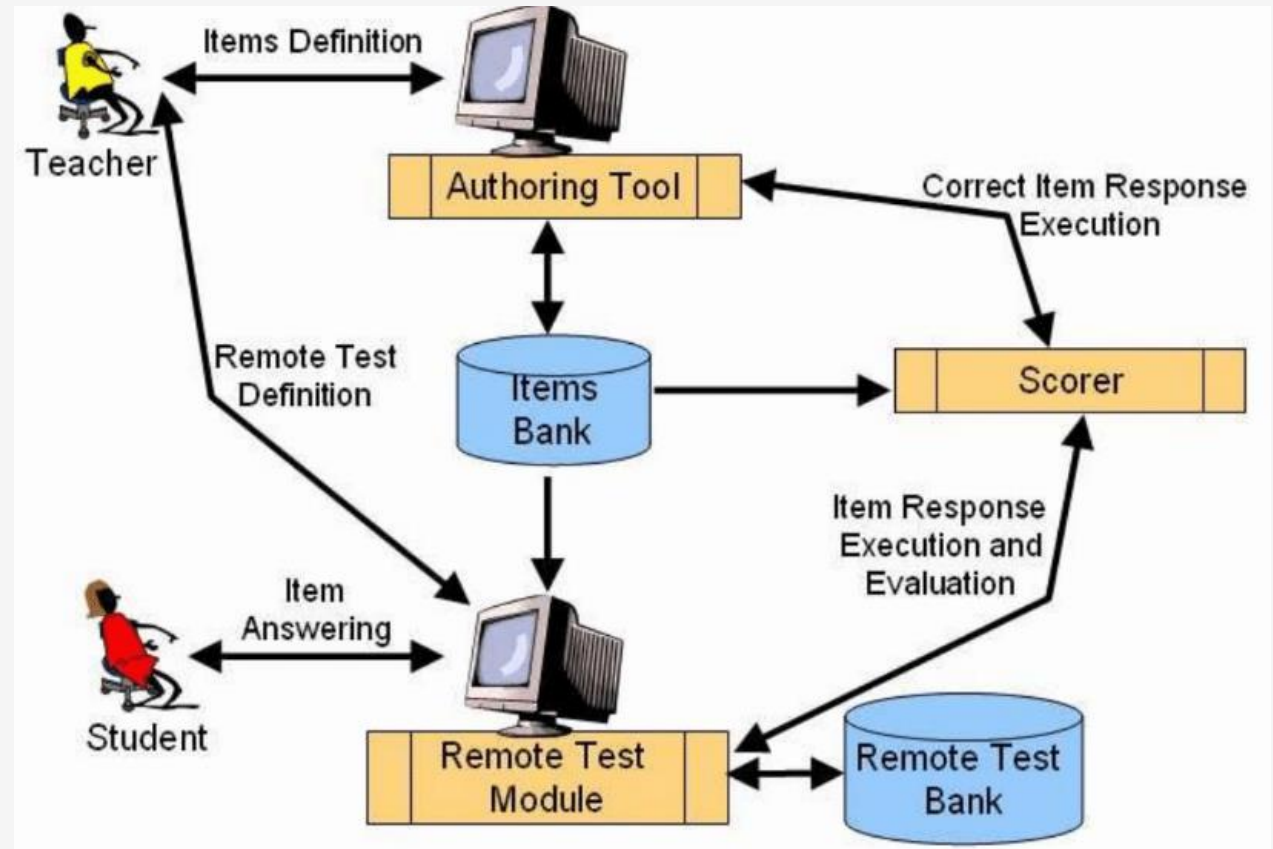
1. Problem Definition
 2. Documenting Business Processes
 3. Process Decomposition
 4. Data Modeling
-

Systems Analysis

What is “Systems analysis?”: Problem solving technique that “decomposes” a system into its component pieces for the purpose of studying how well these parts work & interact to accomplish their purpose

Systems Architecture

- Conceptual Diagram
- Structural Components
- Identify/Solve Problems
- Existing or New
- Communication Tool



