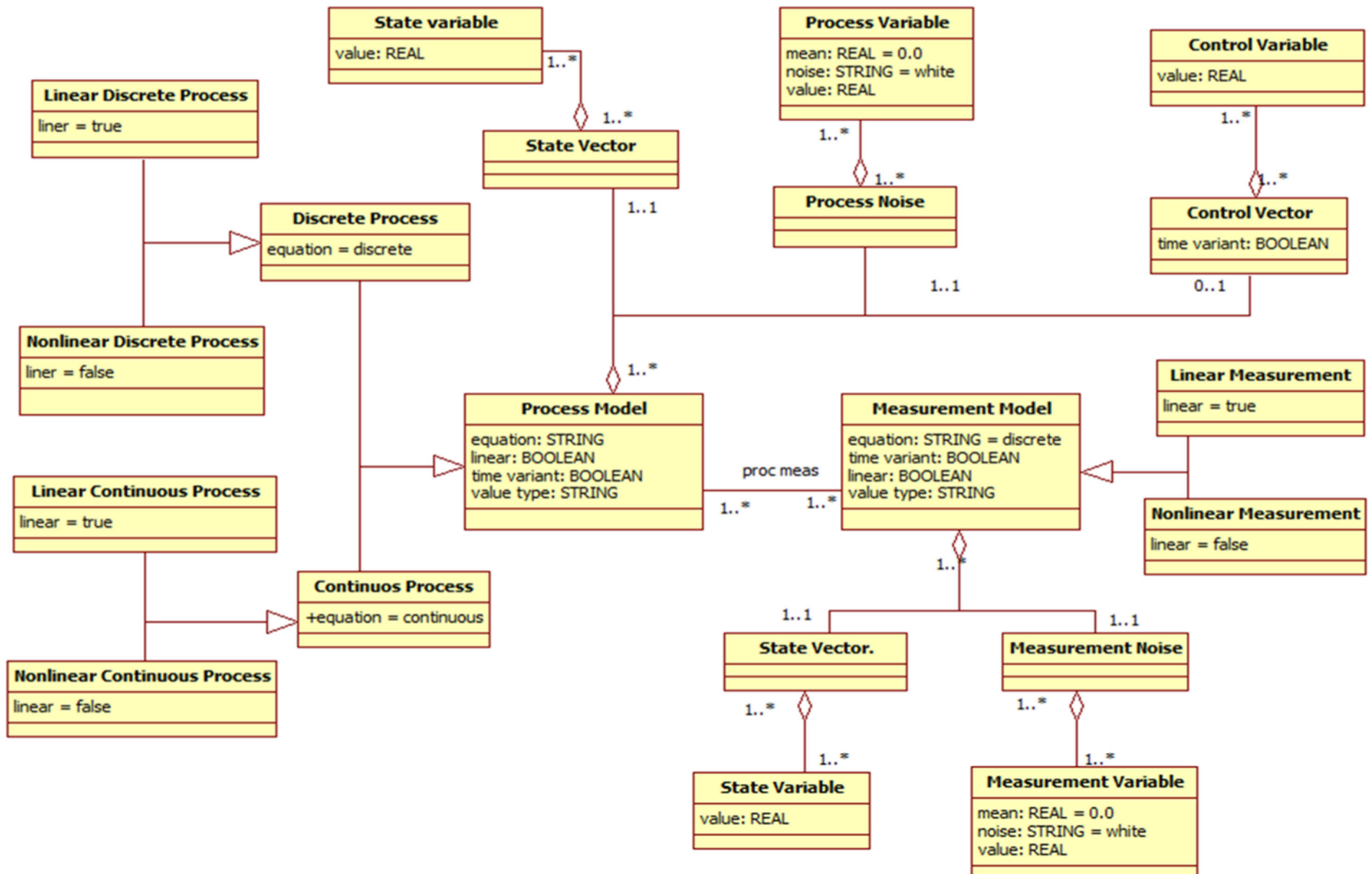


Absence From Campus

1. Monday 11/11 – Veterans Day (No class)
2. Wednesday 11/13 – Recorded Lecture
3. Friday 11/15 – Virtual Lecture
4. Monday 11/18 – In-Classroom Assignment for on-campus students. Online students must complete assignment anytime in a 24-hour period (11/18 start-of-day – end-of-day).

UML Class Diagrams



UML Class Diagrams

Based on mathematical set theory and set relationship.

- A set is:
 - A collection of "things" (objects or numbers, etc.) of interest.
 - Each member is called an element of the set.
 - There should be only one of each member (all members are unique).

ØA relation is:

- a collection of ordered pairs between two sets, such that objects from one set relates to objects from the other set. If the object x is from the first set and the object y is from the second set, then the objects are said to be related if the ordered pair (x, y) is in the relation.

