

Relational Model

using the textbook notations

of *Relations*: 8

Table of Relations:

<i>Relation 1</i>	<i>Relation Customers</i>
<i>Relation 2</i>	<i>Relation Orders</i>
<i>Relation 3</i>	<i>Relation Books</i>
<i>Relation 4</i>	<i>Relation Publisher</i>
<i>Relation 5</i>	<i>Relation Author</i>
<i>Relation 6</i>	<i>Relation Employee</i>
<i>Relation 7</i>	<i>Relation Testimonial</i>
<i>Relation 8</i>	<i>Relation OrderItems</i>

Version 2.0

Approvals Signature Block

COSC 4351	Name	Signature	Date
SE Team Leader			
SE SQA			
SE SQA			
SE DBA			
SE DBA			

of **Es**: **7**

Table of **Es**:

E 1	E Customers
E 2	E Orders
E 3	E Books
E 4	E Publisher
E 5	E Author
E 6	E Employee
E 7	E Testimonial

of Attributes: **46**

Table of Attributes:

E Customers	A1-Customer# A2-LastName A3-FirstName A4-B&SAddress A5-B&SCity A6-B&SState A7-B&SZip A8-Region A9-Username A10-Password A11-Email
E Orders	A1-Order# A2-OrderDate A3-ShipDate A4-ShipStreet A5-ShipCity A6-ShipState A7-ShipZip
E Books	A1-ISBN A2-Title A3-PubDate A4-Cost A5-Retail A6-Category A7-QOH
E Publisher	A1-PubID A2-Name A3-Contact A4-Email

E Author	A1-AuthorID A2-LName A3-FName
E Employee	A1-Employee# A2-FName A3-LName A4-Username A5-Password A6-Role A7-StartDate A8-EndDate A9-Commission A10-Region A11-Email
E Testimonial	A1-TestimonialID A2-Content A3-TDate

of **Rs** : **5**

Table of **Rs**:

R 1	R Place
R 2	R Fill
R 3	R Has
R 4	R Provide
R 5	R Maintains

of **Attributes**: **2**

Table of **Descriptive Attributes**:

R Fill	A1-ITEM# A2-Quantity
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of **Views** : **5**

Table of **Vs**:

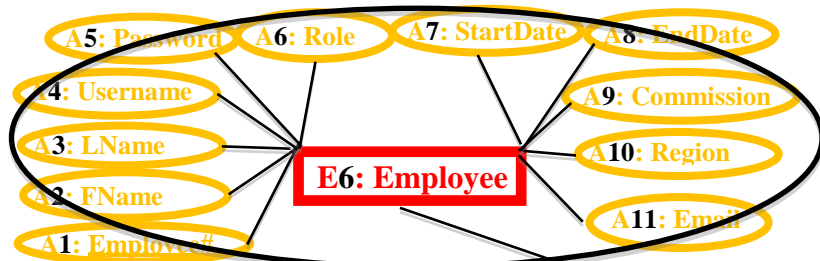
V 1	V Book
V 2	V Order
V 3	V Items
V 4	V Categories
V 5	V Profit

of *Triggers* : 7

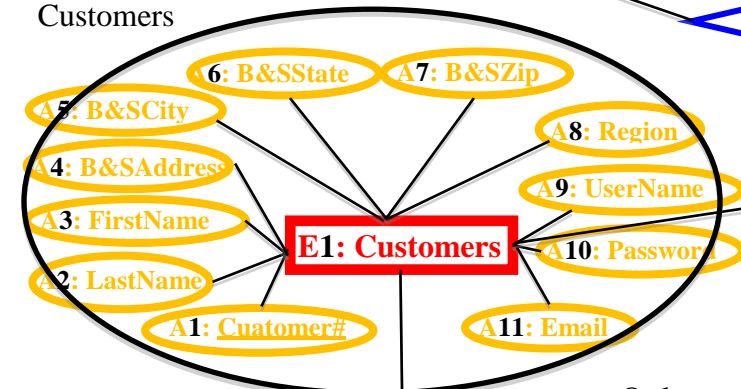
Table of <i>Ts</i> :	<i>T</i> 1	<i>T</i> ReOrderItem
	<i>T</i> 2	<i>T</i> ShipItem
	<i>T</i> 3	<i>T</i> TransferOrder
	<i>T</i> 4	<i>T</i> DistributeGift
	<i>T</i> 5	<i>T</i> TrackCustomers
	<i>T</i> 6	<i>T</i> DiscountItem
	<i>T</i> 7	<i>T</i> DetermineProfitPercentage