Introduction to Process Mapping

- Topics and Required Reading
[An Introduction to Swim Lane Diagrams](#)

Process Mapping

What

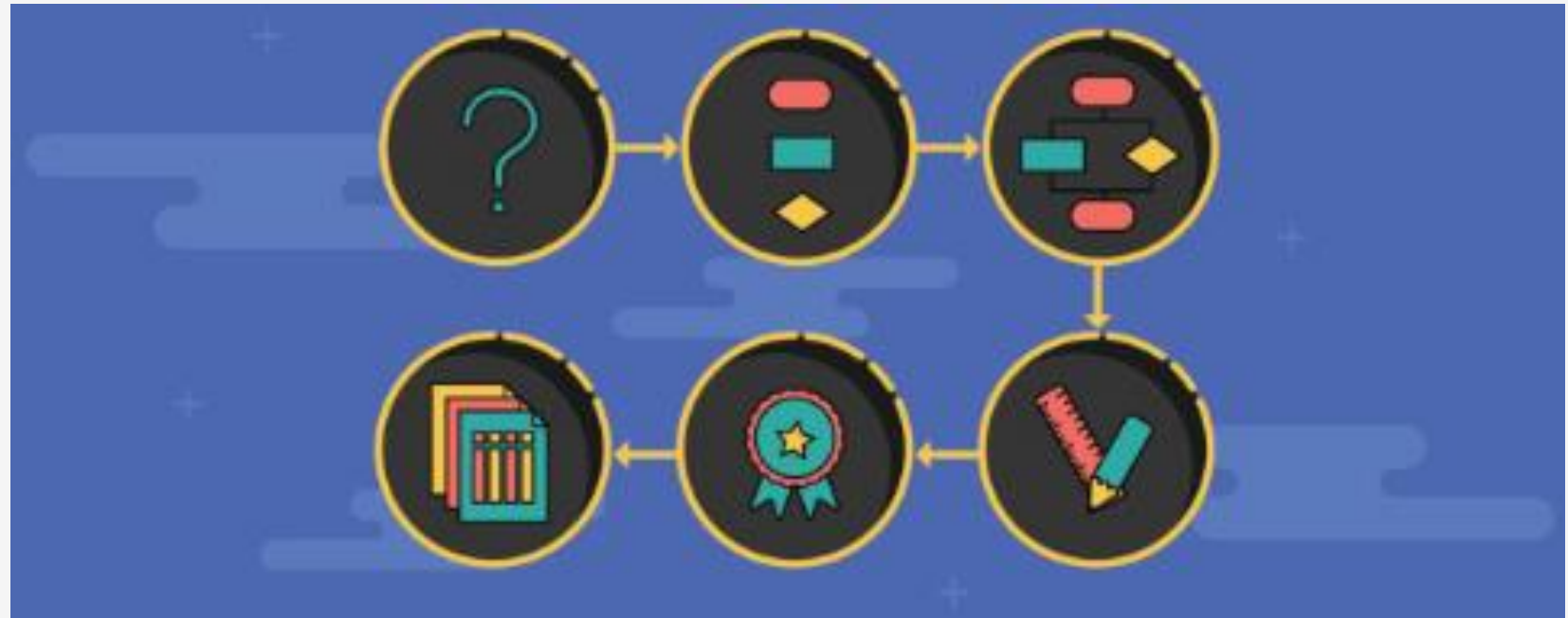
- Visual Representation

Why

- Identify Problems

How

- Draw the “as-is”



