

ITD 256 Advanced Database Management

Practice Exercise 2 Individual Assignment

ERD: Physical Entity Relationship Diagram

- Choose one of the below scenarios and Create the physical level ERD. (You may choose the same or different scenario to the one you worked on in Exercise 1). You must create the ERD using Microsoft Visio or other diagram drawing software as indicated by your professor. Make sure to submit a PDF version of your diagram along with the actual diagram file (in case your professor can't open your Visio file, they can use the PDF file to grade). Make sure to submit the diagram by the due date as specified by your professor.

Scenario 1:

This is a simple list table of a company trying to keep track of parts that they sell and orders that came in purchasing those parts (in other words, not a database but a flat one table file). You will design a database for this company so that they won't be relying on a simple 1 table list system to keep track of their data. Looking at the table below, identify the separate entities and attributes and design a physical level Entity Relationship Diagram for this company.

OrderNum	OrderDate	PartNum	Description	NumOrdered	QuotedPrice
21608	10/20/2010	AT94	Iron	11	\$21.95
21610	10/20/2010	DR93	Gas Range	1	\$495.00
21610	10/20/2010	DW11	Washer	1	\$399.99
21613	10/21/2010	KL62	Dryer	4	\$329.95
21614	10/21/2010	KT03	Dishwasher	2	\$595.00
21617	10/23/2010	BV06	Home Gym	2	\$794.95
21617	10/23/2010	CD52	Microwave Oven	4	\$150.00
21619	10/23/2010	DR93	Gas Range	1	\$495.00
21523	10/23/2010	KV29	Treadmill	2	\$1290.00

OR

Scenario 2:

This is a simple list table of a company trying to keep track of employee assignment to company projects (in other words, not a database but a flat one table file). You will design a database for this company so that they won't be relying on a simple 1 table list system to keep track of their data. Looking at the table below, identify the separate entities and attributes and design a physical level Entity Relationship Diagram for this company.

Project Code	Project Name	Project Manager	Project Budget	Employee No.	Employee Name	Department No.	Department Name	Hourly Rate
PC010	Reservation System	Mr. Ajay	120500	S100	Mohan	D03	Database	21.00
PC010	Reservation System	Mr. Ajay	120500	S101	Vipul	D02	Testing	16.50
PC010	Reservation System	Mr. Ajay	120500	S102	Riyaz	D01	IT	22.00
PC011	HR System	Mrs. Charu	500500	S103	Pavan	D03	Database	18.50
PC011	HR System	Mrs. Charu	500500	S104	Jitendra	D02	Testing	17.00
PC011	HR System	Mrs. Charu	500500	S315	Pooja	D01	IT	23.50
PC012	Attendance System	Mr. Rajesh	710700	S137	Rahul	D03	Database	21.50
PC012	Attendance System	Mr. Rajesh	710700	S218	Avneesh	D02	Testing	15.50
PC012	Attendance System	Mr. Rajesh	710700	S109	Vikas	D01	IT	20.50

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Grading Rubric:

Work is Complete	10 Points
Physical ERD is in correct format/uses correct symbols/notations	15 Points
Correct Attribute Data Types/Constraints Identified	15 Points
Correct Relationship between Entities Identified	5 Points
Cardinality is correctly identified between entities	5 Points
Total:	50 Points