

Required Activities/Deliverables for Up the Hill Bakery
The Database Segment
5% points

Project Objectives

Your client, the owner of the Up the Hill Bakery, needs to know:

- A. How much revenue was generated by each item today*? What is the grand total?
- B. For each customer who had a delivery today*, what was the billing amount? What is the grand total?

* today = the day you run the report

Important Note:

The book points out that there are student files available to you somewhere on the Web. You are discouraged from finding these files because they will be useless to you: You are required to design the tables from scratch and enter **your own** bogus data in these tables. You cannot use the data already provided for you. Doing so will constitute cheating and plagiarism.

Your report will consist of 15 single-sided, stapled sheets. The first, un-numbered sheet of your deliverable will be a cover page identifying the usual details (your name, course number, assignment title, date, etc.). The remaining 14 pages should be numbered consecutively 1-14, with contents specified below.

1. Tables

Activity:

A. Design the three tables: inventory, customer, order. Do so in accordance with the overall specifications in the book:

- inventory table: p. 5
- customer table: p. 6 (add a new attribute called “Establishment Name”)
- order table: pp. 48-49; note that the book does not go into detail regarding the basic design of this table (probably because the authors have already designed it for you, as pointed out under the above “Important Note”). All you need is the information provided on p. 48 under “Design Principle” and on p. 49 regarding linking the order table to the other two tables. You also need the following information on how to put the primary keys of inventory/customer tables in the order table as foreign keys ...

How to put the primary key of table X as a foreign key in table Y

1. *Insert an attribute in table Y that has the exact same name as the primary key of table X.*
2. *Select lookup wizard for data type (bottom of the drop down list)*
3. *Check “I want the lookup column to look up the values in a table or query”; Next*
4. *Highlight the table where the foreign key resides as a primary key, i.e. table X*
5. *Select all the fields that you want to become columns in your lookup column, typically id and name/description;*
6. *Keep the default check on “hide key column”*
7. *Finish.*

Note: Depending on which version of Access you are using, you may find slight variations in the above process.

B.

- For the inventory table, enter the three records listed on p. 4, and then 7 more records of your own fake, bogus data.
- For the customer table, enter the three records listed on p. 5, and then 7 more records of your own fake, bogus data. For the added attribute, “Establishment Name”, use these values for the three records listed on p. 5: **C123: City Hall; C124: Individual; C125: Cheesecake Factory**
- For the order table, enter the three records listed on p. 48, and then **17** more records of your own fake, bogus data.
 - Note that the customer/inventory data you enter for each order must pull the values from data already existing in the customer and inventory tables.
 - For DeliveryDate, use the date on which you are going to produce/print the queries/reports below.

C.

- Find the “Relationships” icon in Access and click it. It opens the entity-relationship diagram window, similar to figure 7.1. If the two links (one between the customer/order tables, the other between inventory/order tables) are not there, create them manually (drag/drop). If the 1/∞ designations are not there, double click the connecting lines and check the “Enforce Referential Integrity” checkbox. For a quick refresher on Referential Integrity, read http://en.wikipedia.org/wiki/Referential_integrity

Deliverable:

For each of the 3 tables:

A. design view (similar to figure 1.1) → **pages 1/2/3 of your deliverable**

B. contents/data view (similar to tables 1.1/1.2) → **pages 4/5/6 of your deliverable**

C. the Relationships diagram similar to figure 7.1. → **page 7 of your deliverable**

.5 point

.5 point

1 point

For these (and remaining) deliverables, use the <PrintScreen> capability of your keyboard to take screen shots of the required elements, paste them into your Word document, and crop/resize the images. When cropping, eliminate all the peripheral stuff and show only the required contents.

2. Forms

Activity:

Design the three forms that sit on top of the three tables: inventory form, customer form, order form. Do so in accordance with the overall specifications in the book:

- inventory form: p. 6
- customer form: p. 7
- order form: the book does not go over this, but by now you’ve got the hang of it and surely know how to do it on your own.

Deliverable:

For each of the 3 forms:

form view (similar to figures 1.2/1.3) → **pages 8/9/10 of your deliverable**

1 point

Again: <PrintScreen>, paste, crop, resize

3. Queries


Activity:

Design the two queries that will be the basis for producing the two reports that will answer the two questions under Project Objectives:

- A. Query 2 on p. 26
- B. Query 3 on p. 50

Deliverable:

For each of the 2 queries:

Query layout (similar to figures 7.2) → *pages 11/12 of your deliverable*  1 point

Again: <PrintScreen>, paste, crop, resize


4. Reports

Activity:

Design the two reports that will answer the two questions under Project Objectives:

- A. Report 2 on p. 29
- B. Report 3 on p. 53

Deliverable:

Run the two reports that will answer the two questions under Project Objectives:  1 point

- A. The Daily Revenue Report (similar to figures 4.4; at the bottom will be the grand total) → *page 13 of your deliverable*
- B. The Daily Billing Amount Report. This report will consist (in addition to a title, of course) of two columns: one showing the name of establishments to which we sold today, the other showing the billing amounts for each establishment; at the bottom will be the grand total. → *page 14 of your deliverable*

Again: <PrintScreen>, paste, crop, resize