

Microsoft Access 2016

Module 2: Building a Database and Defining Table Relationships

A Guide to this Instructor's Manual:

We have designed this Instructor's Manual to supplement and enhance your teaching experience through classroom activities and a cohesive module summary.

This document is organized chronologically, using the same headings in **blue** that you see in the textbook. Under each heading you will find (in order): Lecture Notes that summarize the section, Teacher Tips, Classroom Activities, and Lab Activities. Pay special attention to teaching tips and activities geared towards quizzing your students, enhancing their critical thinking skills, and encouraging experimentation within the software.

In addition to this Instructor's Manual, our Instructor's Resources also contains PowerPoint Presentations, Test Banks, and other supplements to aid in your teaching experience.

Table of Contents

| | |
|---|---|
| Module Objectives | 1 |
| Guidelines for Designing Databases | 2 |
| Guidelines for Setting Field Properties | 2 |
| Creating a Table in Design View | 3 |
| Modifying the Structure of an Access Table | 4 |
| Modifying Field Properties | 4 |
| Adding Records to a New Table | 4 |
| Importing Data from an Excel Worksheet | 5 |
| Creating a Table by Importing an Existing Table Structure | 5 |
| Adding Fields to a Table Using the Data Type Gallery | 6 |
| Modifying the Imported Table | 6 |
| Setting the Default Value Property for a Field | 6 |
| Adding Data to a Table by Importing a Text File | 7 |
| Defining Table Relationships | 7 |
| End of Module Material | 8 |

Module Objectives

Students will have mastered the material in this module when they can:

- | | |
|--|---|
| <p>Session 2.1</p> <ul style="list-style-type: none"> Learn the guidelines for designing databases and setting field properties Create a table in Design view | <ul style="list-style-type: none"> Define fields, set field properties, and specify a table's primary key Modify the structure of a table Change the order of fields in Design view Add new fields in Design view |
|--|---|

- Change the Format property for a field in Datasheet view
- Modify field properties in Design view

Session 2.2

- Import data from an Excel worksheet
- Import an existing table structure
- Add fields to a table with the Data Type gallery

- Delete and rename fields
- Change the data type for a field in Design view
- Set the Default Value property for a field
- Import a text file
- Define a relationship between two tables

Guidelines for Designing Databases

LECTURE NOTES

- Discuss the guidelines for designing databases.

TEACHER TIP

Encourage students to spend adequate time designing their databases; it will save them valuable time later.

The first step in designing a database is to think of all the fields of data you might want to store. Explain to students that for a large database, this step is often done by a group who will “brainstorm” all the data items that will be needed in a database. The next step is to group the fields into tables. Each table will contain a group of related fields. A field will be selected in each table to become the primary key for that table.

The primary key is a field in the table that can uniquely identify a record in the table. When tables will be related to one another, you need to include a common field in the two tables that will be used to form the relationship. For each field, you will need to specify the properties for that field. Field properties include their data type, field sizes, and an optional description of the field.

CLASSROOM ACTIVITIES

1. Classroom Discussion:

What fields would you identify when creating a database of students who attend your school?
(Answer: Identify all the fields needed to produce the required information. For example, information about age, majors, full time, part time, etc.)

2. Quick Quiz:

- The _____ uniquely identifies each record in a table. (Answer: D)
 - A. composite key
 - B. customer ID
 - C. first field
 - D. primary key
- When you store the same data in more than one place, _____ occurs. (Answer: data redundancy)

Guidelines for Setting Field Properties

LECTURE NOTES

- Discuss how to name fields and objects.
- Discuss the assignment of field data types.
- Discuss how to set field sizes.

TEACHER TIP

When selecting a field size, students should make sure the field is big enough to hold the largest piece of data to be stored there. However, the field should not be larger than necessary because this will result in wasted space.

Point out that database design is a very complicated and intricate process. It takes much practice and experience to become a good database designer. The concepts presented in the book are meant to get the student to start thinking about design issues. However, students should know that there is much more to learn about database design.

CLASSROOM ACTIVITIES

1. Quick Quiz:

- True or False: The Field Size property defines a field value's maximum storage size for Text, Number, and AutoNumber fields only. (Answer: True)
- True or False: The primary key determines what field values you can enter for the field and what other properties the field will have. (Answer: False)
- When would you use the Text data type? (Answer: Use the Text data type for names, addresses, descriptions, and fields containing digits that are not used in calculations.)
- When would you use the Memo data type? (Answer: Use the Memo data type for long comments and explanations.)
- When would you use the Number data type? (Answer: Use the Number data type for fields that will be used in calculations, except those involving money; use the Currency data type for money.)

2. Group Activity:

Divide students into groups of five (larger groups allow for more brainstorming). Tell the students they need to set up a database for a softball league. Have students consider that they will need to maintain information about each player and also about each team. Allow students to brainstorm about what fields of information will be needed for each player and for each team. As they consider the required fields, have students also determine each field's properties. Finally, have students determine how these two tables will be related, what type of relationship (e.g., one-to-many) they will have, the common field(s) that form the relationship, and any other specifications that might be important. Have the groups draw out their design similar to Figure 2-2. When they are all finished, have the groups swap their design with another group. Now have each group critique the design that has been passed to them by another group.

[Creating a Table in Design View](#)

LECTURE NOTES

- Demonstrate how to create a table.
- Show how to define a field.
- Show how to specify the primary key.
- Demonstrate how to save the table structure.

TEACHER TIP

When students create a table, they will name the fields and define the properties for the fields. They will also specify the primary key for each table and save the table structure. The table structure is set up and modified in Design view. When all the fields have been defined, they will then specify which field(s) will be the primary key. When the table has been fully defined, they will save the table structure.

Use Figure 2-6 through 2-13 to discuss the elements in the Table window in Design view. Although it is not required to enter a description for the fields, it is advisable to do so. Students should always select a field(s) as the primary key. Although Access does not require that you do so, there are several advantages to selecting a primary key.

CLASSROOM ACTIVITIES**1. Class Discussion:**

In general, what are the steps in creating a table? (Answer: When students create a table, they will name the fields and define the properties for the fields. They will also specify the primary key for each table and save the table structure. The table structure is set up and modified in Design view. When all the fields have been defined, they will then specify which field(s) will be the primary key. When the table has been fully defined, they will save the table structure.)

2. Quick Quiz:

- If you make a typing error, what should you do? (Answer: Click to position the insertion point where the error is located and use either the Backspace key or the Delete key.)
- What data type should you select if you want to display cents and dollar signs? (Answer: Currency)

LAB ACTIVITIES

Divide students into the groups that designed the database for a softball league. Have students create a table based on their group's design.

Modifying the Structure of an Access Table**LECTURE NOTES**

- Demonstrate how to move a field.
- Show how to add a field.

TEACHER TIP

Whenever a database object, such as a table, is modified, Access will ask if you want to save the modification. It is only the structure of the table that must be saved. Records, on the other hand, are automatically stored as they are entered.

When viewing the Relationships window, if the student sees field lists for system tables (beginning with "MSys" in their names), then Access is set to display system tables. To change this setting, click the File tab, click Current Database, click the Navigation Options button, and then clear the "Show Hidden Objects" and "Show System Objects" check boxes. Click the OK button to close the dialog boxes, and then close and reopen the database. (This setting applies to each database and is not a global Access setting.)

CLASSROOM ACTIVITIES

1. Quick Quiz:

- True or False: An Access table cannot be modified once it is created. (Answer: False)
- Text fields have a default field size of _____. (Answer: 255)

2. Class Discussion:

What are the steps to add a field between two fields? (Answer: In the Table window in Design view, select the row for the field above where you want to add a new field. In the Tools group on the Table Tools Design tab, click the Insert Rows button. Define the new field by entering the field name, data type, optional description, and any property specifications.) Why might you want to add a field between two fields?

[Modifying Field Properties](#)

LECTURE NOTES

- Demonstrate how to change the Format Property in Datasheet View.
- Demonstrate changing Properties in Design View.

TEACHER TIP

You can make some changes to properties in Datasheet view; for others, you'll work in Design view.

CLASSROOM ACTIVITIES

1. Quick Quiz:

- True or False: When formatting a field, you do not change the actual values stored in the table. (Answer: True)
- Property changes are more easily done in _____ view. (Answer: Design)

2. Class Discussion:

Why should you reduce the size of fields that are too large for the data they will hold?

[Adding Records to a New Table](#)

LECTURE NOTES

Show how to add a record to a table.

TEACHER TIP

When a table is created, the table structure is established. Once the table has been created, students will then need to add records to the table. As students enter records, they will be placed in the table in the order in which they were entered. However, when students close the table and open it again, the records will be ordered according to the primary key order.

CLASSROOM ACTIVITIES

1. Creative Thinking Activity:

Refer to Figure 2-21. Where would you most likely find the information contained in the table? (Many times when students are given the information, they can enter it into the table, but locating or researching the information can be difficult.)

2. Quick Quiz:

- Use the _____ to open a table in Datasheet view. (Answer: Navigation Pane)

- To insert a check mark in the Yes/No value, press the _____. (Answer: spacebar)

Importing Data from an Excel Worksheet

LECTURE NOTES

- Show how to import a worksheet into a table.

TEACHER TIP

Students often do not realize that information created in one type of software can be imported into another type of software. There are various ways to import this information.

CLASSROOM ACTIVITIES

1. Quick Quiz:

- True or False: Importing data is a process that allows you to copy the data from a source without having to open the source file. (Answer: True)
- True or False: You cannot import a spreadsheet from Excel. (Answer: False)

2. Class Discussion:

What are the first three steps for importing a worksheet into a table? (Answer: 1. Click the Close button on the table window bar to close any open tables. 2. Save the table. 3. Click the External Data tab on the Ribbon.)

Creating a Table by Importing an Existing Table Structure

LECTURE NOTES

- Show how to create a table by importing the structure of another table.

TEACHER TIP

Explain that if another Access database contains a table—or even just the design, or structure, of a table—that you want to include in your database, you can easily import the table and any records it contains or import only the table structure into your database.

When copying records from one table to another, it is very important to first determine that the two tables have the exact same data structure. If the two data structures differ in any way, the copy will cause an error. However, when you import, you are importing an entire table including its data and its structure. This is a good way to include a table in your database that was previously designed in a different database.

CLASSROOM ACTIVITIES

1. Class Discussion:

Discuss that in a corporate setting, there may be several people working on a database at one time. The ability to copy records into a table or import an entire table allows for the transfer of data in a collaborative effort. Of course, someone within the corporation must maintain the integrity of the data.

2. Group Activity:

In groups of two or three, have students consider the following situation: An organization has several departments; up to this point, each department has been creating and maintaining its own database that pertains to its particular needs. However, the organization has decided that it could reduce

redundancy and improve data integrity by pulling all the data into a single database. Have students discuss how this process might be done and what kinds of problems could arise. Ask students to consider that each department had maintained a customer database. Now that the data will be pulled together, what will happen if the table structures don't match? How will they import all this data and end up with a single customer database?

Adding Fields to a Table Using the Data Type Gallery

LECTURE NOTES

- Demonstrate how to add fields using the Data Type gallery.

TEACHER TIP

Explain that this feature allows you to add a group of related fields to a table at the same time, rather than adding each field to the table individually, thus saving time.

CLASSROOM ACTIVITIES

1. Quick Quiz:

- How do you make a field active? (Answer: by clicking in it)
- What section provides options that will add multiple, related fields to the table at one time? (Answer: the Quick Start)

2. Class Discussion:

Consider that a large organization has a very large database of information. What kinds of controls do you think will need to be in place for data entry? Do you think anyone in the corporation should be able to update data? Why or why not?

Modifying the Imported Table

- Show how to delete a field from a table structure and in Design view.
- Show how to rename a field in Design view.
- Show how to change the data type for a field in Design view.

TEACHER TIP

It is important to be able to modify an imported table. Remind students that although they can move fields in Datasheet view by dragging a field's column heading to a new location, doing so rearranges only the display of the table's fields; the table structure is not changed.

CLASSROOM ACTIVITIES

1. Quick Quiz:

- True or False: You can delete fields from an imported table structure. (Answer: True)
- You can change a field's data type in _____ view? (Answer: Design or Datasheet)

2. Class Discussion:

What is the difference between the Description and the Caption property values? Why do you need both?

Setting the Default Value Property for a Field

LECTURE NOTES

- Demonstrate how to set the Default Value property for a field.

TEACHER TIP

The Default Value property for a field specifies what value will appear, by default, for the field in each new record you add to a table. This makes it quicker and more accurate to enter fields that may repeat in most records such as the state code and area code.

CLASSROOM ACTIVITIES**1. Quick Quiz:**

- True or False: A text entry in the Default Value property must be enclosed within quotation marks. (Answer: True)
- True or False: Leaving the quotation marks off will result in an error. (Answer: False, they will be added automatically if left off)

2. Class Discussion:

Consider that a large organization has a very large database of information. What kinds of fields might be defined as having default values?

[Adding Data to a Table by Importing a Text File](#)**LECTURE NOTES**

- Demonstrate how to import data contained in a text file.

TEACHER TIP

Spend some time discussing a delimited text file (one in which fields of data are separated by a character such as a comma or a tab). Refer to Figure 2-38.

CLASSROOM ACTIVITIES**1. Quick Quiz:**

- True or False: Click the Append button to copy the records of a text file. (Answer: True)
- True or False: A delimited text file is one in which fields of data are separated by a character such as a comma or a tab. (Answer: True)

2. Class Discussion:

Consider that a large organization has a very large database of information. What kinds of controls do you think will need to be in place for data entry? Do you think anyone in the corporation should be able to update data? Why or why not?

[Defining Table Relationships](#)**LECTURE NOTES**

- Discuss one-to-many relationships.
- Discuss referential integrity.
- Discuss how to define a relationship between two tables.

