

RIT	School of Information	iSchool
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Homework 2 - Creating a database and a simple table in MySQL

Due Date: Sunday September 8, 2019 @ 6pm (2191)

Make sure you have the `--verbose` option on when you start this assignment. When finished, submit your tee file to the drop box labeled HW2. Include tee file, script files `yourlastname_createContactInfoTable.sql` `yourlastname_insertContactInfoTable.sql` and your query scripts 1- 5 `yourlastname_query#.sql` example **Habermas_query1.sql** **Please do NOT put all the files in a zip file. I like to grade .txt files and .sql files and sometimes .PDF files.**

(Use the MySQL command “tee” to create a log before you start this homework, read last paragraph on page 2 before you begin)

You have been hired as a consultant to create a contact management database, called Conman, for a small company. The specification for the database is given in the appendices. Please review the content in the appendices before continuing.

(Use the MySQL command “tee” to create a log before you start this homework)

Please don't leave syntax errors in your tee file. Edit your tee file before you submit it for grading and remove any syntax errors.

Step 1: Create the database

With MySQL open, at the prompt type in the following command to create the Conman database:

CREATE DATABASE Conman;

You now need to specify that you want to work with the Conman database by issuing the following command:

USE Conman;

Step 2: Create the contact info table

Write a script to create the contact_info table based on the specifications in Appendices A, B, and C. You can use your favorite text editor to create the create table statement, but **do not use Microsoft Word** I would suggest you use textpad www.textpad.com

Your script **must** be named **`yourlastname_createContactInfoTable.sql`**.

Please think very carefully about what would be an appropriate primary key for this table. You don't have to agree with my suggestion, but if every record has a unique email address could email address be a primary key to this assignment? Please set what you think is the appropriate primary key to this table.

Run the saved script from within MySQL by entering the following command, including the full path name to the folder with your script file. For example,

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SOURCE P:\HW02\Soln_Scripts\Habermas_createContactInfoTable.sql

The beauty of using scripts is that if you have an error in your statement, you don't need to re-type it, you simply edit the script and then re-run it.

Once your script has successfully created the contact_info table you can verify the structure of the table by issuing the following command:

DESCRIBE contact_info;

Step 3: Insert data into the table

Now that the table is created add data into it. Create one script to add all of the records in Appendix D, Please ADD a record for yourself with only your firstName, middleInitial,, lastName, suffixDescription, and titleDescription & email (NULL for remaining attributes).

You **must** name your script as follows: *yourlastname_insertContactInfoTable.sql*.

After the script has been executed, run the following command to verify that the information has been successfully inserted into the contact_info table:

SELECT * FROM contact_info;

The table isn't very readable given the length of records; just make sure you have 6 different records in the table. Note: you can use the options on the MySQL window to make the window wider and add a scroll bar which makes the data easier to view.

Step 4: Query the contact_info table

Write a script for each of the questions below using the contact_info table. The format for naming each script should be *yourlastname_query#.sql* example **Habermas_query1.sql** where # is the number of the query.

- 1) What are the firstnames and lastnames of people with the lastname of Nelson?
- 2) What are the firstnames, lastnames, jobtitles, and departments of people that work at Concor International, Inc.?
- 3) Show all of the attributes and records from the contact_info table. Display results vertically.
- 4) What are the firstnames and lastnames of contacts who are not located in CA?
- 5) Show the firstname, lastname, and phone number for those contacts that have either a home phone or a cell number listed.

Step 5: Submitting your work

Make sure the "—Verbose" option is turned in before you start MySql. Use the MySQL command "tee" to create a log before you start this homework.

You must enter 3 comments at the top of your tee file

```
MySQL> tee Lastname_Homework2.txt
```

```
-- Your name
```

```
-- Today's date
```

```
-- Homework #2
```

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Keep the tee running until you have completed your Queries. (DO NOT include all your error attempts in the tee file!!!!!!!!!!!!!!!!!!!!!!) Close the tee file with the command "notee"
Upload your file created with the tee command to the drop box for HW2.
To get credit for this homework you will need to upload all your scripts and submit to the HW2 dropbox in your MyCourses. The deadline for submission is given at the top of this handout. Please do NOT put all the files in a zip file.

Appendix A – Entity-Relationship diagram for Conman (ERWin)

Contact Management System (Conman)

