

This project relates to **Front Range Action Sports**, which is one of the country's largest retailers of sports gear and outdoor recreation merchandise. The company has large retail stores in Colorado, Washington, Oregon, California, and New Mexico, in addition to a growing online business. Major merchandise categories include fishing, camping, rock climbing, winter sports, action sports, water sports, team sports, racquet sports, fitness, golf, apparel, and footwear.

PROJECT CAP 1—INVENTORY SUPPLIES

In this project, you will apply skills you practiced from the Objectives in Access Chapters 1 through 3. You will create a database for Frank Osei, Vice President of Finance, that contains inventory and supplier information. In addition, you will create queries that answer specific questions relating to the inventory items and suppliers, forms for entering and updating information, and reports. Your printed results will look similar to the ones shown in Figure 1.1.

PROJECT FILES

For Project Cap1, you will need the following files:

Blank desktop database

aCap1_Inventory (Excel workbook)

aCap1_Suppliers (Excel workbook)

You will save your database as:

Lastname_Firstname_Cap1_Inventory_Suppliers

PROJECT RESULTS

Item ID	Item Name	Retail Price	Category	Sport	Supplier ID
200555	Handkerchief	\$22.95	Knives	Skating	Supplier-06
200556	Wool Socks	\$15.95	Socks & Gloves	Skating	Supplier-06
314564	Bike Tire	\$88.95	Shoes	Biking	Supplier-11
317855	Car Charger	\$11.95	Accessories	Hiking	Supplier-03
345487	Mountain Bike	\$131.95	Shoes	Biking	Supplier-11
345489	Ultra Bike	\$138.95	Shoes	Biking	Supplier-10
346489	Women's Snow Pants	\$85.65	Pants	Skating	Supplier-06
446275	Winter Gloves	\$39.95	Gloves	Skating	Supplier-06
446275	XTR Frame	\$85.75	Shoes	Hiking	Supplier-11
446275	Winter Gloves	\$39.95	Gloves	Skating	Supplier-06
446275	Phone Headset	\$145.95	Jackets	Hiking	Supplier-09
446275	Gripster Gloves	\$39.95	Socks & Gloves	Skating	Supplier-06
446275	Winter Gloves	\$39.95	Gloves	Skating	Supplier-08
737568	Grande Eddie	\$138.95	Jackets	Skating	Supplier-06
737569	Winter Mittens	\$39.95	Gloves	Skating	Supplier-06
756897	Ski Gloves	\$39.95	Socks & Gloves	Skating	Supplier-07
772569	Cargo Lights	\$44.95	Shoes	Hiking	Supplier-05
772569	Lightweight Jacket	\$138.95	Jackets	Skating	Supplier-06
793256	Fundamental Waves Sketch	\$44.95	Shoes	Fitness	Supplier-04
796845	Winter Full Pant	\$138.95	Pants	Skating	Supplier-06
796845	Winter Full Pant	\$138.95	Jackets	Hiking	Supplier-10
800005	Down Filled Cap	\$240.95	Shoes	Hiking	Supplier-07

Relationships for Lohmann_ProdName_WMC2_Inventory_Suppliers		Lohmann_Thermae WMC2 Hiring Query	
Business Objects (1, 1, 1)		1/21/2013	
<pre> graph LR SupplierID[Supplier ID] --> ItemName[Item Name] SupplierID --> ItemNumber[Item Number] ItemName --> ItemNumber </pre>			
Supplier ID	Item Name	Item Number	Category
Supplier 01	Men's T-Shirts	\$14.95	Shirt
Supplier 02	Down Full Parka	\$225.95	Jackets
Supplier 03	Leather Jacket	\$215.95	Jackets
Supplier 04	Men's High Top Trainers	\$44.46	Shoes
Supplier 05	Men's Low Top Trainers	\$34.46	Shoes
Supplier 06	Vented Explorer	\$44.76	Hat
Supplier 07	XLT Therma	\$55.75	Shoes

Lastname Firstname BRC1 Hiking and Shoeing Query				1/21/2013
Sport	Item Name	Retail Price	Supplier ID	
Hiking	Big Boot	\$125.50	SUPP#45	
Wining	Pedal Fest	\$125.50	SUPP#45	
Hiking	Celeste	\$115.95	SUPP#40	
Hiking	High Top	\$115.95	SUPP#40	
Hiking	Trek Sandals	\$48.95	SUPP#48	
Hiking	XTR Thinner	\$95.00	SUPP#1	