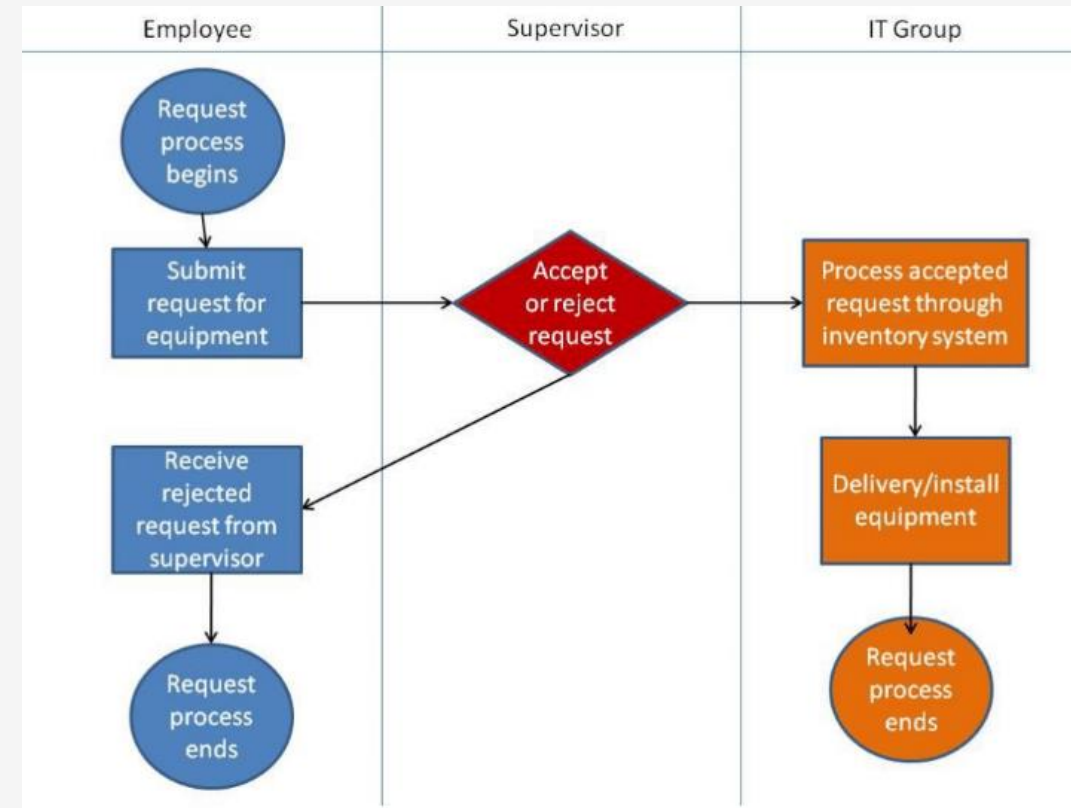
Swim Lane Diagrams

Advantages

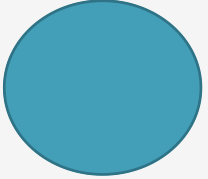
- Identifies who does what & in what order
 - Logical & Chronological
 - Indicates hand-offs

Versatile

- Applied to other diagrams
- Training Tool



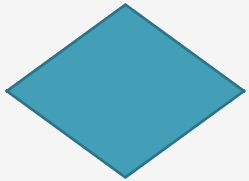
Swim Lane Diagrams - Symbols



- Circle : signifies the starting and ending of an event in the process



- Rectangle : represents an activity in the process



- Diamond : represents a decision that must be made



- Arrow : indicates the flow of the process



- Cylinder : represents stored data

Digital Product Management

- **Topics and Required Reading**

Max Labs Pre-Flight (Canvas)

[Entity Relationship Diagram](#)

[What is Entity Relationship Diagram \(ERD\)?](#)

- **Required Viewing**

[What hiring managers look for in your social media profile](#)

Why Salesforce?

A great platform to deliver cloud-based systems products

- Enables & Enhances Business
- Used by Industry Fortune 100's
 - Across all business function areas

Enabling Organizations

- Technology enables organizations to work faster/smarter/more efficient
 - See how it works
 - Understand how it used by industry
-



