BUS 362
Assignment 08 - Use Case Diagrams

Ashton Charbonneau

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Use Case Diagrams

Purpose

- Shows how actors interact with the use cases that you have created
- Visual representation of how users move from use case to use case
- Use cases connected based on shared information

Elements

- System box
  - Represents the boundaries of your system
  - Actors should all be external to the system and thus outside of the system box
  - Labeled with the system name

- Actors
  - Represents a role (much like an external entity in a DFD/use case)
  - Not a complete match with your external entities in the DFD
  - Actors can be superclasses or subclasses of one another - the subclass inherits the characteristics of the superclass

Elements

- Use cases
  - Major piece of system functionality
  - The same use cases we've been using all semester

- Actor/use case relationships
  - Links actors and use cases
  - Has a star at each end to represent multiplicity (how many times can a customer do this? How many users can this be done for?)
  - Actors are linked with use cases that they participate in

Elements

- Use case relationships
  - Use cases can extend or include another use case
  - Labelled «extends» or «includes»
  - «extends» shows that a use case can be or is used by the use cases it points to, but not necessarily every time
    - Eg. once you have enrolled in university, you may choose your for classes
    - [Enroll in university] ---«extends»---> [Choose classes]
  - «includes» means that when one use case is initiated, all the use cases that include it (and are pointing towards it) must also be completed
    - Eg. you must update your customer information before you can make a purchase
    - [Update information] ---«includes»---> [Make purchase]

Textbook Pages

- 5th Edition: page 516-521
- 6th Edition: page ?

Example

Example

- Car rental system
- Use cases
  - Reserve Car
  - Pick Up Car
  - Drop Off Car
  - Check Car Condition
  - Sell Car

Assignment

Instructions

- Use MS-VISIO to dreaw the Use Case Diagram that corresponds with the description of the process.