Lastname Firstname #6C1 Fitness 5 Category Query				1/21/2013
Category	Item Name	Company	Phone	
Shoes	Black N' Silver	Fitness City	(305) 555-4563	
Shoes	Super Run	Fitness City	(305) 555-8765	
Shorts	E-moderne	Rick's Sporting Shop	(317) 555-7339	
Shorts	Fundamental Woven Shorts	Gear City	(305) 555-8899	

Lastname Firstname BRC1 Price \$100 or More Query				Lastname Firstname BRC1 SUPP-Ok Markup Query				
1/23/2013				1/23/2013				
Company	Item Name	Category	Sport	Supplier ID	Item Name	Retail Price	Markup	Final Price
Hicks' Ultra Gear Shop	Polo shirt	Shirts	Hiking	SUPH-01	Snowboard Gloves	\$100.00	\$10.00	\$110.00
Sports Fitter	French hoodie	Jackets	Hiking	SUPH-05	Granite Divide	\$108.55	\$18.84	\$126.39
Tree Country Outfitters	Ultra hills	Shirts	Hiking	SUPH-06	Ginger Gloves	\$24.95	\$2.06	\$26.11
Frisco Outfitters	Ultra hills	Shirts	Hiking	SUPH-07	Women's Snow Pants	\$64.45	\$8.57	\$72.42
Tree Country Outfitters	Down Full Parks	Jackets	Hiking					
Brock's Outfitters	Ultra hills	Shirts	Hiking					
Biking Toptiques Inc.	Catamaran	Shoes	Hiking					
Big Country Outfitters	Compound	Equipment	Hiking					
Ski Country	Granite Divide	Jackets	Skating					

Lastname Firstname BRCI Crosstab Query						1/21/2013
Category	Total Of Item ID	Biking	Fitness	Hiking	Swing	
None	1			1		1
Shirt	4	1		2		1
Jackets	1		1			1
Pants	1					1
Sheets	6	2	2	4		
Socks	5	4	2	1		
Socks and Gloves	3					3
Total Of All	15			1		

Lastname Firstname BMCI Parameter Query			
Sport	Category	Item Name	Retail Price
Hiking	Hats	Vented Colder	\$22.99
Hiking	Hats	Down Full Face	\$22.99
Hiking	Jackets	K Face	\$179.95
Hiking	Jackets	Mountain High	\$125.00
Hiking	Shoes	Marmot High Top	\$98.44
Hiking	Shoes	Merrell Moab	\$49.95
Hiking	Shoes	XXI Trainer	\$55.75

Lastname Firstname BRC1 Suppliers		Lastname Firstname BRC1 Suppliers Report	
Supplier ID	Supplier Name	Created Date	Last Modified
SUPP-12	Bear Water Sports Inc.	2013-01-01 00:00:00	2013-01-01 00:00:00
Company	Bear Water Sports Inc.		
Email Address	info@waterSports.biz		
Phone	(305) 555-6643		
Address	14 South Beach Rd		
City	Miami		
State	FL		
Postal Code	33123		

Lastname Firstname BRC1 Suppliers Report		Created Date	Last Modified
Company	Email Address	Phone	
Bear Water Sports Inc.	info@waterSports.biz	(305) 555-6643	2013-01-01 00:00:00
Biking Supplies Inc	orders@bikingsupplies.com	(800) 555-3788	2013-01-01 00:00:00
Beds Galore	orders@bedsgalore.com	(541) 555-1170	2013-01-01 00:00:00
Fitness City	orders@fitnesscity.MI	(505) 555-8760	2013-01-01 00:00:00
Gear City	orders@gearcity.com	(205) 555-8888	2013-01-01 00:00:00
Ricks Sporting Shop	riders@ricksports.com	(770) 555-7139	2013-01-01 00:00:00
Ski Country	orders@skcountry.MI	(864) 555-2877	2013-01-01 00:00:00
Snow Gear Fitters	orders@snowfitters.bzl	(248) 555-1000	2013-01-01 00:00:00
Sportswear Direct	orders@sportsweardirect.com	(800) 555-5555	2013-01-01 00:00:00
Sports Fitters	info@sportsfitters.com	(800) 555-4044	2013-01-01 00:00:00
Tree Country Outfitters	info@treecountryoutfitters.bzl	(800) 555-3944	2013-01-01 00:00:00
Winter Sports Club	info@wintersportsclub.bzl	(800) 555-4781	2013-01-01 00:00:00