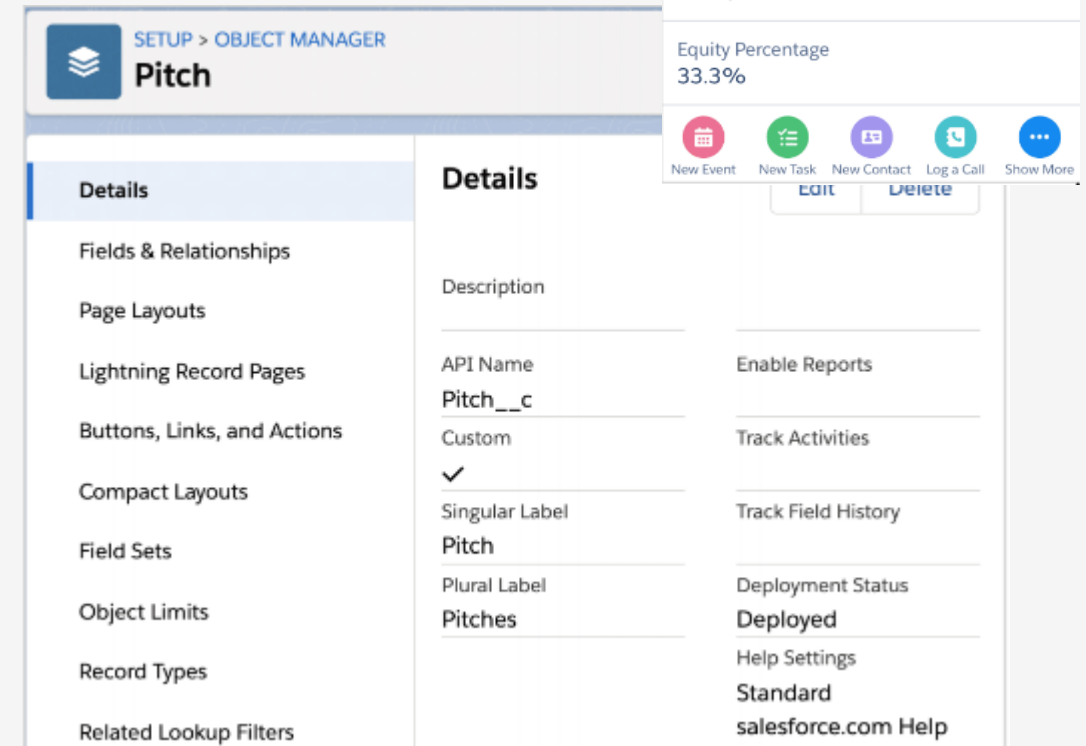
Max Labs – Pre-Flight

A great platform to deliver cloud-based systems products

- Professional Development
 - Developing a professional brand
 - Innovation
 - Scalability & new markets
 - Business & Digital Models
 - B2B (Business to Business)
 - Used to manage their relationships to customers
 - Data/Databases/Apps/Platforms
 - Platform: a collection of tools & services you can piece together to build a **database and apps**
-

Max Labs – 1a

- Creating Databases (objects)
 - Why do we need these lists?
- Determining Data Needs
 - Max's needs for creating the "Pitch" (custom Object)
- Page Layouts
 - What information do we want to show?
- Mobile App



The image displays two screenshots from Salesforce. The top screenshot is a mobile app view of a 'Pitch' record for 'Soaring Eagle, Inc'. It shows fields like Pitch ID (P-000), Business Name, Type (Angel), Investment Amount (\$500,000.00), and Equity Percentage (33.3%). Red arrows point to the record header, the 'DETAILS' tab, and the 'Investment Amount' field. The bottom screenshot is a desktop view of the 'Setup > Object Manager' page for the 'Pitch' object. It shows a left-hand navigation menu with options like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The main area shows the 'Details' configuration, including 'API Name' (Pitch__c), 'Singular Label' (Pitch), 'Plural Label' (Pitches), and 'Enable Reports' (checked).

