

UNIT A
Getting Started with Access 2013

Table of Contents

Unit A: Getting Started with Access 2013.....2
Concepts Review2
Skills Review.....3
Independent Challenge 2.....8
Independent Challenge 3.....9
Independent Challenge 4.....10
Visual Workshop.....11

Unit A: Getting Started with Access 2013

Concepts Review

Screen Labeling	Matching Items	Multiple Choice
1. Customers table tab		
2. Record	10. f	17. d
3. Current record box	11. e	18. b
4. Expand button	12. b	19. d
5. First Record button	13. d	
6. Previous Record button	14. a	
7. Next Record button	15. g	
8. New record button	16. c	
9. FirstName field name and values		

Skills Review

1. No data for solution file are supplied or created for step 1.

a. (See page Access 2.)

Duplicate data is minimized.

Information is more accurate.

Information is more reliable.

Information is more consistent.

Data entry is faster and easier.

Information can be viewed and sorted many ways.

Information is more secure.

Several users can share and edit information at the same time.

b. Several fields constitute a record, several records constitute a table, and several related tables create a relational database.

2. For Step 2: Data File: RealEstate-A.accdb. Solution File: RealEstate-A-Solution.accdb

c.

Table Name	Number of records	Number of fields
Agencies	4	7
HomeTypes	6	1
Listings	26	16
Realtors	11	5

d. Check to make sure the student's name has replaced Gordon Bono's name.

RFirst	RLast	Type	SqFt	Asking
Student First	Student Last	Ranch	3400	\$90,000.00
Student First	Student Last	Ranch	3000	\$129,000.00
Student First	Student Last	Cabin	2900	\$135,000.00
Student First	Student Last	Ranch	1215	\$85,000.00
Student First	Student Last	Cabin	2000	\$280,000.00
Phil	Kirkpatrick	Cabin	1200	\$150,000.00
Phil	Kirkpatrick	Ranch	2500	\$199,000.00
Phil	Kirkpatrick	Two Story	3000	\$276,000.00
Phil	Kirkpatrick	Two Story	1800	\$138,000.00
Phil	Kirkpatrick	Ranch	2200	\$395,613.00
Jessica	Podor	Two Story	3000	\$199,950.00
Jessica	Podor	Two Story	5500	\$194,500.00
Jessica	Podor	Two Story	2500	\$189,900.00
Malika	Thompson	Ranch	2700	\$189,900.00
Malika	Thompson	Log Cabin	2000	\$189,900.00
Malika	Thompson	Ranch	2500	\$189,900.00
Malika	Thompson	Two Story	3200	\$187,500.00
Malika	Thompson	Two Story	2700	\$147,900.00
Malika	Thompson	Patio Home	2200	\$139,900.00
Jane Ann	Welch	Cabin	1350	\$127,900.00
Jane Ann	Welch	Two Story	2000	\$124,900.00
Shari	Duncan	Patio Home	1200	\$120,000.00
Trixie	Angelina	Ranch	2000	\$105,000.00
Mary	Baldwin	Ranch	2000	\$250,000.00
Mary	Baldwin	Cabin	1900	\$111,900.00

3. For Steps 3-8: Data File: Create RealEstateMarketing.accdb. Solution File: RealEstateMarketing-Solution.accdb

3b: Check Design View of the Prospects table and compare the field names and data types.

3c: Check Datasheet View of the Prospects table and look for two records: the student's name should be in the first record and the professor's name in the second record. (See Figure A-20 for the final datasheet for both the States and Prospects table.)

3d: TX should be the value in the State field for the first two records.

3e: All columns should be widened so that all data is clearly visible.

4. Check Design View of the States table and compare the field names and data types to step 4a.

5. Check Design View of the States table and make sure that the StateAbbrev field is the primary key field. Check Datasheet View of the States table, and make sure that the TX Texas record is entered.

6. Check the Relationships window. Check for primary key fields on the StateAbbrev field of the States table and ProspectID field of the Prospects table as shown in Figure A-19. Check for a one-to-many relationship on the StateAbbrev to State field with referential integrity enforced.

7a: Check Datasheet View of the States table, and make sure 7 more records were entered correctly as shown in the step.

7b: Check Datasheet View of the States table to make sure three more state records were entered correctly for a total of 11 records. Check to make sure all state names and abbreviations are spelled correctly.

8. Open the States table and expand the TX record. Make sure Student and Professor records appear in the Subdatasheet as shown in Figure A-20 and that two more records were added.

Independent Challenge 1

No project file is supplied for this Independent Challenge.

1a. Examples of database fields are in the first row. Each example should have 4-7 fields (columns).