TEACHER TIP

Discuss the terminology covered in this section (one-to-many relationships, primary table, related table, orphaned record, and referential integrity). This is a basis for understanding how to define a relationship between two tables.

CLASSROOM ACTIVITIES

1. Quick Quiz:

- True or False: Referential integrity is a set of rules that Access enforces to maintain consistency between related tables when you update data in a database. (Answer: True)
- The _____ connects the fields that are common to two tables. (Answer: join line)

2. Class Discussion:

What is the difference between a primary table and a related table? (Answer: The primary table is the “one” table in a one-to-many relationship; in Figure 2-40, the Animal table is the primary table because there is only one animal for each visit. The related table is the “many” table; in Figure 2-40, the Visit table is the related table because an animal can have zero, one, or many visits.)

LAB ACTIVITIES

Divide the class back into the softball database discussion groups. Have them consider the process of determining a primary key for a table. Have them look at their databases. Do any of these fields represent a unique value that could serve as the primary key? If not, what could they do to provide a field that has a unique value for each record? If they decide to create a field, how will it be done? What will be the data type of the primary key? Who will assign the value? How will you make sure that there are no duplicates in this field? Once they have answered these questions, have them go to their databases and modify and create/delete fields to insert a primary key.

TEACHER TIP

In this module, students learn how to add fields using the Data Type gallery. Students add the fields using a Quick Start Selection, which is a sort of template that inserts a group of related fields in a table. In Access, there is a certain degree of unpredictability when using any templates (database templates, table templates, Quick Start Selections, etc.). The end results are not always what you want or intend. For example, you might want to delete one or more of the fields inserted with the Quick Start Selection. When you delete the field in Datasheet view or Design view, the deletion might not be permanent or visible when you switch views, causing the deleted fields to reappear. If students encounter these types of problems, closing and reopening the table might help, but students might also need to close the database, reopen it, and compact and repair it before the deleted fields will remain deleted from the table.

[End of Module Material](#)

- **Review Assignments:** Review Assignments provide students with additional practice of the skills they learned in the module using the same module case, with which they are already familiar. These assignments are designed as straight practice and do not include anything of an exploratory nature.
- **Case Problems:** A typical NP module has four Case Problems following the Review Assignments. Short modules can have fewer Case Problems (or none at all); other modules may have five Case Problems. The Case Problems provide further hands-on assessment of the skills and topics presented in the module, but with new case scenarios. There are five types of Case Problems:

- **Apply.** In this type of Case Problem, students apply the skills that they have learned in the module to solve a new problem.
- **Create.** In a Create Case Problem, students are either shown the end result (such as a finished Word document) and asked to create the document based on the figure provided, or, students are asked to create something from scratch in a more free-form manner.
- **Challenge.** A Challenge Case Problem involves one or more Explore steps. These steps challenge students by having them go beyond what was covered in the module, either with guidance in the step or by using online Help as directed.
- **Research.** A Research Case Problem requires students to find information on the Internet to help solve a problem or to include in the file they are creating.
- **Troubleshoot.** In this type of Case Problem, certain steps of the exercise require students to identify and correct errors that are intentionally placed in the files. Completing these steps helps to promote problem solving and critical thinking.

[Top of Document](#)

New Perspectives Access 2016

Module 2

Quick Check Answers

Session 2.1

1. Identify all the fields needed to produce the required information, organize each piece of data into its smallest useful part, group related fields into tables, determine each table's primary key, include a common field in related tables, avoid data redundancy, and determine the properties of each field.
2. The Data Type property determines what field values you can enter into the field and what other properties the field will have.
3. Caption
4. Short Text, Number, and AutoNumber
5. 255
6. F6
7. A primary key uniquely identifies each record in the table; a primary key prevents duplicate values from being entered in the same field; Access forces you to enter a value for the primary key field in every record in the table; records will always be displayed in a meaningful order by primary key, regardless of the order in which you entered them; Access responds faster to requests for specific records based on the primary key.

Session 2.2

1. Ctrl + '
2. Importing
3. Data Type
4. The field and all its values are removed from the table.
5. delimited
6. primary table; related table
7. Referential integrity

Grading Rubric – Access 2016

Module 2, Module Case

Class:

Professor:

Notes:

Solution Filename: Riverview.accdb

| Description | Pts | Your Score |
|--|-----|------------|
| “Riverview” database, table created using design in Fig 2-5, table saved as “Billing” | 2 | |
| InvoiceNum field (primary key, Size: “5”, caption: “Invoice Num”) | 1 | |
| VisitID field (Data type: “Short Text”; Description: “Foreign key”; Size: “4”; Caption: “Visit ID”). InvoiceAmt field (Data Type: “Currency”; Decimal Places: “2” Caption: “Invoice Amt”). InvoiceDate field (Data type: “Date/Time”; Format: “mm/dd/yyyy”; Caption: “Invoice Date”). InvoicePaid field (Data type: “yes/no”; Caption: “Invoice Paid”). | 4 | |
| “InvoiceAmt” appears before the InvoicePaid field. | 1 | |
| InvoiceItem field: (Created before InvoicePaid field; Data Type: “Short Text”; Size: “40”; Caption: “Invoice Item”) | 1 | |
| In Visit table, VisitID field (Format: “Short Date”; Description: “Primary Key”; Size: “4”; Caption: “Visit ID”) AnimalID field (Data Type: “Short Text”; Description: “Foreign Key”) VisitDate field (Data Type: “Date/Time”; Caption: “Date of Visit”) Reason field (Data Type: “Short Text”, Size: “60”, Caption: “Reason/Diagnosis”) OffSite field (Data Type: “yes/no”; Caption: “Off-Site Visit?”) | 5 | |
| Add records shown in Figure 2-21 to Billing table | 1 | |
| Data imported from Invoices workbook into Billing table | 3 | |
| Columns in all tables resized to their best fit | 1 | |
| Import Animal table from AllAnimals database into the Riverview database | 3 | |
| Import Owner table from Kelly database into the Riverview database | 3 | |
| Add fields to the Owner database using the Data Type gallery Address field via QuickStart section (5 fields added (“Address”, “City”, “State Province”, “ZIP Postal”, “Country Region”) | 1 | |
| Delete “Country Region”, “County”, and “Notes” fields | 1 | |
| Rename: “StateProvince” as “State”; “ZIPPostal” as “Zip” | 1 | |

| | | |
|---|-----------|----------|
| Edit data types: Phone field: Data type: "Short Text"; Size: "14" Address field: Size: "35"; caption deleted City field: Size: "25"; caption deleted State field: Size: "2"; caption deleted; Default: "WY" Zip field: Size: "10"; caption deleted OwnerID field: Type: "Primary Key"; Caption: "Owner ID"; FirstName field: Caption: "First Name" LastName field: Caption: "Last Name" | 4 | |
| Add two records to the Owner table, resize columns for best fit | 1 | |
| Data imported from Owner text file into Owner table | 3 | |
| One-to-many relationships between tables: Primary Owner table / related Animal table; Primary Animal table / related Visit table; Primary Visit table / related Billing table. All field names visible. Referential integrity, cascade updates defined for each relationship | 3 | |
| Riverview database compacted / repaired | 1 | |
| TOTAL POSSIBLE POINTS: | 40 | 0 |

YOUR SCORE: _____

Grading Rubric – Access 2016 Module 2, Review Assignment

Class:

Professor:

Notes:

Solution Filename: *Vendor.accdb*

| Description | Pts | Your Score |
|---|-----------|------------|
| “Vendor” database, “Supplier” table: Field properties as in Fig 2-45 | 3 | |
| Columns resized to their best fit | 1 | |
| Table created using design in Fig 2-46 | 3 | |
| ProductID primary key, table saved as “Product” | 3 | |
| Field added, “Weight” (Data type: “Number”; Size: “Single”; Decimal Places: “2”; Caption: “Weight in Lbs”; Default Value: [no]) between Price / TempControl fields. “Units/Case” positioned between Price / Weight fields | 4 | |
| Records in Fig 2-47 entered. Columns resized to their best fit | 3 | |
| Data imported from Supplies workbook into Product table | 3 | |
| Columns resized to their best fit | 1 | |
| One-to-many relationships between tables: Primary Supplier table / related Product table. All field names visible. Referential integrity, cascade updates defined for each relationship | 3 | |
| Vendor database compacted / repaired | 1 | |
| TOTAL POSSIBLE POINTS: | 25 | 0 |

YOUR SCORE: _____

Hiker First Name / Hiker Last Name columns
resized to their best fit

All Access Objects

Search...

Tables

- Hiker
- Reservation
- Tour

Queries

- HikerData

Forms

- HikerInfo

Reports

- HikerList

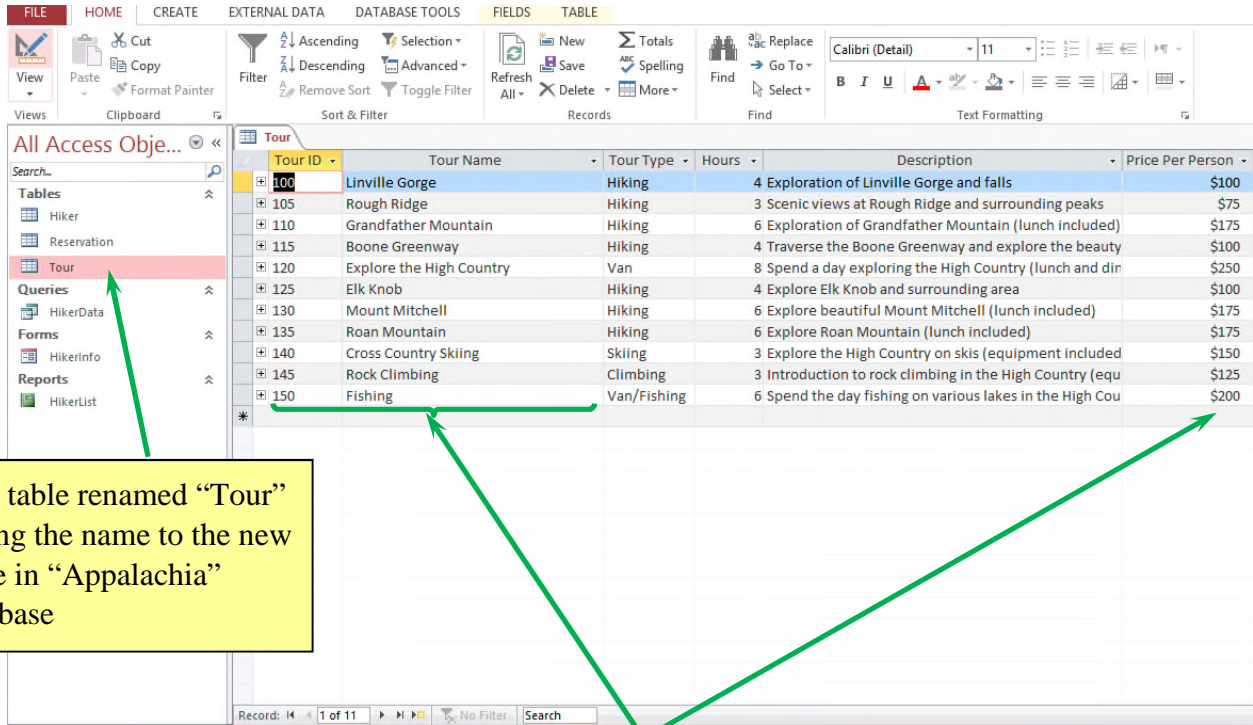
| Hiker ID | Hiker First Name | Hiker Last Name | Address | City | State | Zip | Phone |
|----------|------------------|-----------------|--------------------|----------------|-------|-------|--------------|
| 501 | Student First | Student Last | 123 Jackson St | Boone | NC | 28607 | 828-497-9128 |
| 503 | Ellen | Gilliams | 19 Westernville Rd | Spartanburg | SC | 29301 | 864-921-9876 |
| 506 | Robert | Taylor | 41 Taylor Ln | Jackson | GA | 30233 | 770-999-2391 |
| 509 | Sarah | Peeler | 32 Mountain Ln | Ridgeview | WV | 25169 | 703-456-9381 |
| 512 | Rebecca | Peeler | 32 Mountain Ln | Ridgeview | WV | 25169 | 703-456-9381 |
| 515 | Robert | Peeler | 32 Mountain Ln | Ridgeview | WV | 25169 | 703-456-9381 |
| 518 | Wilbur | Sanders | 512 Loop Rd | Asheville | NC | 28801 | 828-921-3459 |
| 521 | Zack | Hoskins | 2 Hope Rd | Atlanta | GA | 30301 | 404-998-2381 |
| 524 | Sissy | Jackson | 92 Bobcat Cir | Bethesda | MD | 20817 | 240-925-0129 |
| 527 | Mark | Billings | 43 Oak Ln | Cashiers | NC | 28717 | 828-829-9842 |
| 530 | Todd | Pillow | 2 Pillow St | Hendersonville | NC | 28739 | 828-987-2948 |
| 533 | Thomas | Jones | 11 Boston Rd | Greenville | SC | 29601 | 864-234-9501 |
| 535 | Elmer | Jackson | 99 River Rd | Blacksburg | SC | 29702 | 864-921-2384 |
| 538 | Catherine | Johnson | 21 Pine St | Cedartown | GA | 30125 | 678-982-1029 |
| 541 | Douglas | Furrington | 44 King St | Hershey | PA | 17033 | 717-098-9382 |
| 544 | Matthew | Smith | 412 Sentry Ln | Gastonia | NC | 28052 | 704-998-0987 |
| 547 | Heather | Smith | 412 Sentry Ln | Gastonia | NC | 28052 | 704-998-0987 |
| 550 | Jack | Smith | 412 Sentry Ln | Gastonia | NC | 28052 | 704-998-0987 |
| 553 | Seth | Barkley | 12 Main St | Stanley | NC | 28164 | 704-988-2019 |
| 556 | Henry | Billings | 5 Loop Rd | Alexis | NC | 28006 | 704-921-8832 |

