

TP Assignment 4

Instructions: You will need to combine both problems into one MS Access file. Therefore, you will only submit one file on blackboard. Once both problems are in one file, add an additional table and rename it to your full name. The additional table will have a data field titled G_ID. Insert your G-ID in the data field and save your work. Submit your file to blackboard. Note: The additional table will not be linked to any of the tables in the problems.

Due date: Friday, March 10th at 10pm.

Problem 1:

WasteNot Recycling picks up recyclables from homeowners in Boulder, Colorado. Neighborhoods subscribe to the service so that pickup is cost-effective. WasteNot provides special containers to subscribers for sorting recyclables: a blue container for paper products and a purple container for aluminum, plastic, and glass products.

Subscribers place their recycling containers on the curb for biweekly pickup. Each recycling container is weighed before being emptied. WasteNot drivers carry handheld recording devices used to track each pickup. Subscribers receive quarterly profit-sharing checks based on their contributions. If WasteNot does not make a profit, subscribers are not paid for their recyclables. If WasteNot makes a profit, subscribers share in that profit. WasteNot has asked you to help develop a relational database that will effectively track subscribers, using the data downloaded from the drivers' devices. WasteNot has provided you with a snapshot of two tables you need to create. The Customer table shown here holds static customer information such as name, address, and phone. The Customer Record table holds data about each recyclable pickup. The data is stored in the spreadsheet titled, problem1.xls.

Specifically, you are asked to

1. Create a Microsoft Access database.
2. Create the tables, fields, data types, and primary key(s) for the database.
3. Create the relationship(s) needed between the tables.
4. Populate the database with the data provided above.

Customer Table:

Customer ID	Last Name	First Name	Street	City	State	ZIP Code	Phone	First Pickup
1	Wagoner	Sam	5480 Alpine Street	Boulder	CO	80308	(303) 161-5545	05/25/2004
2	Calahan	Eliza	2140 Edgewood Avenue	Boulder	CO	80308	(303) 886-6003	05/25/2004
3	Lake	James	701 Eastman Road	Boulder	CO	80308	(303) 562-4499	08/25/2005
4	Meadows	Sara	Pond Hill Drive	Boulder	CO	80308	(303) 792-3646	02/28/2004
20	Smith	Alto	114 Lexington Street	Boulder	CO	80308	(303) 838-7111	06/02/2004
64	Monarch	Shiela	431 Phillips Lane	Boulder	CO	80308	(303) 352-4847	07/17/2005
65	Guo	Amy	1935 Snow Avenue	Boulder	CO	80308	(303) 555-6731	05/19/2005
80	Rivera	Juan	482 Weston Avenue	Boulder	CO	80308	(303) 815-2456	12/28/2004
85	Williams	Max	230 Southpark Circle	Boulder	CO	80308	(303) 333-0000	07/19/2003

Customer Record Table:

Customer ID	Srvc Date	Weight Paper	Weight Other
1	11/22/2007	8	15
1	10/15/2007	32	85
1	11/7/2007	12	43
2	11/7/2007	19	0
2	11/22/2007	28	174
3	10/15/2007	5	8
3	11/22/2007	16	32
3	12/4/2007	7	12
20	10/15/2007	18	40
20	11/22/2007	35	60
80	10/15/2007	10	10
80	11/7/2007	9	13
80	11/22/2007	16	18
80	12/4/2007	18	21

Problem 2

Launched in 2005 in Boston, Massachusetts, Academic Software has consistently been the fastest-growing education-focused software retailer in North America. It is committed exclusively to academic customers, offering thousands of full-version software titles at great discounts. Academic Software has partnered with the top technology manufacturers, including Adobe, Microsoft, Sibelius, Sony Media Software, and Wacom, to offer excellent service and prices, which are available only to students, schools, and teachers.

From the very beginning, Academic Software has relied heavily on technology to ensure a positive shopping experience for its customers. The company's philosophy is simple: Hire amazing people, give them the best tools, and help them deliver an unbeatable customer experience.

One facet of Academic Software's business that needs assistance is its database organization. You have been asked to assist Academic Software with creating a relational database structure for organizing software, vendors, and academic categories. Currently this information is stored in an Excel spreadsheet, `problem2.xls`, which Academic Software has provided to you.

Specifically, you are asked to

1. Create a Microsoft Access database.
2. Create the tables, fields, data types, and primary key(s) for the database using the structure provided in the `problem2.xls` file. Note: you will have to normalize the table.
3. Create the relationship(s) needed between the tables.
4. Populate the database with the data provided in the `problem2.xls` file.