

Introduction to Access

Club Activities

You have been hired as the administrative assistant for Southern Regional Technical College. Part of your job is to help teachers and staff create and maintain databases for grades, club activities, student accounts, and more. You have been asked by the Phi Beta Lambda business club advisor to help with the PBL club database.

You have designed a database that you feel will meet the needs of the advisor. In order to test your reports, queries, and forms, you enter a few test records. In order to verify the validity of the database design, you perform the activities below.

Databases Are Everywhere!

You need to copy an original database file, rename the copied file, and then open the copied database to complete this scripted lecture. Next, you will replace an existing employee's name with your name and add a new record.

1. Open an Access File, Save the File with a New Name, and Work with the New File

- a. Locate and open the file named *clubs*. Click the **File tab**, click **Save Database As**, type **clubs_LastnameFirstname**, and then click **Save**. Enable the Content.

2. Edit a Record

- a. Click the **Tables group**. Open the Participants table.
- b. Click in the **Last Name field** in the seventh record. Replace *YourName* with your last name. Replace *Yourname* in the **First Name field** with your first name. Click **Undo**. Type your first name again.
- c. Edit record number 4 by changing the First Name to **Ann**. Close the table.

3. Navigate an Access Form and Add Records

- a. Click the **Tables group** in the Navigation Pane to collapse it.
- b. Click the **Forms group** in the Navigation Pane. Open the Enter Participants form. Demonstrate the record navigation buttons. Click in the **Event ID field**.
- c. Click **Find** in the Find group. Type **02** in the **Find What box**, click the **Match arrow**, and then select **Any Part of Field**. Click **Find Next**. Close the Find and Replace dialog box. Click **New (blank) record** on the navigation bar.
- d. Enter the following new record: Last Name, **Fredricks**; First Name, **Sam**; Event ID **002**; **Balance, \$0.00**. Press **Tab**. Point out that the Participant ID filled in automatically.
- e. Click the **File tab**, click **Print**, and then click **Print Preview**. Click **Last Page** in the navigation bar to show the new record you entered. Close Print Preview. Close the form.

4. Recognize the Connection between a Table and a Form; Delete a Record

- a. Click the **Tables group** in the Navigation Pane to expand it. Open the Event table. Click **Last record** in the navigation bar.

- b. Point out that the check mark in the Team Event field shows that this is a team event. Click the **row selector box** to the left of the third record. Click **Delete** in the Records group. Explain the error message. Click **OK**.

5. Compact, Repair, and Back Up the Database

- a. Click the **File tab**. Click **Compact & Repair Database**.
- b. Click the **File tab** again, click **Save & Publish**, and then click **Back Up Database**.
- c. Click **Save As**, accept the default backup file name with today's date by clicking **Save**.

Filters, Sorts, and Access Versus Excel

You would like to apply a filter to a table that will show only participants in event 002 and filter records where participants have a \$0.00 balance. You also need to reorder a table so that the results are sorted alphabetically by the participant name.

1. Use Filter by Selection with an Equal Condition

- a. Open Access. Open the *clubs* database, and then open the Participants table.
- b. Click in the **Event ID field** for record 4. Click **Selection** in the Sort & Filter group. Choose **Equals "002"** from the menu. Click **Toggle Filter** in the Sort & Filter group to remove the filter. Click **Toggle Filter** again to reapply the filter.

2. Use Filter by Selection with a Contains Condition

- a. Click in any field in the **Balance Due column** that contains the value *\$0.00*. Click **Selection** on the Sort & Filter group. Click **Contains \$0.00**. Click **Toggle Filter** in the Sort & Filter group to remove the filters. Close the Participants table without saving design changes.

3. Sort a Table

- a. Locate and double-click the **Participants table** to open it. Click any value in the **Last Name field**. Click **Descending** in the Sort & Filter group on the Home tab. Click the **Event ID column heading**.
- b. Click the **Event ID column heading** again, and then hold the left mouse button down. Drag the **Event ID field** to the left until the thick black line moves between the Participant and Last Name fields.
- c. Click any name in the **Last Name field**, and then click **Ascending** in the Sort & Filter group. Click any ID in the **Event ID field**, and then click **Ascending**. Close the Participants table. Do not save the changes.
- d. Click the **File tab**, click **Info**, and then click **Compact & Repair Database**. Click the **File tab** again, click **Save & Publish**, and then click **Back Up Database**. Click **Save As**, accept **the default file name** and click **Save**.