Records: 1 of 20

“Appalachia” database, “Hiker” table,

- HikerID: “Primary key” description, size “3”, “Hiker ID” caption
- HikerFirst: Size “20”, “Hiker First Name” caption
- HikerLast: Size “25”, “Hiker Last Name” caption
- Address: Size “35”
- City: Size “25”
- State: Size “2”
- Zip: Size “10”
- Phone: Size “14”

“Trip” table structure and data from “Travel” database imported into new table in “Appalachia” database



| Tour ID | Tour Name | Tour Type | Hours | Description | Price Per Person |
|---------|--------------------------|-------------|-------|--|------------------|
| 100 | Linville Gorge | Hiking | 4 | Exploration of Linville Gorge and falls | \$100 |
| 105 | Rough Ridge | Hiking | 3 | Scenic views at Rough Ridge and surrounding peaks | \$75 |
| 110 | Grandfather Mountain | Hiking | 6 | Exploration of Grandfather Mountain (lunch included) | \$175 |
| 115 | Boone Greenway | Hiking | 4 | Traverse the Boone Greenway and explore the beauty | \$100 |
| 120 | Explore the High Country | Van | 8 | Spend a day exploring the High Country (lunch and dinner) | \$250 |
| 125 | Elk Knob | Hiking | 4 | Explore Elk Knob and surrounding area | \$100 |
| 130 | Mount Mitchell | Hiking | 6 | Explore beautiful Mount Mitchell (lunch included) | \$175 |
| 135 | Roan Mountain | Hiking | 6 | Explore Roan Mountain (lunch included) | \$175 |
| 140 | Cross Country Skiing | Skiing | 3 | Explore the High Country on skis (equipment included) | \$150 |
| 145 | Rock Climbing | Climbing | 3 | Introduction to rock climbing in the High Country (equipment included) | \$125 |
| 150 | Fishing | Van/Fishing | 6 | Spend the day fishing on various lakes in the High Country | \$200 |

Trip table renamed “Tour” giving the name to the new table in “Appalachia” database

- TourID: Description “Primary key”, size “3”, “Tour ID” caption
- TourName: “Tour Name” caption, size “35”
- PricePerPerson: “Price Per Person” caption

Columns resized to their best fit

Table created using design in Fig 2-58

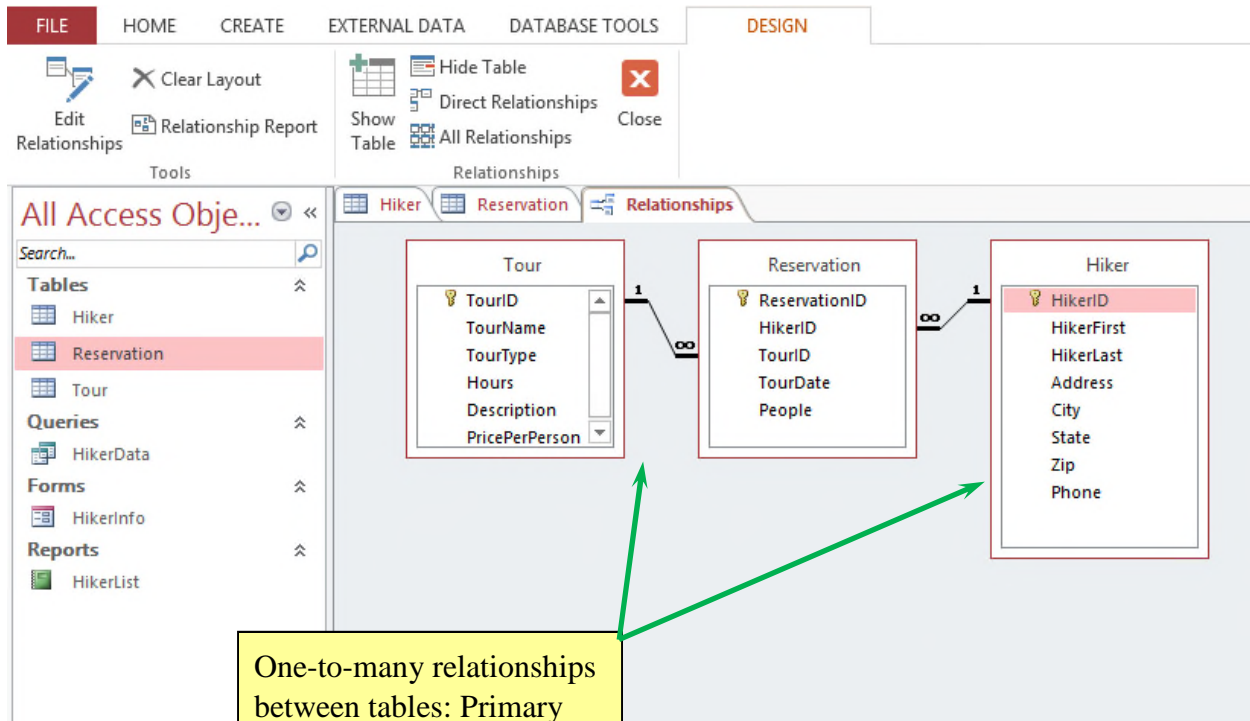
ReservationID primary key, table saved as "Reservation"

TourDate field displays dates in format similar to 02/15/17

| Reservation ID | Hiker ID | Tour ID | Tour Date | People | Click to Add |
|----------------|----------|---------|-----------|--------|--------------|
| 3000 | 512 | 100 | 09/09/17 | 3 | |
| 3005 | 538 | 115 | 09/16/17 | 1 | |
| 3010 | 544 | 115 | 09/16/17 | 1 | |
| 3015 | 547 | 115 | 09/16/17 | 1 | |
| 3020 | 550 | 115 | 09/16/17 | 1 | |
| 3025 | 501 | 130 | 09/23/17 | 2 | |
| 3030 | 521 | 130 | 09/23/17 | 2 | |
| 3035 | 535 | 125 | 09/30/17 | 3 | |
| 3040 | 556 | 125 | 09/30/17 | 2 | |
| 3045 | 527 | 105 | 10/07/17 | 1 | |
| 3050 | 527 | 125 | 09/30/17 | 1 | |
| 3055 | 503 | 110 | 09/02/17 | 1 | |
| 3060 | 553 | 110 | 09/02/17 | 1 | |
| 3065 | 541 | 120 | 10/07/17 | 5 | |
| 3070 | 524 | 100 | 09/09/17 | 2 | |
| 3075 | 506 | 130 | 09/23/17 | 2 | |
| 3080 | 509 | 125 | 09/30/17 | 2 | |
| 3085 | 533 | 125 | 09/30/17 | 1 | |
| 3090 | 530 | 135 | 10/14/17 | 3 | |
| 3095 | 515 | 140 | 12/16/17 | 3 | |
| 3100 | 518 | 145 | 08/26/17 | 2 | |
| 3105 | 527 | 150 | 08/19/17 | 3 | |
| 3110 | 544 | 150 | 08/19/17 | 2 | |
| 3115 | 547 | 120 | 10/07/17 | 2 | |
| 3120 | 503 | 140 | 12/16/17 | 2 | |

Data in the Bookings text file imported into Reservation table

Columns resized to their best fit, date values in TourDate field are displayed according to the custom format



One-to-many relationships between tables: Primary Tour table / related Reservation table, primary Hiker table / related Reservation table. All field names visible. Referential integrity, cascade updates defined for each relationship

Appalachia database compacted / repaired

| Option | | Member | |
|-----------|----------------------------------|-------------|-------------------------------------|
| Option ID | Option Description | Option Cost | Fee Waived |
| + 101 | Manicure weekly for 1 month | 125 | <input type="checkbox"/> |
| + 102 | Manicure weekly for 3 months | 350 | <input checked="" type="checkbox"/> |
| + 103 | Manicure weekly for 6 months | 650 | <input checked="" type="checkbox"/> |
| + 104 | Manicure weekly for 12 months | 1,200 | <input checked="" type="checkbox"/> |
| + 105 | Manicure bi-weekly for 1 month | 70 | <input type="checkbox"/> |
| + 106 | Manicure bi-weekly for 3 months | 190 | <input type="checkbox"/> |
| + 107 | Manicure bi-weekly for 6 months | 350 | <input checked="" type="checkbox"/> |
| + 108 | Manicure bi-weekly for 12 months | 650 | <input checked="" type="checkbox"/> |
| + 109 | Manicure monthly for 3 months | 140 | <input type="checkbox"/> |
| + 110 | Manicure monthly for 6 months | 250 | <input checked="" type="checkbox"/> |
| + 111 | Manicure monthly for 12 months | 450 | <input checked="" type="checkbox"/> |
| + 112 | Pedicure weekly for 1 month | 125 | <input type="checkbox"/> |
| + 113 | Pedicure weekly for 3 months | 350 | <input checked="" type="checkbox"/> |
| + 114 | Pedicure weekly for 6 months | 650 | <input checked="" type="checkbox"/> |
| + 115 | Pedicure weekly for 12 months | 1,200 | <input checked="" type="checkbox"/> |
| + 116 | Pedicure bi-weekly for 1 month | 70 | <input type="checkbox"/> |

- a. OptionID: Description, "Primary key"; size "3"; caption, "Option ID"
- b. OptionDescription: Size "45"; caption, "Option Description"
- c. OptionCost: Format, "Standard"; "0" decimal places; caption, "Option Cost"
- d. FeeWaived: Caption "Fee Waived"

Table created using design in Fig 2-48

MemberID is the primary key, table saved as “Member”

Fields added between LastName / Phone fields

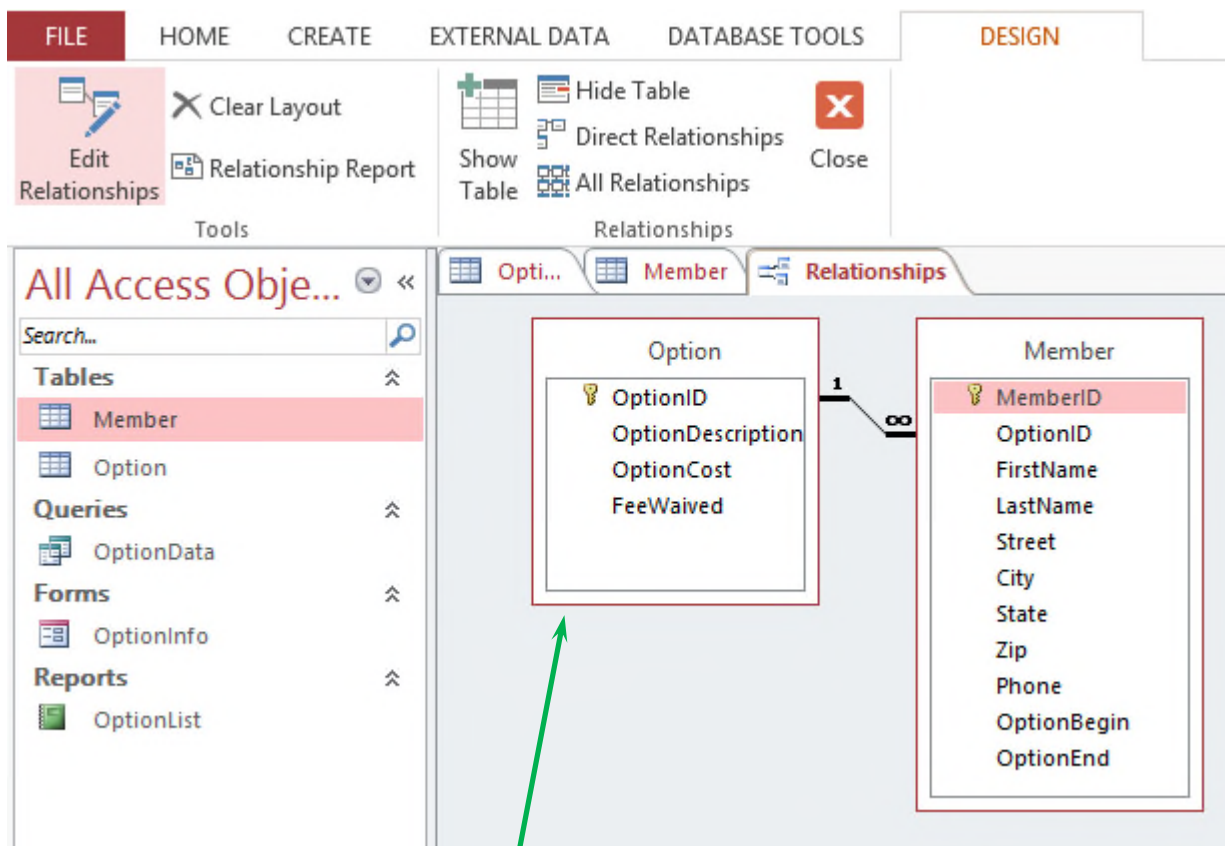
Field added between Phone / OptionEnds fields

