

Database Design Project Deliverable #1 requirement analysis and conceptual model

CIS8040 Database Management Systems, spring 2010, Jack Zheng

Deliverable content

The following parts should be included and compiled into a single document/report.

- 1) Cover page.
- 2) Business summary: a brief description of the business and the functional area you are responsible for. Also include the overview and general purposes of the database you are designing. List major business functions that your database intends to support.
- 3) A complete ERD (Visio 2007 format) embedded in the document.
- 4) Data dictionary and business requirements (see templates attached):
 - a) Entity definition: definition and description for each entity.
 - b) Entity/function mapping table: indicates which entities are involved in a certain business/system function. This will help you to identify missing data/entity.
 - c) Attribute definition: description of major attributes.
 - d) Relationship definition: description of each relationship.

Submission - Due Date: 3/7/2008 Sunday

All required files are submitted through myRobinson

- a) A written formal report in Word or PDF format (with the diagram embedded).
- b) A Visio 2007 file with the original ER diagram.

Grading

Grading is base on the quality and completeness of your report and ERD.

Data dictionary templates (with some examples)

1. Entity Definitions

Entity	Description	Business Requirements/Rules and Modeling Justifications
Customer	A customer is a person who did or is doing business with Cool Coat Paint Company. Customer places order and is the receiver of the painting service provided by Cool Coat Paint Company. The company has about 500 active customers.	<ul style="list-style-type: none">• A customer is a person.• If the customer is an organization, then a representative of the organization will be the customer – the company has few organizational customers, so they are not modeled separately. Organization info will be recorded as a memo.
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2. Entity and system function mapping table

Entity \ Function	F1	F2	F3	F4	...
Customer	X	X			
Contact	X		X		
...					

F1 - customer service: retrieve customer information when serving customers.

F2 - sales management: (descriptions here)

etc.

3. Attributes Definitions (organized by entity)

Entity: Customer

Attribute	Description	Business Requirements/Rules and Modeling Justifications
First Name (identifier)	Customer's first name.	<ul style="list-style-type: none"> First name is required First name is the identifier; this is weird but requested by the user
State	The US state in which customer lives. This information, together with the address, city and zip code enables employees to contact customer by mail.	<ul style="list-style-type: none"> Using 2 letter abbreviation Required Value range: 50 US states (only)

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4. Relationship Definitions (organized by entity)

Entity: Customer

Related entity	Description	Business Requirements/Rules and Modeling Justifications
Order	Customers place orders. <ul style="list-style-type: none"> Multiplicity: 1...* 	<ul style="list-style-type: none"> One customer places many orders One order is placed by one customer A customer does not have to place an order An order must be placed by a customer

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