

Module 1: Entity Relationship Models

- Welcome on board!
- This module will introduce you to Database Management Systems, especially Relational Databases.
- Building Entity Relationship Models is the first step to put Ideas into Models.



Learning Objectives

- Finishing this module, you will be able to:
 - Describe the need for DBMS(Database Management Systems)
 - Explain the pros and cons for different DBMS
 - Understand and explain **Entities** and **Attributes**
 - Understand and explain **Relationships** and **Cardinalities**
 - Draw **ERD**(Entity Relationship Diagrams)
 - Draw **ERAD**(Entity Relationship Attribute Diagrams)



Introduction

- Why we need Database Management Systems?

Example

- Data: \$350
- Information: A share of GameStop as of Jan 29
- Knowledge: Comparing to the price \$17.25 of a share as of Jan 4, the price rises around 2000% in a month
- Intelligence: Buy or Sell?



What Is Data?

- Data
- Information
- Knowledge
- Intelligence