Lastname Firstname 8AC1 Avg Price by Category Report		
Category Equipment	Item Name	Retail Price
Hats	Showboard	\$256.94
	Average Retail Price Per Category	\$256.94
Jackets	Venice Explorer	\$34.78
	Average Retail Price Per Category	\$34.78
Pants	Down Full Pants	\$299.95
	Down Half Zipper	\$199.95
	Gronke Divide	\$188.35
	KFace	\$179.95
	Average Retail Price Per Category	\$178.55
Shoes	Women Snow Boots	\$85.45
	Average Retail Price Per Category	\$85.45
Shorts	Beach Water	\$49.95
	Bite Elite	\$89.95
	Cold Response	\$114.95
	Men's High Top	\$98.46
	Reef	\$139.95
	Super Nova	\$110.95
	Ted Sonder	\$49.95
	XLT Thrower	\$97.25
	Average Retail Price Per Category	\$103.36
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Category	Item Name	Retail Price
Socks and Gloves	Decker Gloves	\$30.50
	Ski Gloves	\$29.50
	Wood Socks	\$12.50
Tops and Tees	Average Retail Price Per Category	\$22.71
	Tie Breaker	\$49.50
	Average Retail Price Per Category	\$49.55

FIGURE 1.1

- 1** Start Access. In the Access opening screen, click **Blank desktop database**. In the **Blank desktop database** dialog box, to the right of the **File Name** box, click **Browse**. In the **File New Database** dialog box, navigate to the location where you are storing your projects, create a new folder named **Front Range Action Sports** or navigate to this folder if you have already created it. Save the database as **Lastname_Firstname_Cap1_Inventory_Suppliers**
- Rename the ID field to **Item ID** and change the **Data Type** to **Short Text**. Create the fields as shown in **Table 1**.
 - Enter the two records as shown in **Table 2**.
 - Close the table, save it as **Lastname Firstname Cap1 Inventory** and then increase the width of the **Navigation Pane** to display the entire table name. Append a copy of the records from the **aCap1_Inventory** Excel file—in your student files folder—to the **Cap1 Inventory** table. From the **Navigation Pane**, open your **Cap1 Inventory** table and verify that there are 25 records in the table. Apply **Best Fit** to all of the fields, and then **Save** the table. Display the table in **Print Preview**, change the **Margins** to **Normal**, and then create a paper or electronic printout as directed. **Close Print Preview**, and then **Close** the table.
 - Import the source data into a new table in the current database from the **aCap1_Suppliers** Excel file—in your student files folder. In the wizard, click **First Row Contains Column Headings** and set the primary key to **Supplier ID**. Name the table **Lastname Firstname Cap1 Suppliers** and then open the table in **Design view**. **Close** the **Navigation Pane**. Delete the **Fax Number** field, and then **Save** the table. Switch to **Datasheet view**, apply **Best Fit** to all of the fields, and then **Save** the table. Display the table in **Print Preview**, change the orientation to **Landscape**, change the **Margins** to **Normal**, and then create a paper or electronic printout as directed. **Close Print Preview**, **Close** the table, and then **Open** the **Navigation Pane**. On the **Navigation Pane**, group the objects by **Tables and Related Views**.
 - Create a relationship between your **Cap1 Suppliers** table and your **Cap1 Inventory** table using the **Supplier ID** field as the common field. **Enforce Referential Integrity**, and then click to select both **Cascade** options. *One supplier can supply many inventory items.* Create a **Relationship Report**, change the **Margins** to **Normal**, and then save the report with the default name. Create a paper or electronic printout as directed, click **Close Print Preview**, and then **Close** the **Relationships** window. Increase the width of the **Navigation Pane** to display the entire relationships report name, and then **Close** the **Navigation Pane**.
- 2** Create a query in **Query Design** view, using your **Cap1 Inventory** table to answer the question, *What is the item name (in alphabetical order), retail price, and category for the sport of hiking?* Do not display the **Sport** field in the query results. Seven records match the criteria.

TABLE 1

Data Type	Short Text	Short Text	Currency	Short Text	Short Text	Short Text
Field Name	Item ID	Item Name	Retail Price	Category	Sport	Supplier ID

(Return to Step 1-b)

TABLE 2

Item ID	Item Name	Retail Price	Category	Sport	Supplier ID
106555	Snowboard	256.99	Equipment	Skiing	SUPP-06
106556	Wool Socks	12.59	Socks and Gloves	Skiing	SUPP-04

(Return to Step 1-c)

Save the query as **Lastname Firstname Cap1 Hiking Query** and then create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.