Mobile App View (Top):

- Header: Soaring Eagle, Inc
- Fields: \$500,000.00 • 33.3%
- Tab: DETAILS
- Fields: Pitch ID (P-000), Business Name (Soaring Eagle, Inc), Type (Angel), Investment Amount (\$500,000.00), Equity Percentage (33.3%)

Desktop View (Bottom):

SETUP > OBJECT MANAGER
Pitch

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters

Details

- Description
- API Name: Pitch__c
- Custom: ✓
- Singular Label: Pitch
- Plural Label: Pitches
- Enable Reports: ☒
- Track Activities: ☐
- Track Field History: ☐
- Deployment Status: Deployed
- Help Settings: Standard
- salesforce.com Help

Max Labs – 1b

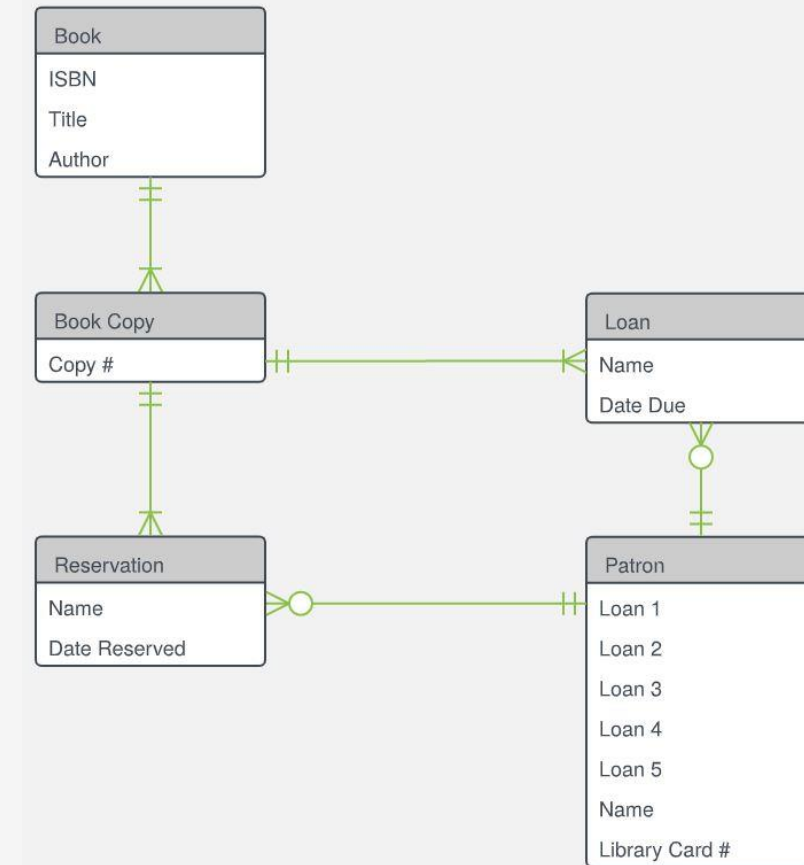
- Digital Business Models
 - Share & Communicate
- Monetize Max's Blog
- Pitch Data File
 - CSV Files, organization
- Generating Reports
 - Visualizing the data
- **Dynamic Dashboards**
 - Real-time Monitoring
 - Collaboration
 - Customization
 - Report Generation



REPORT: PITCHES Average Amount & Equity by Type				
Total Records		Average Investment Amount		Average Equity Percentage
10		\$311,000.00		22.0%
Type ↑ ▾	Pitch: Pitch ID ↑ ▾	Business Name ▾	Investment Amount ▾	Equity Percentage ▾
<input type="checkbox"/> VC (5)	P-002	Silicon Valley Extreme Venture	\$360,000.00	12.0%
	P-003	Net Wealth Leverage Associates	\$450,000.00	18.0%
	P-004	Smart Technology Investmen...	\$80,000.00	8.5%
	P-008	Move Over Ventures	\$100,000.00	10.0%
	P-009	Applied Investments Limited	\$320,000.00	38.5%
Subtotal			Avg: \$262,000.00	Avg: 17.4%
<input type="checkbox"/> Angel (5)	P-000	Soaring Eagle, Inc	\$500,000.00	33.3%
	P-001	Engell & Associates	\$200,000.00	25.0%
	P-005	Rosen Ventures, LLC	\$240,000.00	20.0%
	P-006	Capital Magic	\$700,000.00	50.0%
	P-007	Valducci Amalgam	\$160,000.00	5.0%
Subtotal			Avg: \$360,000.00	Avg: 26.7%
Total (10)			Avg: \$311,000.00	Avg: 22.0%

What is an Entity Relationship Diagram?