a. Using the ERD model created, create a list of each **Relation (Table)**

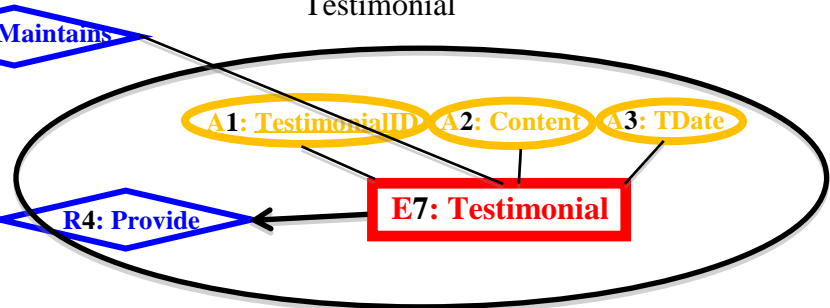
Employee



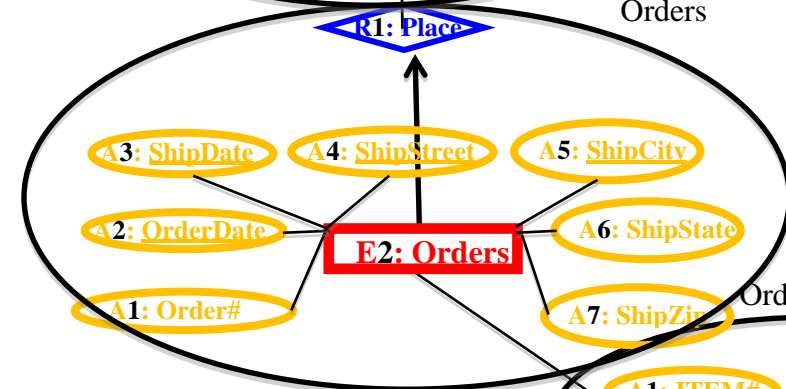
Customers



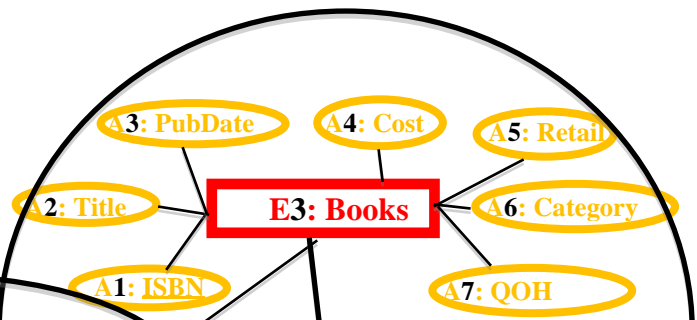
Testimonial



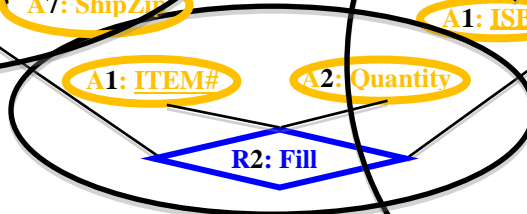
Orders



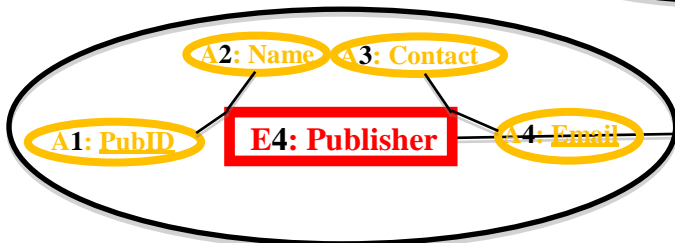
Books



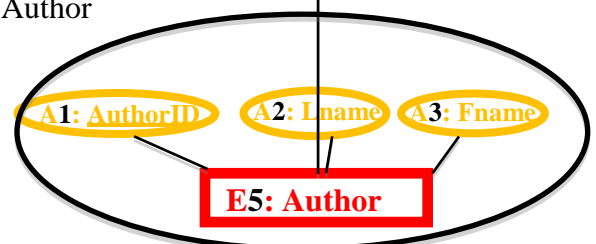
OrderItems



Publisher



Author



List of Relational Tables from ERD:

Customers

<u>Customer#</u>	LastName	FirstName	B&SAddress	B&SCity	B&SState	B&SZip	Region	Username	Password	Email
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Orders

<u>Order#</u>	Customer#	OrderDate	ShipDate	ShipStreet	ShipCity	ShipState	ShipZip
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Books

<u>ISBN</u>	Title	<u>AuthorID</u>	PubDate	<u>PubID</u>	Cost	Retail	Category	QOH
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Publisher

<u>PubID</u>	Name	Contact	Email
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Author

<u>AuthorID</u>	LName	FName
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Employee

<u>Employee#</u>	Fname	Lname	Username	Password	Role	StartDate	EndDate	Commission	Region	Email
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Testimonial

<u>TestimonialID</u>	Content	TDate	<u>Customer#</u>
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OrderItems

<u>Order#</u>	<u>ITEM#</u>	<u>ISBN</u>	Quantity
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b. Convert Relations to 1NF, 2NF, and 3NF.

Already in 3NF:

Customers

<u>Customer#</u>	LastName	FirstName	B&SAddress	B&SCity	B&SState	B&SZip	Region	Username	Password	Email
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Orders

<u>Order#</u>	Customer#	OrderDate	ShipDate	ShipStreet	ShipCity	ShipState	ShipZip