| Member ID | Option ID | First Name | Last Name | Street | City | State | Zip | Phone | Option Begins | Option Ends |
|-----------|-----------|---------------|--------------|--------------------|-------------|-------|-------|--------------|---------------|-------------|
| 2100 | 101 | Elaine | Diza | 192 23rd St | Orlando | FL | 32801 | 407-912-2234 | 11/5/2017 | 12/5/2017 |
| 2103 | 123 | Student First | Student Last | 22 Oak St | Orlando | FL | 32801 | 407-832-3944 | 2/1/2017 | 3/1/2017 |
| 2105 | 103 | Sandra | Garcia | 217 Acorn Ridge Dr | Orlando | FL | 32803 | 407-811-2134 | 1/15/2017 | 7/15/2017 |
| 2110 | 106 | Amara | Moreno | 41 Balboa Dr | Orlando | FL | 32801 | 786-733-7301 | 11/6/2016 | 2/6/2017 |
| 2115 | 123 | Jackie | Smith | 412 Ashton Cir | Orlando | FL | 32805 | 813-231-3001 | 2/4/2017 | 3/4/2017 |
| 2118 | 120 | Susan | Reyes | 3 Balboa St | Orlando | FL | 32804 | 407-216-0091 | 11/2/2016 | 2/2/2017 |
| 2120 | 135 | Barbara | Jackson | 31 Terhune Ave | Orlando | FL | 32830 | 321-417-9980 | 12/6/2016 | 3/6/2017 |
| 2123 | 142 | Angella | Delgado | 2 Sangunta St | Orlando | FL | 32829 | 407-333-3249 | 1/6/2017 | 7/6/2017 |
| 2126 | 111 | Ariesa | Romero | 33 Baldwin Dr | Celebration | FL | 34747 | 407-912-9230 | 12/20/2016 | 12/20/2017 |
| 2129 | 128 | Angel | Fernandez | 19 Mildori St | Orlando | FL | 32809 | 954-840-9391 | 2/1/2017 | 5/1/2017 |
| 2132 | 131 | Maita | Rios | 123 Baja Rd | Orlando | FL | 32812 | 407-801-1240 | 3/3/2017 | 6/3/2017 |
| 2135 | 134 | Oleda | Valdez | 12 Salerno Ct | Orlando | FL | 32819 | 407-422-3901 | 1/12/2017 | 2/12/2017 |
| 2138 | 110 | Lola | Sanchez | 82 Hockley Ct | Orlando | FL | 32818 | 407-940-9401 | 1/15/2017 | 7/15/2017 |
| 2142 | 105 | Nancy | Smith | 44 Hinson St | Orlando | FL | 32808 | 954-844-4801 | 11/10/2017 | 12/10/2017 |
| 2145 | 120 | Mirana | Alvarado | 32 Pack Cir | Orlando | | | | | |
| 2148 | 143 | Gilda | Packson | 111 Sailfish St | Orlando | | | | | |
| 2151 | 141 | Retha | Ramirez | 2 Bostic Cir | Orlando | | | | | |
| 2154 | 131 | Regia | Vargas | 65 Acadlan Dr | Orlando | | | | | |
| 2157 | 127 | Priscilla | Salazar | 101 Rio Ln | Orlando | | | | | |
| 2160 | 141 | Gabriel | Martinez | 16 Ripley Ct | Celebration | | | | | |
| 2163 | 128 | Sandra | Medina | 41 19th St | Orlando | | | | | |
| 2166 | 109 | Linda | Salinas | 122 Bolcher Ave | Orlando | | | | | |
| 2169 | 125 | Susan | Miller | 98 Riva Ct | Orlando | | | | | |
| 2172 | 112 | Allison | Torres | 42 Baker Rd | Orlando | | | | | |
| 2175 | 136 | Taylor | Rivera | 32 Sago Cir | Orlando | | | | | |

- Address field: “Street”, size “40”, caption deleted
- City field: Size “25”, caption deleted
- State field: “State”, size “2”, caption deleted, FL is default value
- ZIPPostal field: “Zip”, size 10, caption deleted
- CountryRegion field deleted from Member table structure
- “OptionBegin” field added (data type: “Date/Time”; format: “Short Date”; Caption: “Option Begins”) between Phone / OptionEnd fields

Records in Fig 2-49 entered. 1st / last names entered. Columns resized to their best fit

Data imported from Customers text file



One-to-many relationship between primary Option / Member table. All field names visible. Referential integrity, cascade updates defined for the relationship

Beauty database compacted / repaired

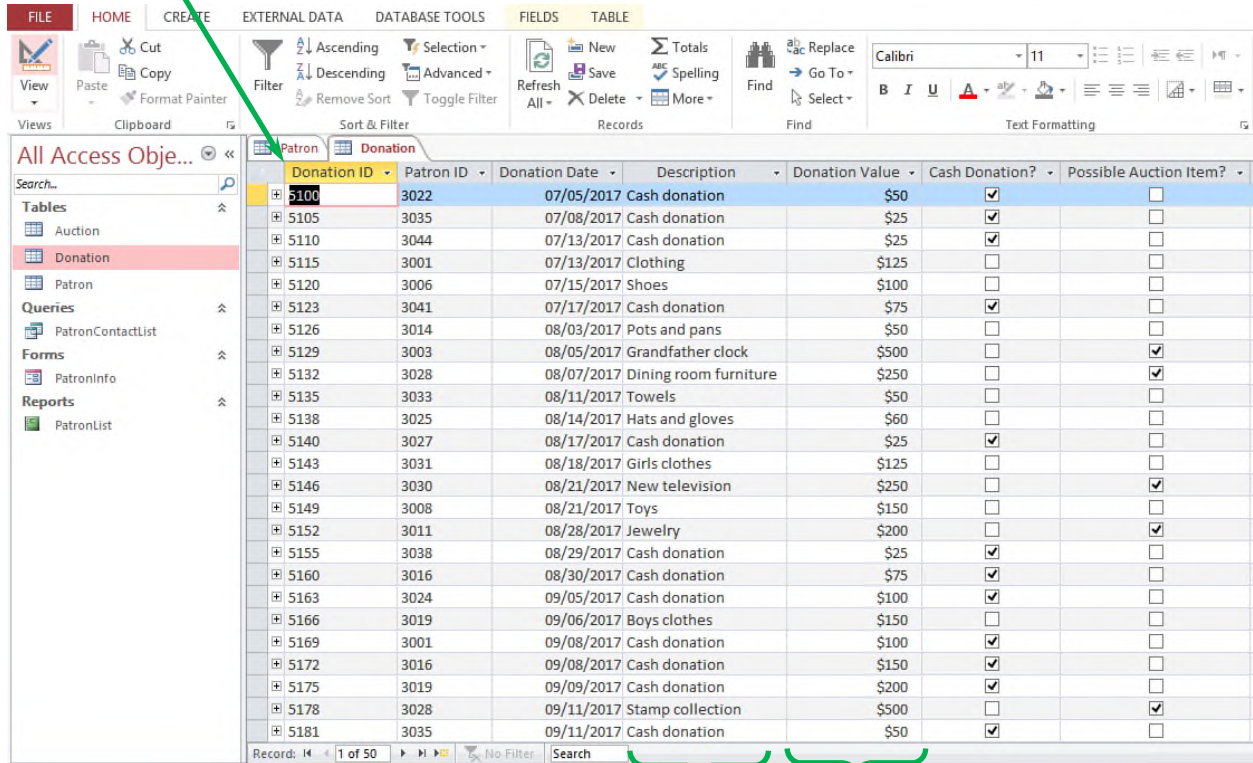
- a. PatronID: Description “Primary key”, field size 5, caption “Patron ID”
- b. Title: Field size 4
- c. FirstName: Field size “20”, caption “First Name”
- d. LastName: Field size “25”, caption “Last Name”
- e. Phone: Field size “14”
- f. Email: Field size “35”

| Patron ID | Title | First Name | Last Name | Phone | Email |
|-----------|-------|---------------|--------------|--------------|---------------------------|
| 3001 | Stud | Student First | Student Last | 404-987-1234 | student@example.com |
| 3003 | Ms. | Sarah | Johanson | 404-987-3985 | johan19@example.com |
| 3006 | Dr. | Elbert | Schneider | 678-492-9101 | countrydoc@example.com |
| 3008 | Mrs. | June | Franklin | 404-987-0915 | junebug@example.net |
| 3011 | Mr. | Henry | Shelton | 678-492-0091 | hshelton42@example.com |
| 3014 | Mr. | Ben | Jackson | 706-917-4019 | bennie@example.net |
| 3016 | Mr. | Edward | Jones | 404-972-1102 | edwardo@example.net |
| 3019 | Mrs. | Jane | Michaels | 706-489-3310 | jjmichaels@example.com |
| 3022 | Dr. | Taylor | Williams | 404-812-9301 | thefootdoc@example.net |
| 3024 | Ms. | Catherine | McGill | 706-421-4491 | mcgill12@example.com |
| 3025 | Mr. | David | Thomas | 706-921-8830 | funnyman@example.net |
| 3027 | Mrs. | Kathy | Johnston | 404-489-4108 | johnstonk123@example.com |
| 3028 | Mrs. | Sue | Jackson | 678-321-2019 | susieq@example.net |
| 3030 | Mr. | David | Hampton | 404-824-3381 | thehamptons@example.net |
| 3031 | Ms. | Elinor | Zak | 404-435-9120 | elinorzak@example.net |
| 3033 | Mrs. | Lauren | Shelbert | 404-421-0021 | bertie32@example.com |
| 3035 | Mr. | Bill | Thomas | 678-876-9419 | thombo42@example.com |
| 3038 | Ms. | Gail | Fordham | 404-349-9310 | thefordhams@example.net |
| 3041 | Mr. | Frank | Miller | 404-824-3431 | frankmiller12@example.net |
| 3044 | Mr. | Victor | Washburn | 706-982-0184 | thewashburns@example.net |

Primary key DonationID,
table named "Donation"

Table created with data
imported from the
Donations workbook

Table matches design in
Fig 2-55



| Donation ID | Patron ID | Donation Date | Description | Donation Value | Cash Donation? | Possible Auction Item? |
|-------------|-----------|---------------|-----------------------|----------------|-------------------------------------|-------------------------------------|
| 5100 | 3022 | 07/05/2017 | Cash donation | \$50 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5105 | 3035 | 07/08/2017 | Cash donation | \$25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5110 | 3044 | 07/13/2017 | Cash donation | \$25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5115 | 3001 | 07/13/2017 | Clothing | \$125 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5120 | 3006 | 07/15/2017 | Shoes | \$100 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5123 | 3041 | 07/17/2017 | Cash donation | \$75 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5126 | 3014 | 08/03/2017 | Pots and pans | \$50 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5129 | 3003 | 08/05/2017 | Grandfather clock | \$500 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5132 | 3028 | 08/07/2017 | Dining room furniture | \$250 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5135 | 3033 | 08/11/2017 | Towels | \$50 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5138 | 3025 | 08/14/2017 | Hats and gloves | \$60 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5140 | 3027 | 08/17/2017 | Cash donation | \$25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5143 | 3031 | 08/18/2017 | Girls clothes | \$125 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5146 | 3030 | 08/21/2017 | New television | \$250 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5149 | 3008 | 08/21/2017 | Toys | \$150 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5152 | 3011 | 08/28/2017 | Jewelry | \$200 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5155 | 3038 | 08/29/2017 | Cash donation | \$25 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5160 | 3016 | 08/30/2017 | Cash donation | \$75 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5163 | 3024 | 09/05/2017 | Cash donation | \$100 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5166 | 3019 | 09/06/2017 | Boys clothes | \$150 | <input type="checkbox"/> | <input type="checkbox"/> |
| 5169 | 3001 | 09/08/2017 | Cash donation | \$100 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5172 | 3016 | 09/08/2017 | Cash donation | \$150 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5175 | 3019 | 09/09/2017 | Cash donation | \$200 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5178 | 3028 | 09/11/2017 | Stamp collection | \$500 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5181 | 3035 | 09/11/2017 | Cash donation | \$50 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Columns resized to
their best fit

DonationDescription
left-justified

Donation Value: Made
current field, 0 decimal
places

Primary key AuctionID,
table saved as "Auction"

Table created using design
in Fig 2-56

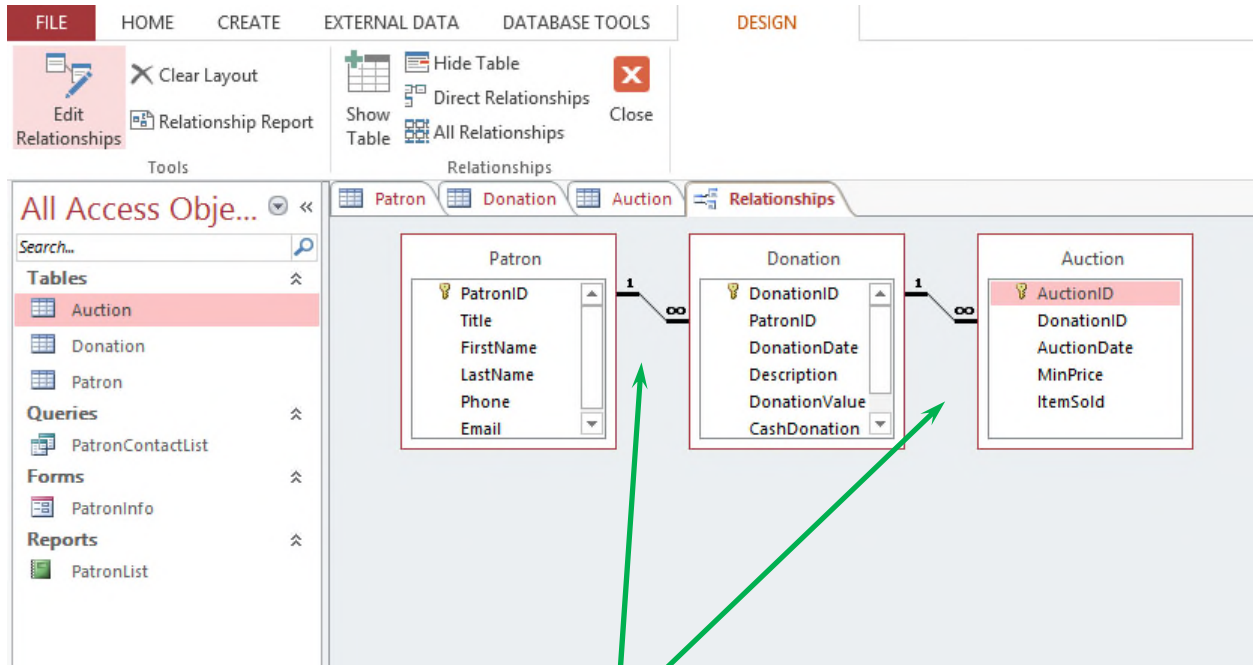
Data imported to Auction
table from Auctions text
file