- a. Open the **Navigation Pane**, and then create a copy of your **Cap1 Hiking Query**, naming it **Lastname Firstname Cap1 Hiking and Biking Shoes Query**. Redesign the query design to answer the question, *What is the sport, item name, retail price, and supplier ID for the category of shoes where the sport is hiking or biking?* Sort the records first in ascending order by the **Sport** field and then in ascending order by the **Item Name** field. Do not display the **Category** field in the query results. Be sure to display the **Sport** field in the query results. Six records match the criteria. Create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.
- b. Create a query in **Design view**, using your **Cap1 Suppliers** table and your **Cap1 Inventory** table to answer the question, *What is the category, item name, company, and phone number, for a category that begin with the letter S for the sport of fitness?* Sort the records first in ascending order by the **Category** field and then in ascending order by the **Item Name** field. Do not display the **Sport** category in the query results. Four records match the criteria. Save the query as **Lastname Firstname Cap1 Fitness S Category Query** and then create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.
- c. Create a query in **Design view**, using your **Cap1 Suppliers** table and your **Cap1 Inventory** table to answer the question, *What is the company, item name, category, sport, and retail price for items that have a retail price of \$100 or greater sorted first in ascending order by Sport and then in descending order by retail price?* Nine records match the criteria. Save the query as **Lastname Firstname Cap1 Price \$100 or More Query** and then create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.
- d. Create a query in **Query Design view**, using your **Cap1 Inventory** table to answer the question, *For the supplier ID of SUPP-06, for each item name and retail price, what is the markup for each item if marked up 10%, and what is the final price?* Name the first calculated field **Markup** and name the second calculated field **Final Price**. All numeric fields should be formatted as **Currency, 2 Decimal Places**. For the **Item Name** of **Snowboard**, the **Final Price** is **\$282.69**. Apply **Best Fit** to all of the fields, Save the query as **Lastname Firstname Cap1 SUPP-06 Markup Query** and then create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.
- e. Use the **Query Wizard** to create a crosstab query using your **Cap1 Inventory** table. Set the **Category** field as the row headings, and set the **Sport** field as the column headings. Count the **Item ID** field, name the query **Lastname Firstname Cap1 Crosstab Query** and then **Finish** the query. Apply **Best Fit** to all of the fields, and then **Save** the query. Create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.
- f. Create a query in **Query Design view** using your **Cap1 Inventory** table that prompts you to enter the **Sport**, and then answers the question, *What is the sport, category, item name, and retail price for inventory items, sorted first in ascending order by category and then in ascending order by the item name?* The query should prompt an individual to **Enter the Sport** Run the query, and type **hiking** when prompted for the criteria. Seven records match the criteria. Save the query as **Lastname Firstname Cap1 Parameter Query** and then create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the query.