1b. Examples of two possible records for each database are in the second and third rows.

Telephone directory

FirstName	LastName	Street	City	Zip	Phone
Lisa	Friedrichsen	111 Maple	Fontanelle	50010	555-111-2222
Douglas	Donald	222 Oak	Schaller	50011	555-111-3333

College course offerings

Course name	course number	section	number of credit hours	instructor's last name	term offered	starting date	classroom
Access I	PCA114	101	3	Mahring	Spring15	1/5/15	CLB403
Access II	PCA115	201	3	Cahill	Fall15	8/20/15	CLB405

Restaurant menu items

Menu item	price	description	food category
Hamburger	\$1.99	quarter pounder with cheese	entree
Fish Sandwich	\$1.79	white fish filet on a toasted bun	entree

Vehicles

Make	Model	MilesPerGallon	Year	Color	AskingPrice
Ford	Escape	25	2011	Burgundy	\$15,000
Honda	Accord	32	2009	White	\$11,000

Movie listing

Title	TypeOfMovie	LeadRole	Director	Length	Rating	Comments
Rolling Meadows	Adventure	Costner	Spielberg	99	PG	Struggling Iowa farmer hits oil then fights off neighbors for wealth
Space Station	Science Fiction	Clooney	Spielberg	90	PG13	US and Russia race for space domination for the next millennium

Islands of the Caribbean

CountryName	Language	Currency	Capital	Population
Puerto Rico	Spanish	US Dollar	San Juan	3,839,810

Bonaire	Dutch	NAF	Kralendijk	14,900
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Physical Activities

ActivityName	CaloriesBurnedPerHour	BiggestRisk	LeadInstructor
Biking	300	Serious injury due to crash	Solarity
Hiking	350	Sprained ankle	Downing

Shopping catalog

Item	Item Number	Weight	Description	Price
Camping tent	123XYZ	32	Nylon camping tent sleeps 8	\$199.99
Cookstove	1886XR2	5	Heavy-duty grill cooks 4 patties	\$19.99

Conventions

ConventionName	LocationCity	LocationState	MainHotel	Cost	StartDate	EndDate
Fitness Plus	Kansas City	MO	Downtown Marriott	\$200	7/6/16	7/9/16
Intentional Living	Denver	CO	Hyatt Marquis	\$400	7/7/16	7/10/16

Party guest list

FirstName	LastName	Street	City	State	Zip	Telephone Number
Kelsey	Lang	9987 Ashley Park	Des Moines	IA	50001	555-666-7777
David	Rice	7788 Pin Oak Drive	Clive	IA	50002	555-777-1111

Members of the House of Representatives

First name	last name	party affiliation	MM/YY elected	state
Charles	Grassley	R	11/15/86	IA
Samuel	Brown	D	11/15/98	KS

Ancient Wonders of the World

Name	Country	YearCreated	CauseOfDestruction
Great Pyramid of Giza	Egypt	2560 BC	Flood
The Hanging Gardens of Babylon	Iraq	1750 BC	Fire

Discuss that in order to preserve maximum capability to find, sort, filter, merge, and calculate on pieces of information in the database, names should be divided into first and last name, addresses should be divided into street, city, state, and zip fields, and units of measure and quantities should be in two fields as well.

Independent Challenge 2

Data File: Recycle-A.accdb. Solution File: Recycle-A-Solution.accdb

c.

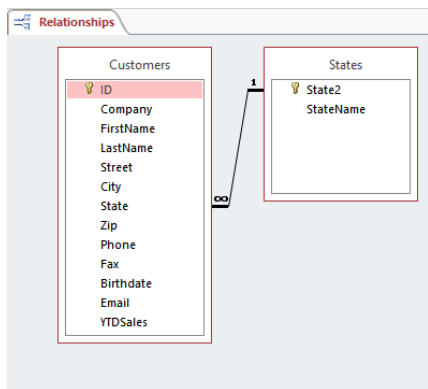
Table name	Number of fields	Number of records
Centers	10	4 (but 5 after the exercise is over because the student adds another record to this table in step i.)
Clubs	9	7 (but 8 after the exercise is over because the student adds another record to this table in step g.)
Deposits	5	100

The rest of the exercise creates the Relationships window shown in Figure A-21. Be sure to check for a one-to-many relationship between the correct fields, with referential integrity enforced.