Records added from
Fig 2-57

DonationID: made 2nd
field, description "Foreign
key".

| Auction ID | Donation ID | Date of Auction | Minimum Sales Price | Item Sold at Auction? |
|------------|-------------|-----------------|---------------------|--------------------------|
| 200 | 5129 | 08/12/2017 | \$300 | <input type="checkbox"/> |
| 205 | 5132 | 08/12/2017 | \$200 | <input type="checkbox"/> |
| 210 | 5146 | 09/09/2017 | \$150 | <input type="checkbox"/> |
| 215 | 5152 | 09/09/2017 | \$125 | <input type="checkbox"/> |
| 220 | 5178 | 10/14/2017 | \$350 | <input type="checkbox"/> |
| 225 | 5187 | 10/14/2017 | \$200 | <input type="checkbox"/> |
| 230 | 5205 | 10/14/2017 | \$175 | <input type="checkbox"/> |
| 235 | 5217 | 10/14/2017 | \$150 | <input type="checkbox"/> |
| 240 | 5238 | 10/14/2017 | \$225 | <input type="checkbox"/> |
| 245 | 5241 | 10/14/2017 | \$400 | <input type="checkbox"/> |
| 250 | 5244 | 11/11/2017 | \$50 | <input type="checkbox"/> |
| 255 | 5260 | 11/11/2017 | \$100 | <input type="checkbox"/> |
| * | | | \$0 | <input type="checkbox"/> |

Columns resized to their
best fit



One-to-many relationships between tables: Primary Patron table / related Donation table, primary Donation table / related Auction table. All field names visible. Referential integrity, cascade updates defined for each relationship

Center database compacted / repaired

Programming database,
Tutor table, field properties
set as in Fig 2-50

Field added as last field
with name “Groups”,
“Yes/No” data type,
caption “Groups Only”

| Tutor ID | First Name | Last Name | Major | Year In School | School | Hire Date | Groups Only |
|----------|---------------|--------------|----------------------|----------------|-------------------------|-----------|-------------------------------------|
| 1001 | Tom | Johnson | Computer Science | Senior | Hogan University | 2/5/2017 | <input type="checkbox"/> |
| 1003 | Carey | Billings | Information Systems | Junior | Eikenville College | 3/1/2017 | <input checked="" type="checkbox"/> |
| 1005 | Bob | Smith | Computer Science | Graduate | Hogan University | 4/18/2017 | <input type="checkbox"/> |
| 1008 | Sally | Gilbert | Information Systems | Senior | Ellings College | 1/15/2017 | <input type="checkbox"/> |
| 1010 | Cathy | Cowler | Computer Engineering | Graduate | Eikenville College | 2/1/2017 | <input type="checkbox"/> |
| 1013 | Aaron | Black | Computer Science | Junior | Smith Technical College | 5/14/2017 | <input type="checkbox"/> |
| 1015 | Douglas | Arrendale | Computer Engineering | Senior | Ellings College | 3/27/2017 | <input type="checkbox"/> |
| 1018 | Fredrik | Karlsson | Mechatronics | Junior | Smith Technical College | 2/6/2017 | <input checked="" type="checkbox"/> |
| 1020 | Ian | Rodriguez | Computer Science | Senior | Potswan College | 2/27/2017 | <input type="checkbox"/> |
| 1023 | Jake | Ballard | Mechatronics | Senior | Smith Technical College | 4/2/2017 | <input type="checkbox"/> |
| 1025 | Larry | Smith | Computer Science | Graduate | Hogan University | 5/21/2017 | <input type="checkbox"/> |
| 1028 | Mike | Johnson | Mechatronics | Senior | Smith Technical College | 1/8/2017 | <input type="checkbox"/> |
| 1031 | Nichole | Schneider | Computer Science | Junior | Switzer University | 2/28/2017 | <input type="checkbox"/> |
| 1033 | Barbara | Alzo | Information Systems | Senior | Hogan University | 3/12/2017 | <input type="checkbox"/> |
| 1036 | Ellen | Desoto | Computer Science | Graduate | Hogan University | 4/16/2017 | <input checked="" type="checkbox"/> |
| 1039 | Gail | Fordham | Information Systems | Junior | Switzer University | 2/22/2017 | <input type="checkbox"/> |
| 1042 | Henry | Justice | Computer Science | Graduate | Smith Technical College | 4/20/2017 | <input type="checkbox"/> |
| 1045 | Kelly | Rudd | Computer Science | Graduate | Potswan College | 2/27/2017 | <input type="checkbox"/> |
| 1048 | Angie | Hinson | Computer Engineering | Senior | Franklin University | 5/10/2017 | <input type="checkbox"/> |
| 1051 | Donald | Gallager | Computer Science | Graduate | Hogan University | 1/18/2017 | <input checked="" type="checkbox"/> |
| 1060 | Student First | Student Last | Computer Science | Senior | Ellings College | 2/14/2017 | <input type="checkbox"/> |

Tutors conduct group
tutoring sessions only:
Carey Billings, Fredrik
Karlsson, Ellen Desoto,
Donald Gallager

Structure of Student table in Client database imported into table named Student in Programming database

Fields related to phone numbers added between Zip / BirthDate

New fields added at end: "BirthDate" (Date/Time), "Gender" (Short Text)

The screenshot shows the Microsoft Access interface with the 'Student' table open in Datasheet View. The table has the following fields: Student ID, First Name, Last Name, Address, City, State, Zip, Home Phone, Cell Phone, Birth Date, and Gender. The records are sorted by Student ID in ascending order. Annotations include:

- A green star in the 'Home Phone' column for the first record (Joshua Anderson) with the text 'BusinessPhone / ★ FaxNumber fields deleted'.
- A green bracket under the 'Birth Date' and 'Gender' columns with the text 'New fields added at end: "BirthDate" (Date/Time), "Gender" (Short Text)'.
- A green bracket under the 'Zip', 'Home Phone', and 'Cell Phone' columns with the text 'Fields related to phone numbers added between Zip / BirthDate'.
- A green bracket under the 'First Name' and 'Last Name' columns with the text 'LastName field follows FirstName field'.
- A green bracket under the 'Student ID' column with the text 'Records in Fig 2-52 added'.
- A green bracket under the 'Address' column with the text 'Fields resized to their best fit'.
- A green bracket under the 'City' column with the text 'Data imported from Students text file'.
- A green bracket under the 'State' column with the text 'Columns resized to their best fit'.

| Student ID | First Name | Last Name | Address | City | State | Zip | Home Phone | Cell Phone | Birth Date | Gender |
|------------|------------|------------|-------------------|---------------|-------|-------|--------------|--------------|------------|--------|
| AND4010 | Joshua | Anderson | 55 Boone Ct | Raleigh | NC | 27601 | 919-263-4938 | 919-665-0119 | 4/27/1998 | M |
| BAR4018 | Andrew | Bartles | 47 King St | Cary | NC | 27511 | 919-663-9118 | 919-678-1612 | 11/2/1997 | M |
| COW4100 | Darcy | Cowler | 88 Earth Way | Raleigh | NC | 27601 | 919-264-5981 | 919-664-4454 | 12/2/1998 | F |
| DOR4030 | Barbara | Dorman | 65 Kirby Ct | Raleigh | NC | 27602 | 919-265-6549 | 919-664-0971 | 9/16/1997 | F |
| EIG4042 | Fredrik | Eigenmeyer | 16 Emporium Ct | Raleigh | NC | 27603 | 919-264-2598 | 919-665-5540 | 3/2/1995 | M |
| FRA4045 | Salvador | Francisco | 11 Bobcat Dr | Cary | NC | 27512 | 919-664-9810 | 919-678-4719 | 5/25/1998 | M |
| GAL4050 | Elizabeth | Gallagher | 44 Winner Cir | Raleigh | NC | 27602 | 919-265-1410 | 919-664-9988 | 4/12/1997 | F |
| HIC4055 | Hildago | Hickman | 22 Pinwheel Ln | Cary | NC | 27511 | 919-664-0129 | 919-678-4960 | 11/12/1998 | M |
| JOH4075 | Amber | Johnson | 2 14th Ave | Raleigh | NC | 27602 | 919-263-4432 | 919-664-1992 | 4/1/1997 | F |
| KIL4085 | David | Killian | 123 Berry Dr | Apex | NC | 27503 | 919-234-1413 | 919-698-9381 | 11/14/1997 | M |
| LON4105 | Wilbur | Long | 55 Pond Rd | Holly Springs | NC | 27540 | 919-355-8450 | 919-712-2139 | 1/5/1997 | M |
| LOP4015 | Henry | Lopez | 19 8th St | Raleigh | NC | 27601 | 919-264-9981 | 919-665-8110 | 2/19/1998 | M |
| MAL4115 | Dystra | Malik | 14 Gaston St | Raleigh | NC | 27602 | 919-264-6450 | 919-664-9125 | 6/22/1998 | M |
| NIV4110 | Christy | Niver | 617 Echo Ln | Apex | NC | 27503 | 919-234-6693 | 919-699-0158 | 4/12/1996 | F |
| PAS4020 | Victor | Pasquez | 42 Nightingale Ct | Cary | NC | 27511 | 919-662-1002 | 919-678-8240 | 8/2/1998 | M |
| PER4055 | Rosalyn | Perez | 421 Pine Ln | Cary | NC | 27511 | 984-662-4761 | 919-678-0012 | 4/12/1996 | F |
| RAM4025 | Ellen | Ramsey | 45 7th St | Holly Springs | NC | 27540 | 919-355-5340 | 919-713-1654 | 12/29/1997 | F |
| TOL4035 | Jack | Tolliver | 12 19th St | Apex | NC | 27503 | 919-235-1109 | 919-698-1585 | 6/2/1997 | M |
| VAS4040 | Anton | Vasquez | 32 Wolf Dr | Raleigh | NC | 27602 | 919-263-9531 | 919-665-5329 | 10/22/1998 | M |
| WIL4050 | Sue | Williams | 99 Skyblue Rd | Apex | NC | 27503 | 919-235-5343 | 919-699-5339 | 2/6/1996 | F |

Design from Fig 2-51, including revised field names / data types

Records in Fig 2-52 added

LastName field follows FirstName field

Fields resized to their best fit

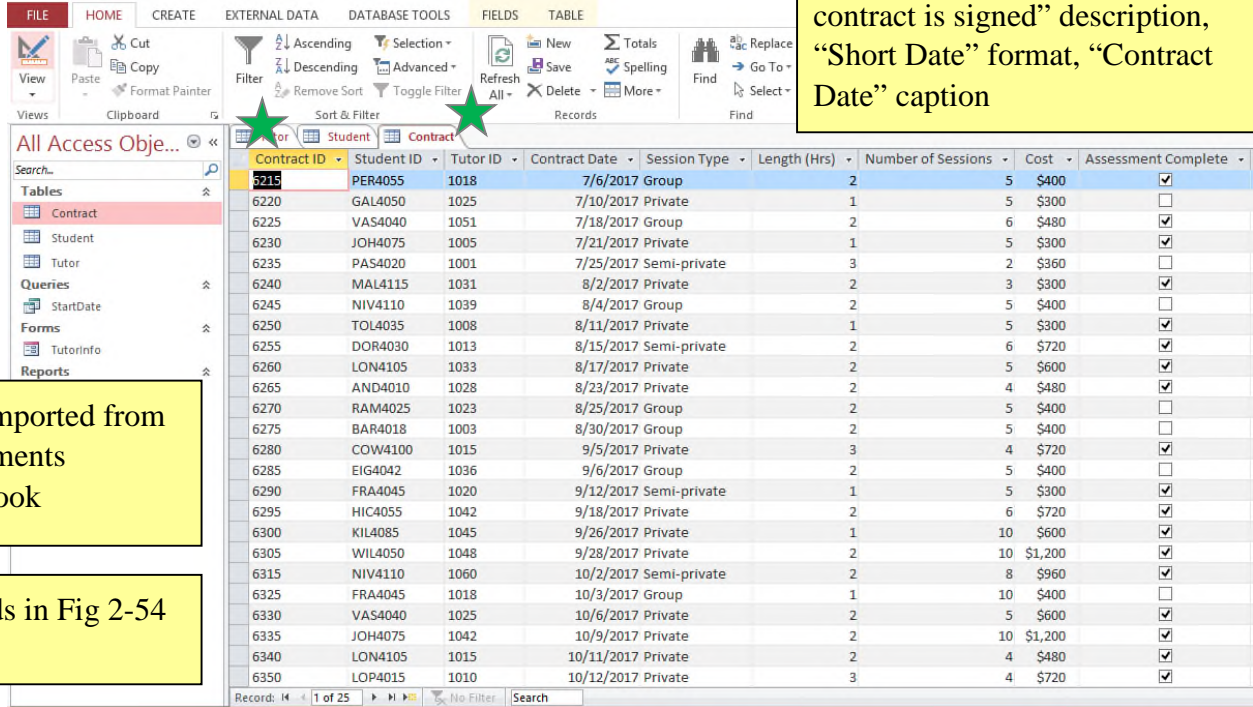
Data imported from Students text file

Columns resized to their best fit

Table created using design in Figure 2-53

ContractID is primary key, table saved as “Contract” ★

Field added, between TutorID / SessionType fields: “ContractDate” name, “Date/Time” data type, “Date contract is signed” description, “Short Date” format, “Contract Date” caption