- 3** Based on your **Cap1 Suppliers** table, use the **Form** tool to create a form. Switch to **Form** view, and then using the form, add a new record as shown in **Table 3**.
- Display the record you just created, and then create a paper or electronic printout of only that record, changing the **Column Size Width** in the **Print** dialog box to **7.5** Save the form as **Lastname Firstname Cap1 Supplier Form** and then click **Close Print Preview**.
 - With your **Cap1 Supplier Form** displayed in **Form** view, use the **Filter By Form** tool to create a filter that displays records with a **State** of **CO** or **FL**. After verifying that three records match this criteria, click **Toggle Filter** to display all 12 records. **Save** your form, and then **Close** your form.
- 4** Based on your **Cap1 Suppliers** table, use the **Report** tool to create a new report. **Delete** the following fields from the report: **Supplier ID**, **Address**, **City**, **State**, and **Postal Code**. Apply the **Facet** theme to this object only. **Sort** the **Company** field in **Ascending** order. For the **Phone** field, change the **Width** property to **1.25** For the **Company** field, change the **Left** property to **1** and then **Close** the **Property Sheet**.
- At the bottom of the report, delete the **page number control**. For the title of the report, set the **Font Size** to **14** and add **Report** to the end of the report title so that it displays as **Lastname Firstname Cap1 Suppliers Report**. Save the report as **Lastname Firstname Cap1 Suppliers Report** and then switch to **Design** view. Increase the **Height** of the **Report Footer** section to **0.5** and add a **label control** that displays **Front Range Action Sports** For the **label control**, apply **Bold**. With the **label control** selected, apply a **Background Color** of **Blue-Gray, Text 2, Lighter 80%**—under **Theme Colors**, in the fourth column, the second color. Double-click the right edge of the selected **label control** to fit the text in the **label control**. For the selected **label control**, use the **Property Sheet** to set the **Top** property to **0.1** and the **Left** property to **3** Close the **Property Sheet**, and then **Save** the report. Display the report in **Print Preview**, and then create a paper or electronic printout as directed. Click **Close Print Preview**, and then **Close** the report.
 - Use the **Report Wizard** to create a report based on your **Cap1 Inventory** table. Add the following fields to the report: **Category**, **Item Name**, and **Retail Price**. **Group** by the **Category** field. **Sort** in **Ascending** order by the **Item Name** field. Find the **Average** of the **Retail Price** field. Be sure that the **Layout** is **Stepped** and that the **Orientation** is **Portrait**. For the report title, type **Lastname Firstname Cap1 Avg Price by Category Report** and then switch to **Layout** view.
 - Apply the **Ion Boardroom** theme to only this report. For the report title, change the **Font Size** to **14**, and then apply **Bold**. Delete the controls that begin with **Summary for 'Category'**. At the top of the report, click the three **label controls** that display the field names, and then apply **Bold**. Under **Item Name**, click any **text box control**, and then set the **Width** property to **2.75** For the **Retail Price** **label control**, set the **Left** property to **6** and then **Save** the design changes to your report.
 - At the bottom of the report, in the last column, select the **last two controls** that display the **#** symbols. Set the **Width** property to **1** and the **Left** property to **6** Change the text in the **Avg** **label control** from **Avg** to **Average Retail Price Per Category** Close the **Property Sheet**.

TABLE 3

Supplier ID	Company	Email Address	Phone	Address	City	State	Postal Code
SUPP-12	Beach Water Sports Inc	info@water-sports.biz	(305) 555-6543	14 South Beach Rd	Miami	FL	33125

→ (Return to Step 3-a)

Save the design changes to your report, and then switch to **Design** view. In the **Detail** section, click the **Item Name** text box control, hold down **Shift**, and then in the **Category Footer** section, click the **Average Retail Price Per Category** label control. Align the controls on the **Right**, and then **Save** the design changes to your report.

- e. Switch to **Print Preview**, **Zoom** to display **Two Pages** of the report, and examine how the groupings break across the pages. Switch to **Layout** view, display the **Group, Sort, and Total** pane, select **keep whole group together on one page**, and then close the **Group, Sort, and Total** pane. Switch to **Print Preview**, and notice that the groupings are no longer split between pages. **Save** the report, and then create a paper or electronic printout as directed—two pages result. Click **Close Print Preview**, and then **Close** the report.

- 5 Open the **Navigation Pane**, and if necessary, widen the pane so that all object names display fully. On the right side of the title bar, click **Close** to close the database and to exit Access. As directed by your instructor, submit your database and the paper or electronic printouts of the two tables, the relationship report, seven queries, one form, and two reports—one report is two pages—that are the results of this project. Specifically, in this project, using your own name, you created the following database and printouts or electronic printouts:

1. Lastname_Firstname_Cap1_Inventory_Suppliers	Database file
2. Lastname Firstname Cap1 Inventory	Table (printout or electronic printout)
3. Lastname Firstname Cap1 Suppliers	Table (printout or electronic printout)
4. Relationships for Lastname_Firstname_Cap1_Inventory_Suppliers	Relationship Report (printout or electronic printout)
5. Lastname Firstname Cap1 Hiking Query	Query (printout or electronic printout)
6. Lastname Firstname Cap1 Hiking and Biking Shoes Query	Query (printout or electronic printout)
7. Lastname Firstname Cap1 Fitness S Category Query	Query (printout or electronic printout)
8. Lastname Firstname Cap1 Price \$100 or More Query	Query (printout or electronic printout)
9. Lastname Firstname Cap1 SUPP-06 Markup Query	Query (printout or electronic printout)
10. Lastname Firstname Cap1 Crosstab Query	Query (printout or electronic printout)
11. Lastname Firstname Cap1 Parameter Query	Query (printout or electronic printout)
12. Lastname Firstname Cap1 Supplier Form	Form (printout or electronic printout – Record 12)
13. Lastname Firstname Cap1 Suppliers Report	Report (printout or electronic printout)
14. Lastname Firstname Cap1 Avg Price by Category Report	Report (printout or electronic printout – two pages)