

COSC 3380

Name: Paola Garibay_____

Seat #_F1

Project 1:

(100 points)

a.	<input type="text"/>	50 points
b.	<input type="text"/>	30 points
c.	<input type="text"/>	10 points
d.	<input type="text"/>	10 points

PLEASE ENTER YOUR GRADE IN THIS BOX & ALSO on the CHECK SHEET:

a. (50 points – separate document) Using the above COSC3380 Data Requirements create the ERD Model (must fit on one page)

(Conceptual Model – **WHAT** – Analysis).

(You HAVE to use ER symbols from the textbook!)

(You must use Microsoft Word; no by hand deliverables will be accepted)

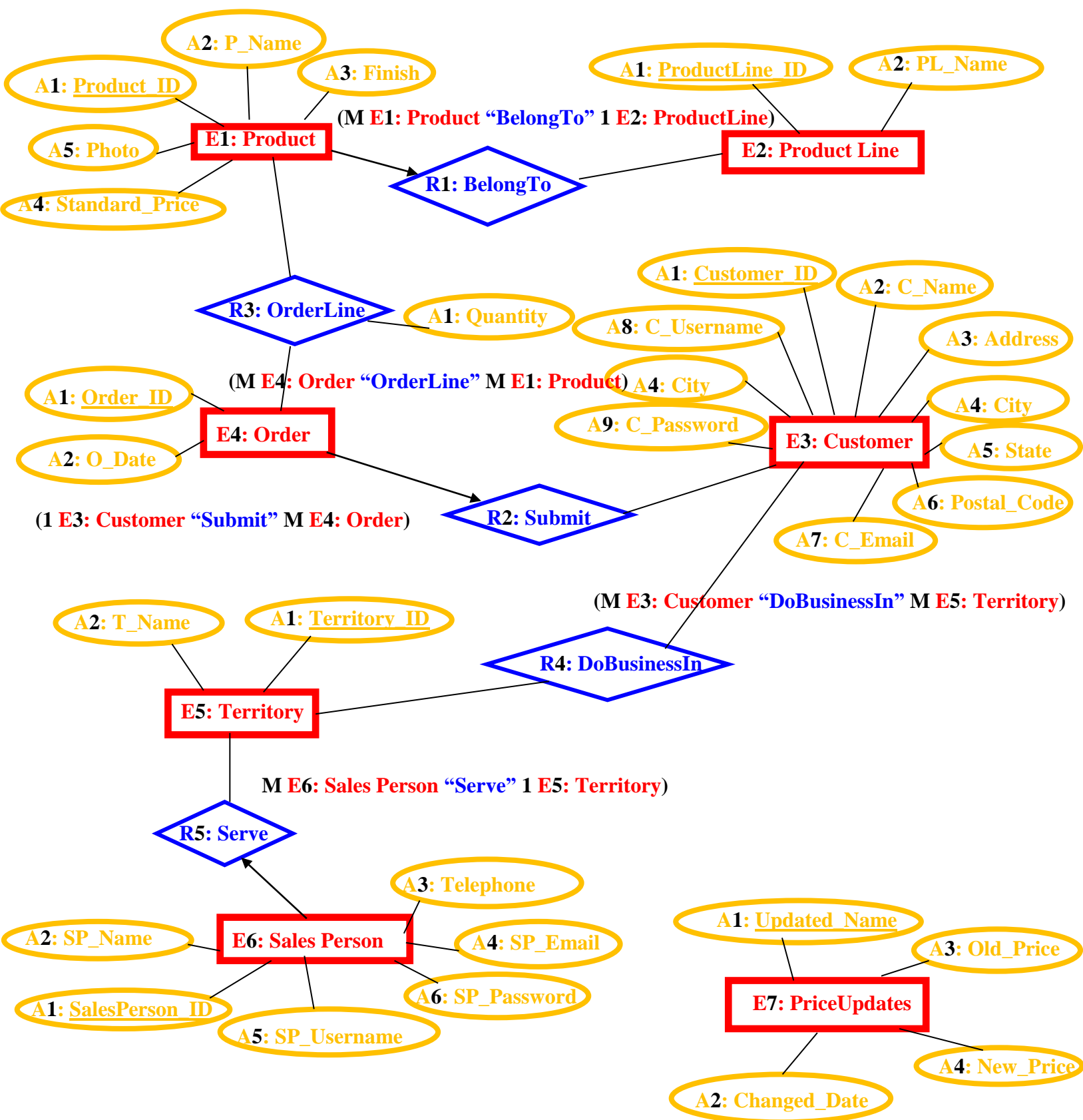
A systematic approach to do conceptual design of a database is given below:

- Step 1. Identify Entity Sets
- Step 2. Identify Attributes
- Step 3. Identify Keys
- Step 4. Identify Relationship Sets
- Step 5. Identify Cardinality

Data Analysis documents, Project 1 with Line Numbers for ERD Modeling.doc and Project 1 Data Requirements Specifications.doc need to be turned in.

Please remember the ERD Diagram does not have any OVALS on it.)

(Just place the ERD Diagram HERE)



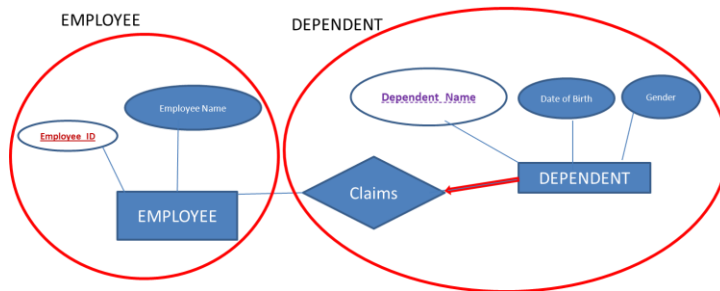
b. (30 points) **COSC3380 Relational Model** (must fit on one page)

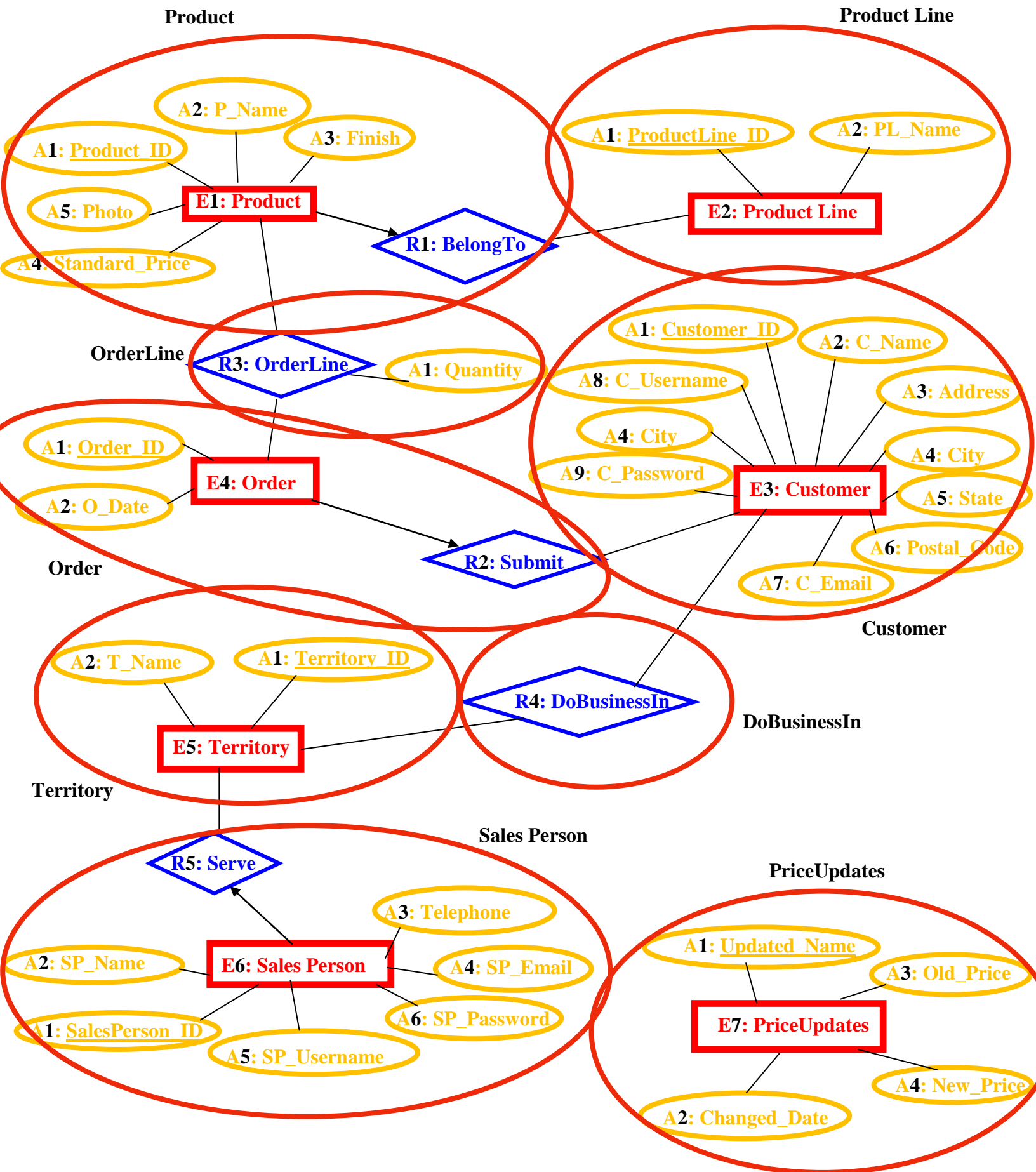
(Internal Model – **HOW** – Design).