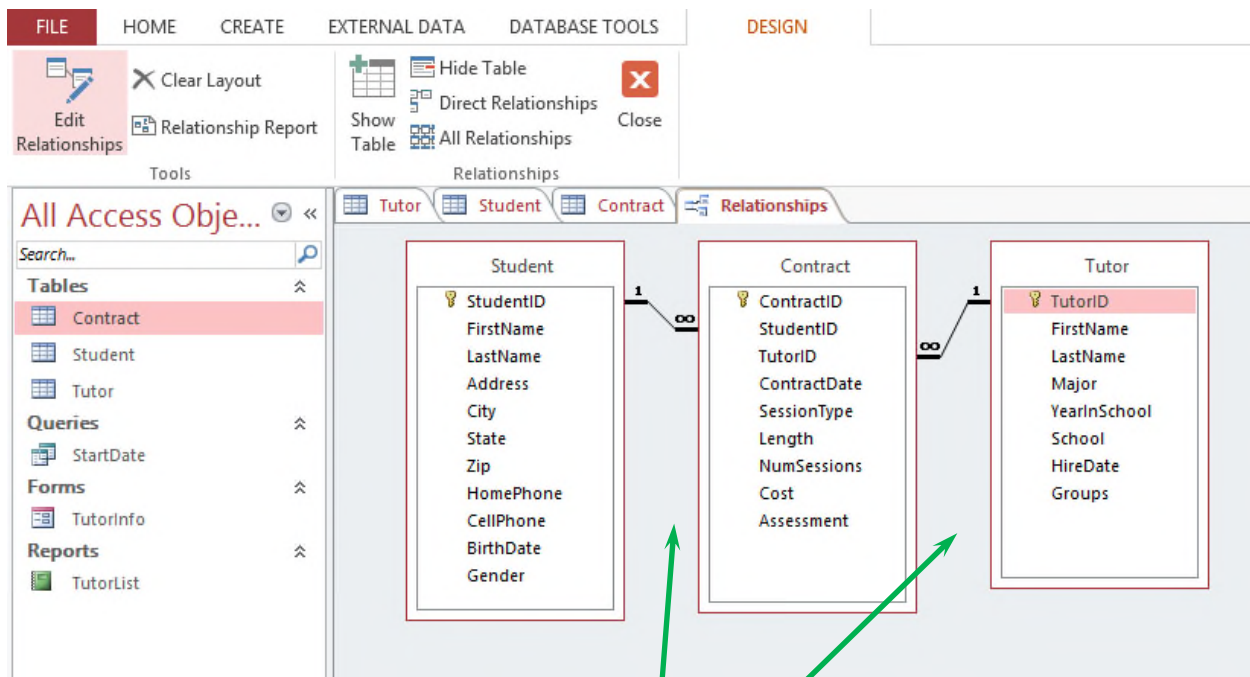


| Contract ID | Student ID | Tutor ID | Contract Date | Session Type | Length (Hrs) | Number of Sessions | Cost | Assessment Complete |
|-------------|------------|----------|---------------|--------------|--------------|--------------------|---------|-------------------------------------|
| 5215 | PER4055 | 1018 | 7/6/2017 | Group | 2 | 5 | \$400 | <input checked="" type="checkbox"/> |
| 6220 | GAL4050 | 1025 | 7/10/2017 | Private | 1 | 5 | \$300 | <input type="checkbox"/> |
| 6225 | VAS4040 | 1051 | 7/18/2017 | Group | 2 | 6 | \$480 | <input checked="" type="checkbox"/> |
| 6230 | JOH4075 | 1005 | 7/21/2017 | Private | 1 | 5 | \$300 | <input checked="" type="checkbox"/> |
| 6235 | PAS4020 | 1001 | 7/25/2017 | Semi-private | 3 | 2 | \$360 | <input type="checkbox"/> |
| 6240 | MAL4115 | 1031 | 8/2/2017 | Private | 2 | 3 | \$300 | <input checked="" type="checkbox"/> |
| 6245 | NIV4110 | 1039 | 8/4/2017 | Group | 2 | 5 | \$400 | <input type="checkbox"/> |
| 6250 | TOL4035 | 1008 | 8/11/2017 | Private | 1 | 5 | \$300 | <input checked="" type="checkbox"/> |
| 6255 | DOR4030 | 1013 | 8/15/2017 | Semi-private | 2 | 6 | \$720 | <input checked="" type="checkbox"/> |
| 6260 | LON4105 | 1033 | 8/17/2017 | Private | 2 | 5 | \$600 | <input checked="" type="checkbox"/> |
| 6265 | AND4010 | 1028 | 8/23/2017 | Private | 2 | 4 | \$480 | <input checked="" type="checkbox"/> |
| 6270 | RAM4025 | 1023 | 8/25/2017 | Group | 2 | 5 | \$400 | <input type="checkbox"/> |
| 6275 | BAR4018 | 1003 | 8/30/2017 | Group | 2 | 5 | \$400 | <input type="checkbox"/> |
| 6280 | COW4100 | 1015 | 9/5/2017 | Private | 3 | 4 | \$720 | <input checked="" type="checkbox"/> |
| 6285 | EIG4042 | 1036 | 9/6/2017 | Group | 2 | 5 | \$400 | <input type="checkbox"/> |
| 6290 | FRA4045 | 1020 | 9/12/2017 | Semi-private | 1 | 5 | \$300 | <input checked="" type="checkbox"/> |
| 6295 | HIC4055 | 1042 | 9/18/2017 | Private | 2 | 6 | \$720 | <input checked="" type="checkbox"/> |
| 6300 | KIL4085 | 1045 | 9/26/2017 | Private | 1 | 10 | \$600 | <input checked="" type="checkbox"/> |
| 6305 | WIL4050 | 1048 | 9/28/2017 | Private | 2 | 10 | \$1,200 | <input checked="" type="checkbox"/> |
| 6315 | NIV4110 | 1060 | 10/2/2017 | Semi-private | 2 | 8 | \$960 | <input checked="" type="checkbox"/> |
| 6325 | FRA4045 | 1018 | 10/3/2017 | Group | 1 | 10 | \$400 | <input type="checkbox"/> |
| 6330 | VAS4040 | 1025 | 10/6/2017 | Private | 2 | 5 | \$600 | <input checked="" type="checkbox"/> |
| 6335 | JOH4075 | 1042 | 10/9/2017 | Private | 2 | 10 | \$1,200 | <input checked="" type="checkbox"/> |
| 6340 | LON4105 | 1015 | 10/11/2017 | Private | 2 | 4 | \$480 | <input checked="" type="checkbox"/> |
| 6350 | LOP4015 | 1010 | 10/12/2017 | Private | 3 | 4 | \$720 | <input checked="" type="checkbox"/> |

Data imported from Agreements workbook

Records in Fig 2-54 added

Columns resized to their best fit



One-to-many relationships between database tables: Between Primary Student table / related Contract table; primary Tutor table / related Contract table. All field names visible. Referential integrity, cascade updates defined for each relationship

Programming database compacted / repaired

“Riverview” database, table created using design in Fig 2-5; table saved as “Billing”

VisitID field (Data type: “Short Text”; Description: “Foreign key”; Size: “4”; Caption: “Visit ID”).
 InvoiceAmt field (Data Type: “Currency”; Decimal Places: “2” Caption: “Invoice Amt”).
 InvoiceDate field (Data type: “Date/Time”; Format: “mm/dd/yyyy”; Caption: “Invoice Date”).
 InvoicePaid field (Data type: “yes/no”; Caption: “Invoice Paid”).

InvoiceNum
primary key

“InvoiceAmt” moved and appears before the InvoicePaid field.
 “InvoiceItem” field added (Data type: “Short Text”; Size: “40”; Caption: “Invoice Item”) between InvoiceAmt/InvoicePaid fields

| Invoice Num | Visit ID | Invoice Date | Invoice Amt | Invoice Item | Invoice Paid |
|-------------|----------|--------------|-------------|--------------------------|-------------------------------------|
| 42098 | 1002 | 11/09/2016 | \$50.00 | Lab work | <input checked="" type="checkbox"/> |
| 42099 | 1002 | 11/09/2016 | \$75.00 | Updated shots | <input type="checkbox"/> |
| 42100 | 1002 | 11/09/2016 | \$45.00 | Flea & tick medications | <input type="checkbox"/> |
| 42110 | 1006 | 11/14/2016 | \$35.00 | Heartworm medication | <input checked="" type="checkbox"/> |
| 42111 | 1006 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42112 | 1006 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42118 | 1009 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42119 | 1009 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42125 | 1012 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42126 | 1012 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42127 | 1012 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42128 | 1013 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42129 | 1013 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42130 | 1014 | 11/14/2016 | \$35.00 | Heartworm medication | <input type="checkbox"/> |
| 42131 | 1014 | 11/21/2016 | \$75.00 | Lab work | <input checked="" type="checkbox"/> |
| 42132 | 1015 | 11/21/2016 | \$75.00 | Updated shots | <input checked="" type="checkbox"/> |
| 42133 | 1015 | 11/21/2016 | \$75.00 | Lab work | <input checked="" type="checkbox"/> |
| 42134 | 1016 | 11/21/2016 | \$75.00 | Updated shots | <input checked="" type="checkbox"/> |
| 42135 | 1016 | 11/21/2016 | \$75.00 | Lab work | <input checked="" type="checkbox"/> |
| 42145 | 1020 | 11/22/2016 | \$275.00 | Surgery for wing repair | <input checked="" type="checkbox"/> |
| 42146 | 1020 | 11/22/2016 | \$50.00 | Medications for recovery | <input checked="" type="checkbox"/> |
| 42147 | 1020 | 11/22/2016 | \$75.00 | Lab work | <input checked="" type="checkbox"/> |
| 42155 | 1024 | 11/23/2016 | \$50.00 | Lab work | <input checked="" type="checkbox"/> |
| 42156 | 1024 | 11/23/2016 | \$75.00 | Updated shots | <input checked="" type="checkbox"/> |
| 42157 | 1024 | 11/23/2016 | \$45.00 | Flea & tick medications | <input checked="" type="checkbox"/> |

Records in Fig 2-21 entered; Data imported from Invoices worksheet into Billing table. ★

Invoice Item column
resized to its best fit

Columns resized to their
best fit

VisitID field (Format: "Short Date"; Description: "Primary Key"; Size: "4"; Caption: "Visit ID")

AnimalID field (Data Type: "Short Text"; Description: "Foreign Key")

VisitDate field (Data Type: "Date/Time"; Caption: "Date of Visit")

Reason field (Data Type: "Short Text", Size: "60", Caption: "Reason/Diagnosis")

OffSite field (Data Type: "yes/no"; Caption: "Off-Site Visit?")

| Visit ID | Animal ID | Date of Visit | Reason/Diagnosis | Off-Site Visit |
|----------|-----------|---------------|----------------------------|-------------------------------------|
| 1002 | 12282 | 11/8/2016 | Vaccinations | <input type="checkbox"/> |
| 1006 | 12290 | 11/11/2016 | Vaccinations | <input type="checkbox"/> |
| 1009 | 12308 | 11/15/2016 | Nail clipping and grooming | <input type="checkbox"/> |
| 1012 | 12335 | 11/18/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1013 | 12337 | 11/18/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1014 | 12340 | 11/18/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1015 | 12343 | 11/18/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1016 | 12345 | 11/18/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1020 | 12328 | 11/21/2016 | Injured wing | <input type="checkbox"/> |
| 1024 | 12312 | 11/22/2016 | Vaccinations | <input type="checkbox"/> |
| 1028 | 12300 | 11/28/2016 | Grooming | <input type="checkbox"/> |
| 1032 | 12296 | 11/28/2016 | Grooming | <input type="checkbox"/> |
| 1036 | 12294 | 11/29/2016 | Declawing | <input type="checkbox"/> |
| 1040 | 12286 | 12/1/2016 | Vaccinations | <input type="checkbox"/> |
| 1044 | 12278 | 12/2/2016 | Vaccinations | <input type="checkbox"/> |
| 1048 | 12318 | 12/2/2016 | Injured paw | <input type="checkbox"/> |
| 1052 | 12325 | 12/5/2016 | Ear issue | <input type="checkbox"/> |
| 1056 | 12332 | 12/6/2016 | Spaying | <input type="checkbox"/> |
| 1060 | 12322 | 12/8/2016 | Vaccinations | <input type="checkbox"/> |
| 1064 | 12315 | 12/9/2016 | Injured paw | <input type="checkbox"/> |
| 1070 | 12350 | 12/12/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1071 | 12353 | 12/12/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1072 | 12356 | 12/12/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1073 | 12359 | 12/12/2016 | Vaccinations | <input checked="" type="checkbox"/> |
| 1074 | 12362 | 12/12/2016 | Vaccinations | <input checked="" type="checkbox"/> |