Process for Creating Requirements Level CD



Extract noun/noun phrases from specification,



Identify candidate classes,

Is this entity relevant?

Can I uniquely identify this entity?

Is this entity within the scope of the system



From the remaining entities,
identify candidate attributes,

Is this entity relevant?

Is this candidate a property of a candidate class?



Draw the classes,



Identify relationships between the
candidate classes,

Obtain from specification and customer.

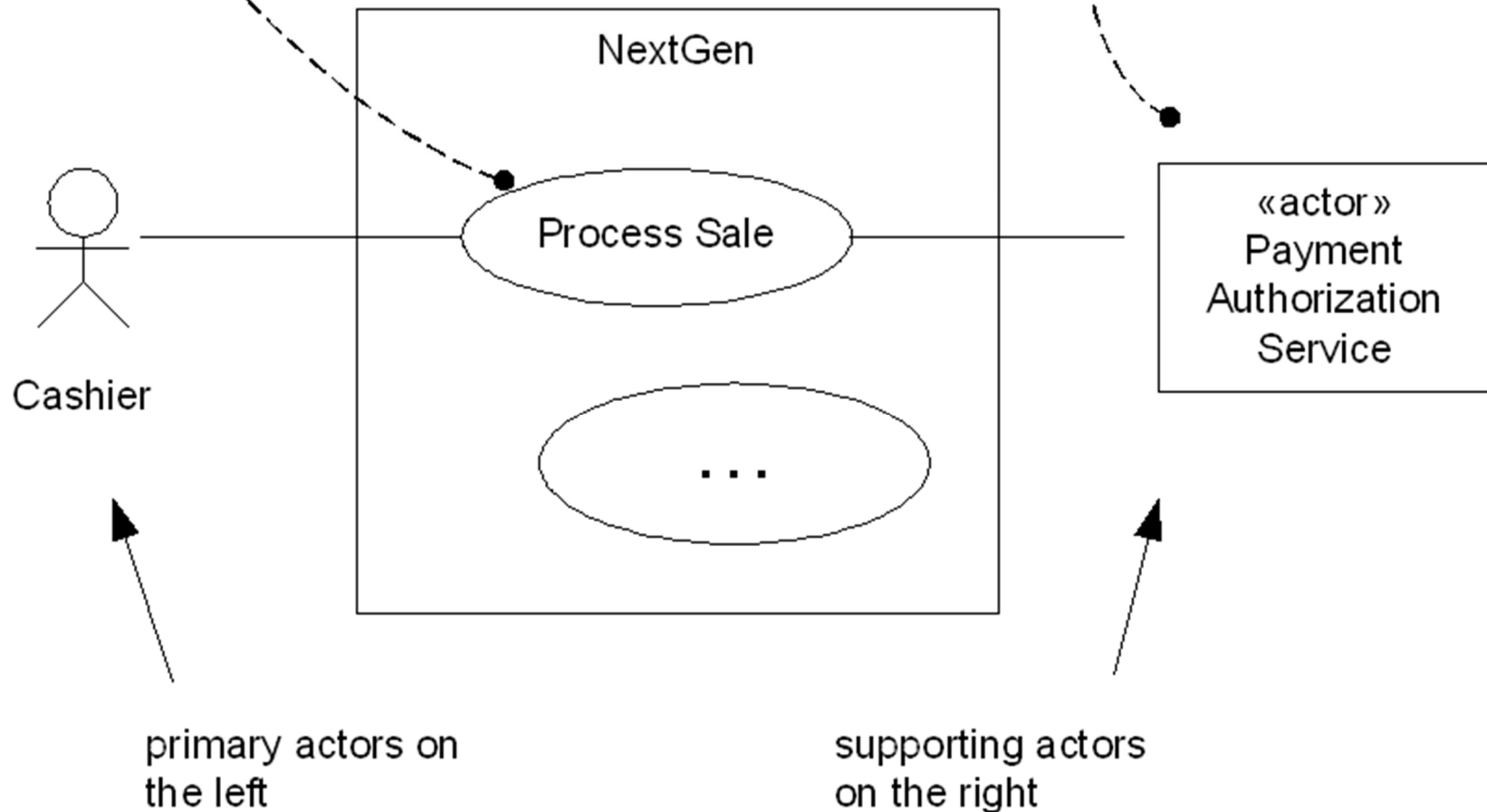


Draw the relationships.