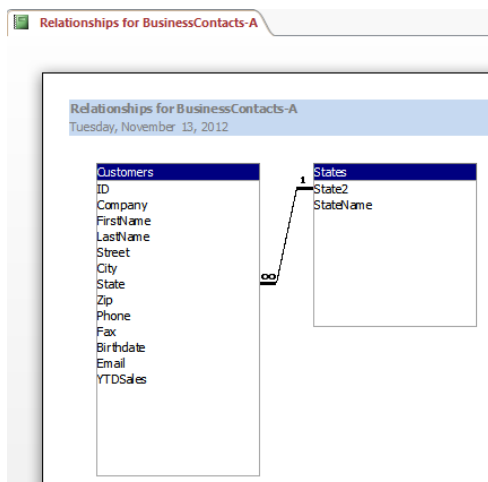
Independent Challenge 3

Data File: BusinessContacts-A.accdb. Solution File: BusinessContacts-A-Solution.accdb

- b. Check to make sure the student's name is in the last record of the Customers table with \$7,788.99 in the YTDSales field. Note the value of the State field as it will need to be entered into the States table in step g.
- c. Check to make sure that Sprint Systems has been changed to MTB Mobile with a Street value of 4455 College St. in the first record (ID 1) of the Customers table.
- d. Make sure the record for St. Luke's Hospital (ID 20) has been deleted.
- e., f. Check to make sure the States table with two fields has been created with State2 as the primary key field as shown below.
- g. Check to make sure that there are three records in the States table including KS Kansas, MO Missouri, and the state information for the record they added in step b.
- h.-i. The relationships are as follows:



- j.-k. Make sure that the Relationships for BusinessContacts-A report is saved in the database. A preview of the report is shown as follows:



Independent Challenge 4

No project file is supplied for this Independent Challenge.

a.-b. The answers to “benefits of a relational database” or “benefits of Microsoft Access” will vary. Possible answers include these points. Be sure that the students provide URLs to document their information.

--Avoid retype redundant data

http://techrepublic.com.com/5100-6270_11-5288500.html

--Free yourself from repetitive tasks, saving time and money

--Manage large amounts of information effortlessly.

--Find key information in seconds, not hours.

--Extract valuable information and trends from the mass of meaningless data.

--Avoid having to change your business to suit an off-the-shelf package

http://www.access-programmers.co.uk/services2/benefits_to_my_company.htm

--compatibility with SQL

http://en.wikipedia.org/wiki/Microsoft_Access

c.-d. Students may select any five (or more) technical terms to define, but each should in some way be related to databases or Access. Answers will vary, but five such terms are provided as an example. Be sure that the students provide URLs for each definition.

SQL: Structured Query Language (SQL) is the most popular computer language used to create, modify and query databases.

<http://en.wikipedia.org/wiki/SQL>

database: A database is information set with a regular structure. Its front-end allows data access, searching and sorting routines. Its back-end affords data inputting and updating. A database is usually but not necessarily stored in some machine-readable format accessed by a computer. There are a wide variety of databases, from simple tables stored in a single file to very large databases with many millions of records, stored in rooms full of disk drives or other peripheral electronic storage devices.

<http://en.wikipedia.org/wiki/Database>

relational database: A relational database is a collection of data items organized as a set of formally described tables from which data can be accessed or reassembled in many different ways without having to reorganize the database tables. The relational database was invented by E. F. Codd at IBM in 1970.

http://searchdatabase.techtarget.com/sDefinition/0,,sid13_gci212885,00.html

data: In computing, data is information that has been translated into a form that is more convenient to move or process. Relative to today's computers and transmission media, data is information converted into binary digital form.

http://searchstorage.techtarget.com/sDefinition/0,,sid5_gci211894,00.html

flat file system: A flat file system is a system of organizing files in an operating system in which all files are stored in a single directory. In contrast to a hierarchical file system, in which there are directories and subdirectories and different files can have the same name as long as they are stored in different directories, in a flat file system every file must have a different name because there is only one list of files. Early versions of the Macintosh and DOS operating systems used a flat file system. Today's commercial operating systems use a hierarchical file system.

http://www.webopedia.com/TERM/f/flat_file_system.html

e. Answers will vary, but some possibilities of how a student could use Access to organize their life or career might include:

Job Search Database

Business Contacts Database

Baseball/Softball/Basketball/Bowling League Players and Schedule Database

Membership Database to any Organization or Club

Contributions Database

Photos/Videos Database

Exercise/Diet Log

Visual Workshop

Data File: Basketball-A.accdb. Solution File: Basketball-A-Solution.accdb

Be sure that the Players table includes the student's name instead of Ellyse Howard. Students will observe the one-to-many power of related tables by editing the Ellyse Howard data to their own name in the Offense table because one player is related to many Stats records.

Be sure the Relationships for Basketball-A report is in the database and shows the relationships shown in Figure A-22.