Columns resized to their best fit

Import “Animal” table from AllAnimals database into the Riverview database

| FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS | FIELDS | TABLE |
|--------------------|-------------------------------|---------------|--|--|----------------------------|-----------------------------|
| View | Cut Copy Format Painter | Filter | Ascending Descending Remove Sort | Selection Advanced Toggle Filter | Refresh Delete | Totals Spelling More |
| Views | Clipboard | Sort & Filter | Records | Find | Replace Go To Select | Calibri (Detail) B I U A |
| All Access Objects | | | | | | |
| Search... | | | | | | |
| Tables | | | | | | |
| Animal | | | | | | |
| Billing | | | | | | |
| Owner | | | | | | |
| Visit | | | | | | |
| Queries | | | | | | |
| VisitList | | | | | | |
| Forms | | | | | | |
| VisitData | | | | | | |
| Reports | | | | | | |
| VisitDetails | | | | | | |
| Animal | | | | | | |
| Animal ID | Owner ID | Animal Name | Animal Birth Date | Animal Type | Animal Breed | |
| 12278 | 2412 | Bailey | 05/09/2013 | Dog | Beagle | |
| 12282 | 2310 | Whiskers | 04/10/2014 | Cat | Burmese | |
| 12286 | 2318 | Lady | 08/12/2015 | Dog | Border collie | |
| 12290 | 2325 | Rustle | 09/02/2015 | Dog | Australian shepherd | |
| 12294 | 2335 | Bushy | 03/02/2015 | Cat | Himalayan | |
| 12296 | 2350 | Patches | 02/09/2013 | Cat | Siberian | |
| 12300 | 2358 | Buddy | 08/02/2013 | Dog | Russell terrier | |
| 12304 | 2366 | Tweets | 11/12/2010 | Bird | Parakeet | |
| 12308 | 2375 | Rosie | 07/05/2013 | Dog | Dalmatian | |
| 12312 | 2412 | Molly | 04/29/2009 | Dog | Labrador retriever | |
| 12315 | 2380 | Silly | 05/02/2012 | Dog | Chihuahua | |
| 12318 | 2314 | Tracker | 04/29/2013 | Dog | Bloodhound | |
| 12322 | 2322 | Ellie | 12/22/2014 | Dog | Scottish terrier | |
| 12325 | 2340 | Butch | 11/16/2012 | Dog | Bulldog | |
| 12328 | 2354 | Lovie | 02/03/2002 | Bird | Lovebird | |
| 12332 | 2370 | Smittie | 05/19/2014 | Cat | American shorthair | |
| 12335 | 2384 | Hereford1 | 02/04/2015 | Cattle | Hereford | |
| 12337 | 2384 | Hereford2 | 03/18/2015 | Cattle | Hereford | |
| 12340 | 2384 | Hereford3 | 04/02/2015 | Cattle | Hereford | |
| 12343 | 2384 | Hereford4 | 04/17/2015 | Cattle | Hereford | |
| 12345 | 2384 | Hereford5 | 04/28/2015 | Cattle | Hereford | |
| 12350 | 2388 | Merino1 | 03/14/2014 | Sheep | Merino | |
| 12353 | 2388 | Merino2 | 04/21/2014 | Sheep | Merino | |
| 12356 | 2388 | Merino3 | 04/28/2014 | Sheep | Merino | |
| 12359 | 2388 | Merino4 | 08/02/2014 | Sheep | Merino | |
| Record: 1 of 57 | | No Filter | Search | | | |

Import "Owner" table from Kelly database into the Riverview database

Add fields to the Owner database using the Data Type gallery
Address field via QuickStart section (5 fields added ("Address", "City", "State Province", "ZIP Postal", "Country Region"))

Records

| Owner ID | First Name | Last Name | Phone | Address | City | State | Zip | Email |
|----------|---------------|--------------|--------------|------------------------|-----------|-------|-------|----------------------------|
| 2310 | Student First | Student Last | 307-824-1245 | 12 Elm Ln | Cody | WY | 82414 | student@example.com |
| 2314 | Sally | Cruz | 307-406-4321 | 199 18th Ave | Ralston | WY | 82440 | scrutz@example.com |
| 2318 | Sandra | Pincher | 307-982-8401 | 12 Rock Ln | Cody | WY | 82414 | sp231@example.com |
| 2322 | Billy | Ruffton | 307-843-9810 | 21 Simple Cir | Garland | WY | 82435 | br299@example.com |
| 2325 | Barbara | Fishman | 307-987-0092 | 2 L | | | | |
| 2330 | Jimmy | Gonzalez | 307-987-0334 | 16 | | | | |
| 2335 | Joey | Smith | 307-888-4239 | 17 | | | | |
| 2340 | Melanie | Jackson | 307-882-1925 | 42 | | | | |
| 2345 | Dan | Poleman | 307-887-8873 | 75 | | | | |
| 2350 | Samantha | Smith | 307-887-1239 | 14 Rock Ln | Ralston | WY | 82440 | ssmith@example.com |
| 2354 | Randy | Blacksmith | 307-882-9987 | 245 18th Ave | Cody | WY | 82414 | blacksmith@example.com |
| 2358 | Angie | Hendricks | 307-943-2234 | 27 Locklear Ln | Powell | WY | 82440 | angie@example.com |
| 2362 | Thomas | Jones | 307-985-9981 | 622 Bobcat Tr | Ralston | WY | 82440 | tj@example.com |
| 2366 | Aaron | Jackson | 307-984-1182 | 17 Ridge Rd | Cody | WY | 82414 | aj17@example.com |
| 2370 | Curt | Billings | 307-824-1802 | 14 Elm Ln | Cody | WY | 82414 | curtbillings@example.com |
| 2375 | Joseph | Otterman | 307-824-9863 | 42 Rock Ln | Cody | WY | 82414 | otterman42@example.com |
| 2380 | Billy | Smith | 307-887-4829 | 312 Oak Rd | Ralston | WY | 82440 | bsmith@example.com |
| 2384 | Susan | Miller | 307-824-2756 | 1283 Old Roundabout Rd | Cody | WY | 82414 | susanfarms@example.com |
| 2388 | Jack | Sprawling | 307-824-8305 | 1 Sprawling Farm Rd | Cody | WY | 82414 | sprawlingfarms@example.com |
| 2392 | Elmer | Jackson | 307-843-8472 | 22 Jackson Farm Rd | Garland | WY | 82435 | ElmerJ22@example.com |
| 2396 | Richie | Upton | 307-824-9876 | 155 Cherry Canyon Rd | Cody | WY | 82414 | uptonfarms@example.com |
| 2400 | Leslie | Smith | 307-883-9481 | 123 Sheepland Rd | Elk Butte | WY | 82433 | sheepland@example.com |
| 2404 | Reggie | Baxter | 307-943-2469 | 880 Powell-Cody Rd | Powell | WY | 82440 | baxterfarms@example.com |
| 2408 | Tom | Rascal | 307-824-3575 | 1 Rascal Farm Rd | Cody | WY | 82414 | rascalfarms@example.com |
| 2412 | Taylor | Johnson | 307-868-8862 | 412 River Rd | Cody | WY | 82414 | taylorj@example.com |

Record: 1 of 25

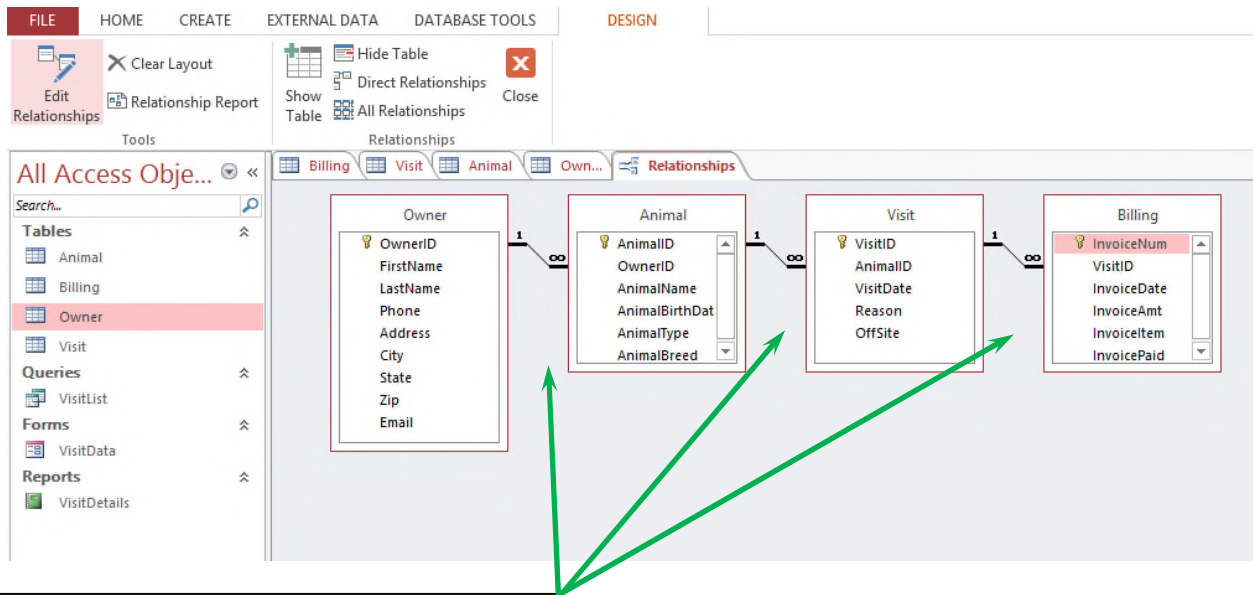
Edit data types:

Phone field: Data type: "Short Text"; Size: "14"
 Address field: Size: "35"; caption deleted
 City field: Size: "25"; caption deleted
 Sate field: Size: "2"; caption deleted; Default: "WY"
 Zip field: Size: "10"; caption deleted
 OwnerID field: Type: "Primary Key"; Caption: "Owner ID";
 FirstName field: Caption: "First Name"
 LastName field: Caption: "Last Name"

Delete "Country Region", "County", and "Notes" fields

Add two records to the Owner table, resize columns for best fit; Data imported from Owner text file into Owner table

Columns resized to their best fit



One-to-many relationships between tables:
Primary Owner table / related Animal table;
Primary Animal table / related Visit table;
Primary Visit table / related Billing table.
All field names visible. Referential integrity,
cascade updates defined for each relationship

Riverview database
compacted / repaired

“Vendor” database,
“Supplier” table: Field
properties set as in Fig 2-45

Columns resized to their
best fit

Supplier

| Supplier ID | Company | Category | Address | City | State | Zip | Contact Phc | Contact First | Contact Last | Initial Contact |
|-------------|---------------------------|-----------|--------------------|------------|-------|-------|--------------|---------------|--------------|-----------------|
| APL615 | A+ Labs | Equipment | 619 West Dr | Omaha | NE | 68022 | 531-219-7206 | Jacques | Dupont | 4/10/2017 |
| ATB512 | All Things for Birds | Resale | 512 Canary Way | Tulsa | OK | 74102 | 539-498-0041 | Shou | Miyamoto | 1/16/2017 |
| BOS412 | Boston Medical | Equipment | 412 Mass Way | Boston | MA | 02110 | 617-984-3961 | Ellen | Smith | 3/2/2017 |
| CWI444 | Cat World Inc. | Supplies | 444 Boxcar Way | San Diego | CA | 92110 | 619-477-9482 | Amelia | Kline | 5/1/2017 |
| DEK012 | Dexter Supplies | Supplies | 12 Supply Rd | Wichita | KS | 67202 | 316-811-2109 | Aiden | Claxton | 4/16/2017 |
| FTS123 | Flea & Tick Supplies | Resale | 123 Overlook Ln | Atlanta | GA | 30301 | 404-341-2981 | Robert | Jackson | 3/6/2017 |
| GGF099 | Green Gill Food | Resale | 99 Guppie Ln | Orlando | FL | 32802 | 321-564-1492 | Brittany | Lowry | 4/2/2017 |
| HPF042 | Henry's Pet Food | Resale | 42 Elm Rd | Knoxville | TN | 37902 | 865-321-0081 | Bob | Samuels | 1/16/2017 |
| IPS009 | Iomega Pet Supplies | Supplies | 9 International Dr | Dallas | TX | 75202 | 469-592-9401 | Xavier | Jackson | 3/21/2017 |
| JMS499 | Jimison Medical Supplies | Supplies | 499 Techway Blvd | Columbia | SC | 29202 | 803-418-9982 | Louise | Jimison | 5/7/2017 |
| KLS321 | Kilgore Lab Supplies | Supplies | 321 Production Ave | Adolphus | KY | 42120 | 270-397-1008 | Tammy | Kilgore | 4/19/2017 |
| LAS011 | Luxury Amlinal Supplies | Resale | 11 Peakview Rd | Asheville | NC | 28801 | 828-432-9401 | Sharlene | Packson | 1/26/2017 |
| MMS311 | Montreat Medical Supplies | Supplies | 311 Supply Rd | Montreat | NC | 28757 | 828-432-9910 | Charley | Smith | 2/6/2017 |
| NFG001 | No Flea Guarantee | Resale | 1 Plyler Cir | Hillsville | VA | 24343 | 276-942-8820 | Zack | Plyer | 3/21/2017 |
| PMC019 | Pet Medical | Equipment | 19 Waverly Ct | Blacksburg | VA | 24061 | 540-702-0098 | Julie | Baxter | 2/21/2017 |
| PUP092 | Puppy World | Resale | 92 Bark Rd | Athens | GA | 30602 | 762-498-5081 | Makayla | Robinson | 2/15/2017 |
| QLS002 | Quincy Lab Supplies | Supplies | 2 Plainview Rd | Columbus | OH | 43085 | 614-591-3091 | Jackson | Palmer | 4/17/2017 |
| RPF001 | Ramsey Pet Foods | Resale | 1 Mountainview Way | Billings | MT | 59102 | 406-824-9980 | Phillip | Ramsey | 3/19/2017 |
| YUM345 | Yummy Dog Food | Resale | 345 Riverside Dr | Charlotte | NC | 28201 | 704-205-8725 | Student First | Student Last | 2/1/2017 |
| ZPS006 | Zack's Pet Supplies | Resale | 6 Pond Dr | Worcester | MA | 01602 | 508-431-9200 | Zack | Brown | 3/21/2017 |

Table created using design in Fig 2-46

Field added, “Weight” (Data type: “Number”; Size: “Single”; Decimal Places: “2”; Caption: “Weight in Lbs”; Default Value: [no]) between Price / TempControl fields. “Units/Case” positioned between Price/Weight fields