An Entity Relationship Diagram (ERD) is a visual representation of different data using conventions that describe how these data are related to each other.

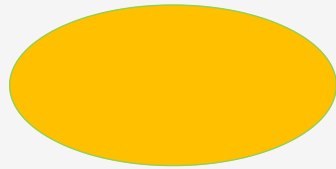


Source: <https://dzslcw3kip6qmk.cloudfront.net/marketing/pages/chart/examples/libraryerdiagram.svg>

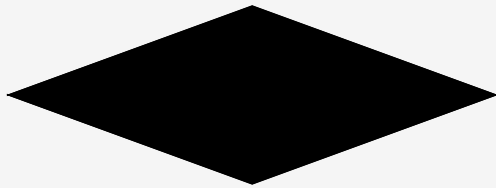
Primary ERD Symbols: Chen's Database Notation



- Entity = noun
ex: shopper, item

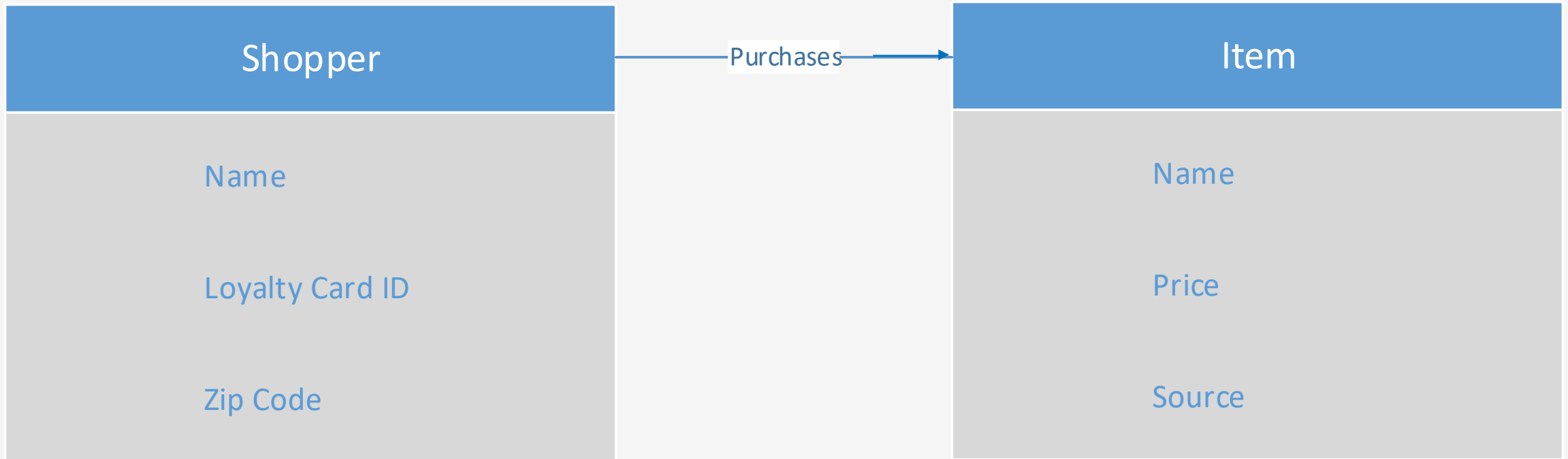


- Attribute = adjective/characteristic
ex: item price



- Relationship = verb
ex: buys

*Entity Relationship Diagram: **ERD** tables*



Crow's Foot Database Notation

Cardinality in Data Modeling: *Relationships*

Cardinality describes a fundamental characteristic of the relationship between two entities.

- 1:1 = a one to one relationship
- 1:m = a one to many relationship
- m:m = a many to many relationship