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Books

<u>ISBN</u>	Title	<u>AuthorID</u>	PubDate	<u>PubID</u>	Cost	Retail	Category	QOH
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Publisher

<u>PubID</u>	Name	Contact	Email
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Author

<u>AuthorID</u>	LName	FName
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Employee

<u>Employee#</u>	Fname	Lname	<u>Username</u>	Password	Role	StartDate	EndDate	Commission	Region	Email
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Testimonial

<u>TestimonialID</u>	Content	TDate	<u>Customer#</u>
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OrderItems

<u>Order#</u>	<u>ITEM#</u>	<u>ISBN</u>	Quantity
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c. Draw the revised ERD model that corresponds to the 3NF relations for b.

UNCHANGED SAME AS a.

d. Using the revised ERD model created in c., create a list of each relation (table).

UNCHANGED SAME AS b.

DOCUMENT CONTROL

CHANGE HISTORY

TLs entries (assigned work and due dates) before releasing to the team (all SQAs)

Revision	Name	Due Date	Description
1.A	DBA	03/23/2014	Complete Relational Model
1.B	DBA	03/23/2014	Complete Relational Model
1.X	SQA	03/26/2014	Review Document
1.Y	SQA	03/26/2014	Review Document

TMs entries when they completed their work

Revision	Name	Completed Date	Description
1.A	DBAs Name	XX/XX/XXXX	I completed XXX
1.B	DBAs Name	XX/XX/XXXX	I completed YYY
1.X	SQA Name	XX/XX/XXXX	I reviewed Document
1.Y	SQA Name	XX/XX/XXXX	I reviewed Document

TLs entry before BLUE TEAMS DELIVERABLES

Revision	Name	Due Date	Description
2.0	TL Name	XX/XX/XXXX	I changed Version to 2.0

DOCUMENT STORAGE

This file is stored in SVN at <https://svn.cs.uh.edu//svn/cosc4351/team1/DB TEAM PROJECT DELIVERABLES/Relational Model using the textbook notations.doc>.