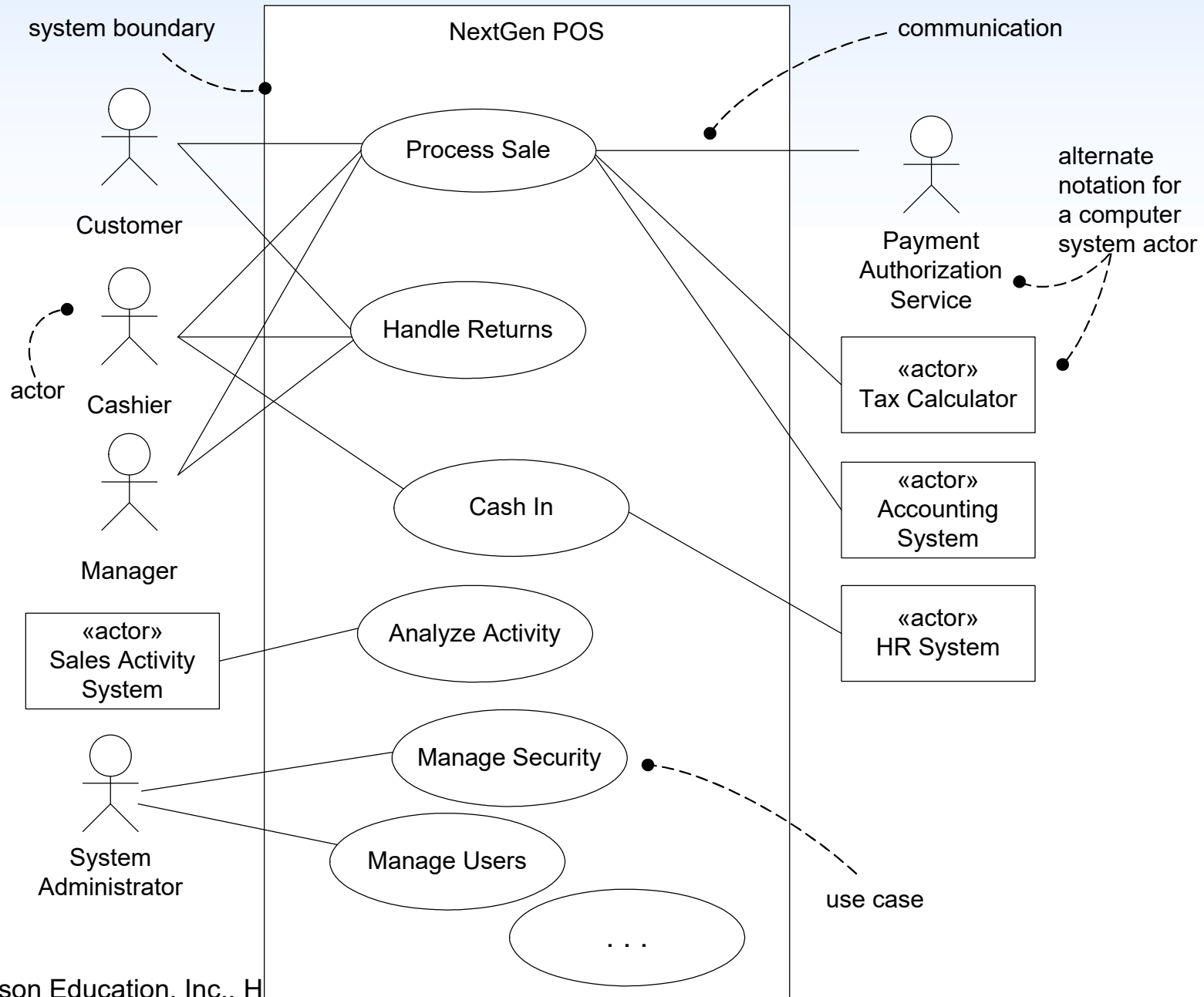
Use Case Diagram

For a use case context diagram, limit the use cases to user-goal level use cases.

Show computer system actors with an alternate notation to human actors.



Use Case Diagram



Process for Creating Requirements Level Use Case Diagram

Extract verb/verb phrases from specification,

Identify candidate use cases,

- Is this entity relevant?
- Is this entity within the scope of the system?
- Is this entity at the highest level of abstraction?
- Decide name of use case

Identify candidate users,

Candidate users are taken from the Class Diagram.

Draw the use cases,

Identify relationships between candidate users and use cases,

Obtain from specification and customer.

Draw the relationships.

Process for Creating Requirements Level CD



Extract noun/noun phrases from specification,



Identify candidate classes,

Is this entity relevant?

Can I uniquely identify this entity?

Is this entity within the scope of the system



From the remaining entities,
identify candidate attributes,

Is this entity relevant?

Is this candidate a property of a candidate class?



Draw the classes,



Identify relationships between the
candidate classes,

Obtain from specification and customer.



Draw the relationships.