CNIT 38000: Assignment #9
Component Diagram (CD)

Prepare:

Using your Class Diagram from Assignment #7. Assume:

- It is a secured system – there is a security component.
- Data is stored/accessed on a database (relational).
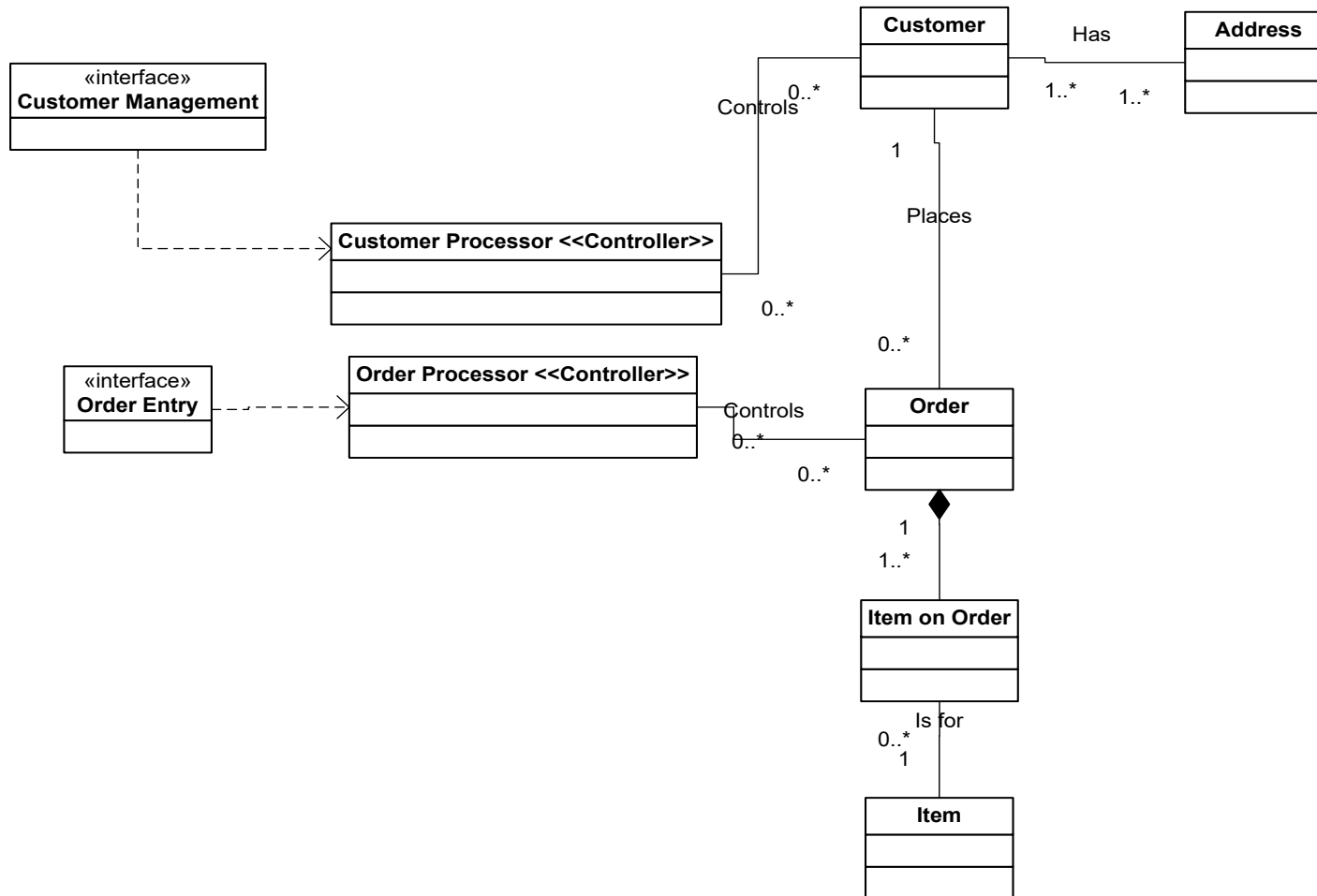
LAB OBJECTIVES

Analyze System Components.
Distinguish Interface Objects.
Distinguish Controller Objects.
Distinguish Business Objects.
Distinguish System/Persistent Data.
Model a Component Diagram (CD).

REQUIREMENTS:

1. You **MUST** draw your diagram using Visual Paradigm or Microsoft Visio Professional or Upgraded. The templates that your Component Diagram and UML are to be used.

2. For document type, use **UML COMPONENT.**

3. Use the example below to complete a component diagram for your *Class Diagram*.

4. Use a TEXT BOX to document ALL your assumptions.

5. Copy and paste your diagram into the Word document (Assignment #8 - Student Answers.doc) where indicated, replacing the yellow, highlighted text. Add your name and submission date. NO .PNG files.

6. DO NOT zip your file

7. Attach the .VPP or .VSDX file(s) in case I have questions.

8. DO NOT use an old student's file, as there are some changed system, actor, process names, etc. in this semester's assignments.

9. Attach and submit the two files **<u>separately</u>** in Brightspace.

Example of Component Diagram, but use yours.

Interface

Controller

Business

System/Persistence Data

<<component>>
Address

DataAccess

Address

Encryption

<<component>>
Security
<<Infrastructure>>

AccessControl

<<component>>
Customer Management <<UI>>

<<component>>
Customer Processor
<<Controller>>

Customer

<<component>>
Customer

DataAccess

Customer

<<component>>
Persistence
<<Infrastructure>>

Persistence

<<component>>
Order

DataAccess

Order

<<component>>
Order Entry <<UI>>

<<component>>
Order Processor
<<Controller>>

Order

<<component>>
Item on Order

DataAccess

Order

<<component>>
Customer DB
<<Database>>

JDBC

<<requires>>

<<component>>
Item

DataAccess

Order

<<component>>
Order DB
<<Database>>

JDBC

The system is secured with some security component

Data is stored and accessed through a customer database

Data is stored and accessed through a Order database

Each component of the business connects to the encryption port
(Connections not shown)