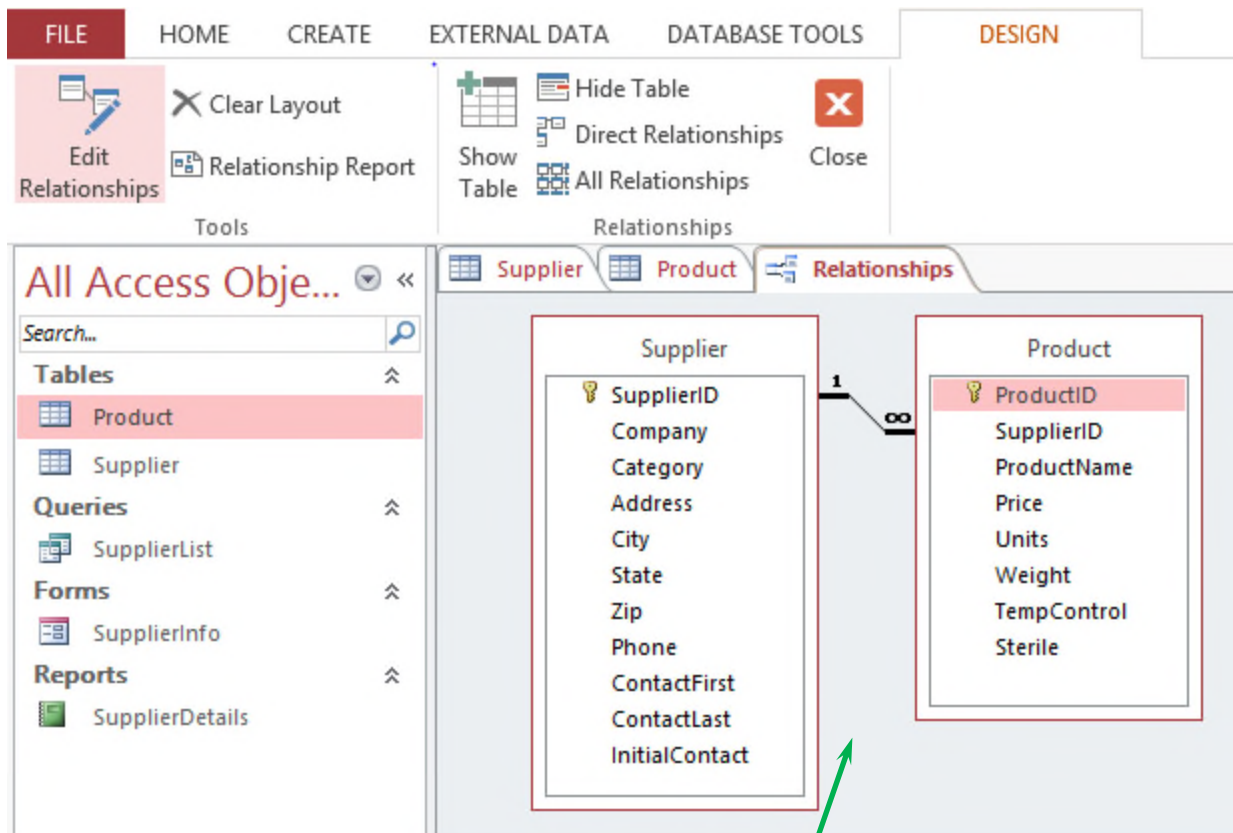
ProductID primary key, table saved as “Product”

| Product ID | Supplier ID | Product Name | Price | Units/Case | Weight in Lbs | Temp Controlled? | Sterile? |
|------------|-------------|----------------------------------|----------|------------|---------------|-------------------------------------|-------------------------------------|
| AT222 | KLS321 | Adhesive tape roll | 75.00 | 25 | 3 | <input type="checkbox"/> | <input type="checkbox"/> |
| AU982 | BOS412 | Autoclave | 4,500.00 | 1 | 75 | <input type="checkbox"/> | <input type="checkbox"/> |
| BC100 | KLS321 | Blood collection vial | 47.00 | 20 | 1 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| BN111 | QLS002 | Blood collection needle - large | 17.00 | 10 | 1 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| BN222 | QLS002 | Blood collection needle - small | 16.00 | 10 | 1 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| BS100 | ATB512 | Premium bird seed | 50.00 | 10 | 20 | <input type="checkbox"/> | <input type="checkbox"/> |
| BV100 | JMS499 | Bordetella vaccine | 72.00 | 10 | 1 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| CB100 | IPS009 | Cat bowl | 40.00 | 10 | 4 | <input type="checkbox"/> | <input type="checkbox"/> |
| CB999 | ZPS006 | Cat bed | 25.00 | 1 | 4 | <input type="checkbox"/> | <input type="checkbox"/> |
| CC001 | CWI444 | Cat collar | 75.00 | 10 | 1 | <input type="checkbox"/> | <input type="checkbox"/> |
| CC500 | LAS011 | Luxury cat collar | 47.00 | 5 | 2 | <input type="checkbox"/> | <input type="checkbox"/> |
| CE432 | APL619 | Centrifuge | 5,500.00 | 1 | 50 | <input type="checkbox"/> | <input type="checkbox"/> |
| CF111 | CWI444 | Premium moist cat food | 60.00 | 20 | 3 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| CF222 | CWI444 | Premium dry cat food | 55.00 | 25 | 7 | <input type="checkbox"/> | <input type="checkbox"/> |
| CF600 | NFG001 | Cat flea medicine | 62.00 | 5 | 1 | <input type="checkbox"/> | <input type="checkbox"/> |
| CG001 | ATB512 | Deluxe bird cage | 75.00 | 1 | 15 | <input type="checkbox"/> | <input type="checkbox"/> |
| CT100 | FTS123 | Cat tick collar | 70.00 | 10 | 2 | <input type="checkbox"/> | <input type="checkbox"/> |
| CT500 | CWI444 | Cat toy | 10.00 | 10 | 2 | <input type="checkbox"/> | <input type="checkbox"/> |
| CV500 | NFG001 | Cattle viral respiratory vaccine | 137.00 | 10 | 1 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| DB100 | IPS009 | Dog bowl | 40.00 | 10 | 4 | <input type="checkbox"/> | <input type="checkbox"/> |
| DB888 | ZPS006 | Dog bed - large | 48.00 | 1 | 7 | <input type="checkbox"/> | <input type="checkbox"/> |
| DB999 | ZPS006 | Dog bed - small | 38.00 | 1 | 6 | <input type="checkbox"/> | <input type="checkbox"/> |
| DC500 | LAS011 | Luxury dog collar | 52.00 | 5 | 2 | <input type="checkbox"/> | <input type="checkbox"/> |
| DF100 | HPF042 | Premium dry dog food | 65.00 | 10 | 40 | <input type="checkbox"/> | <input type="checkbox"/> |
| DF200 | HPF042 | Premium moist dog food | 35.00 | 10 | 2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Records in Fig 2-47 entered. Columns resized to their best fit

Data imported from Supplies workbook into Product table

Columns resized to their best fit



One-to-many relationships between tables: Primary Supplier table / related Product table. All field names visible. Referential integrity, cascade updates defined for each relationship

Vendor database compacted / repaired

Grading Rubric – Access 2016

Module 2, Case Problem 1

Class:

Professor:

Notes:

Solution Filename: *Beauty.accdb*

| Description | Pts | Your Score |
|---|-----------|------------|
| Beauty database, Option table a. OptionID: Description, “Primary key”; size “3”; caption, “Option ID” b. OptionDescription: Size “45”; caption, “Option Description” c. OptionCost: Format, “Standard”; “0” decimal places; caption, “Option Cost” d. FeeWaived: Caption “Fee Waived” | 4 | |
| Table created using design in Fig 2-48 | 3 | |
| MemberID is the primary key, table saved as “Member” | 2 | |
| 4 Fields added between LastName / Phone fields and one field between Phone and OptionEnd fields | 2 | |
| a. Address field: “Street”, size “40”, caption deleted b. City field: Size “25”, caption deleted c. StateProvince field: “State”, size “2”, caption deleted, FL is default value d. ZIPPostal field: “Zip”, size 10, caption deleted e. CountryRegion field deleted from Member table structure f. “OptionBegin” field added (data type: “Date/Time”; format: “Short Date”; Caption: “Option Begins”) between Phone / OptionEnd fields | 4 | |
| Records in Fig 2-49 entered. 1 st / last names entered. Columns resized to their best fit | 2 | |
| Data imported from Customers text file; Source: Customer text file; append the data; Table: Member; import delimited data and use a comma delimiter; do not save the import steps | 3 | |
| One-to-many relationship between primary Plan / Member table. All field names visible. Referential integrity, cascade updates defined for the relationship | 3 | |
| Beauty database compacted / repaired | 2 | |
| TOTAL POSSIBLE POINTS: | 25 | 0 |

YOUR SCORE: _____

Grading Rubric – Access 2016 Module 2, Case Problem 2

Class:

Professor:

Notes:

Solution Filename: *Programming.accdb*

| Description | Pts | Your Score |
|--|-----------|------------|
| Programming database, Tutor table, field properties set as in Fig 2-50 | 3 | |
| Field added as last field with name “Groups”, “Yes/No” data type, caption “Groups Only” | 3 | |
| Specify which tutors conduct group tutoring sessions only: Carey Billings, Fredrik Karlsson, Ellen Desoto, Donald Gallager | 2 | |
| Structure of Student table in Client database imported into table named “Student” in Programming database | 3 | |
| New fields at end: “BirthDate” (Date/Time), “Gender” (Short Text) | 2 | |
| 4 fields related to phone numbers added between Zip / BirthDate | 3 | |
| BusinessPhone / FaxNumber fields deleted | 2 | |
| Design from Fig 2-51, including revised field names / data types | 2 | |
| LastName field follows FirstName field | 1 | |
| Records in Fig 2-52 added | 3 | |
| Fields resized to their best fit | 1 | |
| Data imported from Students text file | 2 | |
| Columns resized to their best fit | 1 | |
| Table created using design in Figure 2-53 | 3 | |
| ContractID is primary key, table saved as “Contract” | 2 | |
| Field added, between TutorID / SessionType fields: “ContractDate” name, “Date/Time” data type, “Date contract is signed” description, “Short Date” format, “Contract Date” caption | 3 | |
| Data imported from Agreements workbook | 3 | |
| Records in Fig 2-54 added | 3 | |
| Columns resized to their best fit | 1 | |
| One-to-many relationships between database tables: Between Primary Student table / related Contract table, primary Tutor table / related Contract table. All field names visible. Referential integrity, cascade updates defined for each relationship | 5 | |
| Programming database compacted / repaired | 2 | |
| TOTAL POSSIBLE POINTS: | 50 | 0 |

YOUR SCORE: _____

Grading Rubric – Access 2016 Module 2, Case Problem 3

Class:

Professor:

Notes:

Solution Filename: Center.accdb

| Description | Pts | Your Score |
|---|----------|------------|
| “Center” database, “Patron” table, a. PatronID: Description “Primary key”, field size 5, caption “Patron ID” b. Title: Field size 4 c. FirstName: Field size “20”, caption “First Name” d. LastName: Field size “25”, caption “Last Name” e. Phone: Field size “14” f. Email: Field size “35” | 4 | |
| Table created with data imported from the Donations workbook | 2 | |
| Primary key DonationID, table named “Donation” | 2 | |
| Left-justify DonationDescription field | 1 | |
| Table matches design in Fig 2-55 | 3 | |
| Columns resized to their best fit | 1 | |
| Donation Value: Made current field, 0 decimal places | 2 | |
| Table created using design in Fig 2-56 | 3 | |
| Primary key AuctionID, table saved as “Auction” | 2 | |
| Data imported to Auction table from Auctions text file | 2 | |
| Columns resized to their best fit | 1 | |
| DonationID: made 2 nd field, description “Foreign key”. | 2 | |
| Records added from Fig 2-57 | 2 | |
| One-to-many relationships between tables: Primary Patron table / related Donation table, primary Donation table / related Auction table. All field names visible. Referential integrity, cascade updates defined for each relationship | 5 | |
| Center database compacted / repaired | 2 | |
| TOTAL POSSIBLE POINTS: | | 0 |

YOUR SCORE: _____

Grading Rubric – Access 2016 Module 2, Case Problem 4

Class:

Professor:

Notes:

Solution Filename: *Appalachia.accdb*

| Description | Pts | Your Score |
|---|-----------|------------|
| “Appalachia” database, “Hiker” table, a. HikerID: “Primary key” description, size “3”, “Hiker ID” caption b. HikerFirst: Size “20”, “Hiker First Name” caption c. HikerLast: Size “25”, “Hiker Last Name” caption d. Address: Size “35” e. City: Size “25” f. State: Size “2” g. Zip: Size “10” h. Phone: Size “14” | 6 | |
| Hiker First Name / Hiker Last Name columns resized to their best fit | 1 | |
| “Trip” table structure and data from “Travel” database imported into new table in “Appalachia” database | 3 | |
| Trip table renamed “Tour” giving the name to the new table in “Appalachia” database | 1 | |
| a. TourID: Description “Primary key”, size “3”, “Tour ID” caption b. TourName: “Tour Name” caption, size “35” c. PricePerPerson: “Price Per Person” caption | 3 | |
| Columns resized to their best fit | 1 | |
| Table created using design in Fig 2-58 | 3 | |
| ReservationID primary key, table saved as “Reservation” | 2 | |
| TourDate field displays dates in format similar to 02/15/17 | 1 | |
| Data in the Bookings text file imported into Reservation table | 2 | |
| Columns resized to their best fit, date values in TourDate field are displayed according to the custom format | 2 | |
| One-to-many relationships between tables: Primary Hiker table / related Reservation table, primary Tour table / related Reservation table. All field names visible. Referential integrity, cascade updates defined for each relationship | 4 | |
| Appalachia database compacted / repaired | 1 | |
| TOTAL POSSIBLE POINTS: | 30 | 0 |

YOUR SCORE: _____

New Perspectives Microsoft Office 365 and Access 2016 Introductory 1st Edition Shellman Solutions Manual

Full Download: <http://testbanklive.com/download/new-perspectives-microsoft-office-365-and-access-2016-introductory-1st-edition>