#Relations/Tables: 9

Using the **ERD Model** created in a., create a list of each **Relation (Table)** by using the textbook notation of placing ovals (make sure you Label them – these will be your Relations names) on the **ERD Model** for each **Relation**. Use the pictorial format for the Relational Model presented in class (Please use the SAME names as in the Labels for your Relations. You need to turn in **(You HAVE to use Relational symbols from the textbook!)** (You must use Microsoft Word, and your Word ERD Model marked up with ovals for the **Relations**; no deliverables by hand will be accepted)

This is just an example of ERD to Relational mapping:





Product Line

<u>ProductLine_ID</u>	PL_Name
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Product

<u>Product_ID</u>	P_Name	Finish	Standard_Price	Photo	<u>ProductLine_ID</u>
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OrderLine

<u>Product_ID</u>	<u>Order_ID</u>	Quantity
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Order

<u>Order_ID</u>	O_Date	<u>Customer_ID</u>
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Customer

<u>Customer_ID</u>	C_Name	Address	City	State	Postal_Code	C_Email	C_Username	C_Password
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DoBusinessIn

<u>Customer_ID</u>	<u>Territory_ID</u>
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Territory

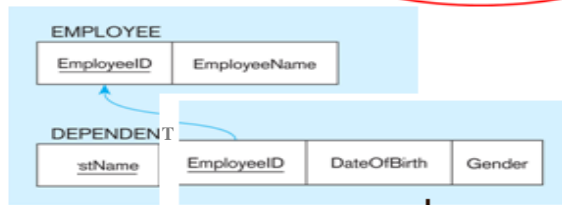
<u>Territory_ID</u>	T_Name
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Sales Person

<u>SalesPerson_ID</u>	SP_Name	Telephone	SP_Email	SP_Username	SP_Password	<u>Territory_ID</u>
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PriceUpdates

<u>Updated_Name</u>	Changed_Date	Old_Price	New_Price
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c. (10 points) Given the unnormalized data in b. convert **Relations** to 1NF, 2NF, and 3NF. (If already in 3NF, just state so and do not copy the **Relations** from b.)

Already in 3NF

d. (10 points) Draw the revised **ERD** Model that corresponds to the 3NF **Relations** for c. (You HAVE to use **ER** symbols from the textbook!) (If no change to the **ERD**, just state so and do not copy the **ERD** from a.)

No Change