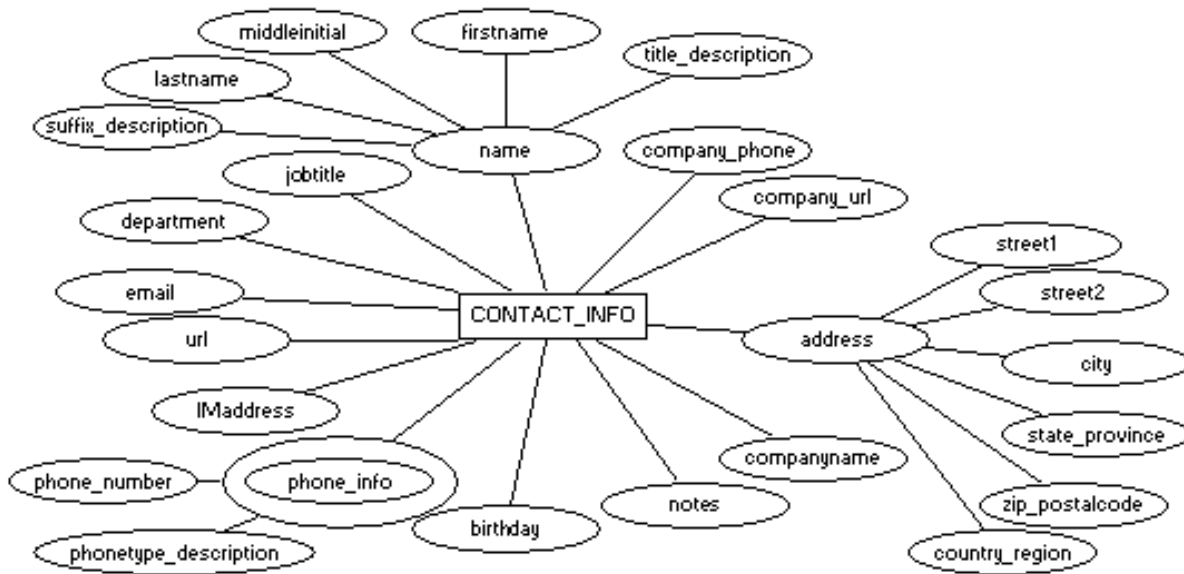
CONTACT INFO

firstname
middleinitial
lastname
suffix_description
title_description
jobtitle
department
email
url
lMaddress
phone_number
phonetype_description
birthday
notes
companyname
street1
street2
city
state_province
zip_postalcode
country_region
company_url
company_phone

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Appendix B. Entity-Relationship diagram for Conman (Chen notation)

Contact Management System (Conman)



Note: the double circle notation represents a "multivalued" attribute. Above, this indicates that there may be multiple values of the phone-info. Here we will restrict the ConMan system to one telephone.

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Appendix C. Data Dictionary for Conman: Information describing a contact_info table.

Attribute Name	Data type	Description
firstName	varchar(25)	The first name of the contact.
middleInitial	char(1)	The middle initial of the contact.
lastName	varchar(25)	The last name of the contact.
suffixDescription	varchar(5)	A description of the suffix a contact may have after his/her name.
titleDescription	varchar(5)	The title the contact use before his/her name.
jobTitle	varchar(40)	The job title of the contact.
department	varchar(30)	The name of the department the contact works for within the company.
email	varchar(35)	The email address of the contact.
url	varchar(50)	The URL of the contact's webpage.
IMAddress	varchar(25)	The instant messaging address of the contact.
phoneNumber	varchar(25)	A phone number for the contact.
phoneDescription	varchar(10)	A description of the phone number provided by the contact (ex. home, work, cell, fax, etc.).
birthday	date	The date of birth of the contact.
notes	varchar(255)	Any notes or comments on the contact.
companyName	varchar(30)	The employer of the contact.
addressLine1	varchar(40)	A first line for the street address of the company.
addressLine2	varchar(40)	A second line for the street address of the company.
city	varchar(20)	The city the company is located in.
state_province	varchar(15)	The state or province the company is located in.
zip_postalcode	varchar(10)	The zip code or postal code of the company.
country_region	varchar(15)	The country or region the company is located in.
companyURL	varchar(50)	The URL for the company's website.
companyPhone	varchar(12)	The main phone number for the company.

Notes

1. Use spelling in the table above, not those in ER data model or ER diagram which may differ. The author does not have access to the original diagrams to change the names.
2. Look up the use of the date data type in the MySQL 5.5 Reference Manual.

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Appendix D. Data for contact_info table

Attribute Name	Record #1	Record #2	Record #3	Record #4	Record #5
firstName	Jacob	Charlene	Karson	Les	Rachel
middleInitial	P		B	M	
lastName	Jacobson	Reynolds	Campbell	Nelson	Woods
suffixDescription	Jr.			Ph.D.	
titleDescription	Mr.	Mrs.	Dr.	Prof.	Miss.
jobTitle	Director	Assistant to Finance Director	Chief Resident	Professor	
department	Finance	Finance	Pediatrics	Business	
email	rjameson@concor.com	creynolds@concor.com	kbc232@mvch.org	lmnbus@rit.edu	goof@go.com
url	www.concor.com/~rjames				
IMAddress	jpjacobson	charreynolds			Goofy12
phoneNumber	323-546-6834 ext. 29	323-546-6834 ext. 30	585-544-1212	585-475-0000	585-532-4332
phoneDescription	work	work	home	work	cell
birthday	1969-07-13	1972-06-15	1955-01-05	1964-03-23	1985-05-06
notes	All meetings must be scheduled through Charlene Reynolds	Very nice, but can make things difficult if you make her angry.	Wife: Molly Kids: Cassidy, Justine, and Cory.	Hates when work is submitted late	Favorite color is purple.
companyName	Concor International, Inc.	Concor International, Inc.	Mountain View Hospital	RIT	
addressLine1	143 South Main Street	143 South Main Street		Bldg. 12	
addressLine2				102 Lomb Memorial Drive	
city	Los Angeles	Los Angeles		Rochester	
state_province	CA	CA		NY	
zip_postalcode	90012-3712	90012-3712		14623	
country_region	USA	USA		USA	
companyURL	www.concor.com	www.concor.com		www.rit.edu	
companyPhone	323-546-6834	323-546-6834			