Relational Database

You will practice applying advanced filters to generate reports for your boss that contain specific information. You will also investigate the Relationships window to determine how data in different tables is connected.

1. Use the Relationships Window

- a. Open the *clubs* database. Click the **Database Tools tab**, and then click **Relationships** in the Relationships group. Discuss the existing relationship. Click **Show Table** in the Relationships group on the Relationship Tools Design tab. Click the **Queries tab** in the Show Table dialog box.
- b. Close the Show Table dialog box. Click **All Access Objects** on the Navigation Pane. Select **Tables and Related Views**. Click **OK** in the message box if necessary. Close the Relationships Window.

2. Filter a Query

- a. Click **All Tables** on the Navigation Pane, and then select **Object Type**. Locate and open the Participant Event query. Select your last name. Click **Selection** in the Sort & Filter group. Select **Equals "Your Name"** from the selection menu. Click **Toggle** to remove the filter.

3. Remove a Filter

- a. Open the Participant Event query. Click **Toggle Filter** in the Sort & Filter group. Click **Advanced** in the Sort & Filter group, and then click **Clear All Filters**. Close the query. Save the changes.
- b. Open the Participant Event query again. Click **Advanced** in the Sort & Filter group. Point out that the Clear All Filters option is dim. Save and close the query.
- c. Click the **File tab**, and then click **Compact & Repair Database**. Click the **File tab** again, and then click **Exit**.

PART TWO

Travel Club

You are the itinerary planner for a small vacation club. You have several trips coming up within the next two years and have decided to move your information from Excel to Access.

Table Design, Properties, Views, and Wizards

To set up your database, you need to create a new table to store hotel information.

1. Create a New Database

- a. Start Microsoft Access. Click **Blank database**. Type **YOUR_LAST_NAME_travel** as the name. Click **Browse**, change to the desired location, click **OK**, and then click **Create**.

2. Create a Table by Entering Data

- a. Type **PA03** in the second column, first row. Press **Tab**. Type **3102** in the third column, **Duminey Vendome** in the fourth column, and **125** in the fifth column.
- b. Press **Tab** three times. Enter the following record: **LO01, 3180, Wellington Court, 155**.
- c. Enter the third record: **PA04, 3102, Marsai Villa, 148**. Click **Save**. Type **Hotels** as the name.

3. Change the Primary Key, Modify Field Properties, and Delete a Field

- a. Click **View**. Delete the **ID field row**. Click **Yes** to both messages.

- b. Change *Field1* field name to **HotelID**; *Field2* to **TripID**; *Field3* to **HotelName**; and *Field4* to **PricePerNight**. Make **HotelID** the Primary key field. Click **Save**.

4. Modify Table Fields in Design View

- a. Make the following changes:
 - HotelID: Field Size–**4**; Caption–**Hotel ID**; Indexed–**Yes (No Duplicates)**.
 - TripID: Data Type–**Text**; Field Size–**4**; Caption–**Trip ID**.
 - HotelName: Field Size–**40**; Caption–**Hotel Name**.
 - PricePerNight: Caption–**Price Per Night**; Data type–**Currency**.

5. Create a New Field in Design View

- a. Click in the first blank row below the PricePerNight field name, and then type **PartnerDate**. Specify Data Type of **Date/Time**; Description of **This is the partnership date**; Caption of **Partnership Date**; Format of **Short Date**. Click **Save**. Click **Yes** at the warning message.

Multiple Table Databases

Other information that was previously stored in Excel can be imported into Access. You need to modify data types and field properties as well as create relationships between your tables.

1. Import Excel Data into an Access Table

- a. Click the **External Data tab**, and then click **Excel** in the Import & Link group. Select the **Import the source data into a new table in the current database option**. Click **Browse**, and then go to the student data folder. Select *travelers.xls* Click **Open**, and then click **OK**.
- b. Click **Next** twice. Click the **Indexed arrow**, and then select **Yes (No Duplicates)**. Click **Next**. Click the **Choose my own primary key option**, and then select **TravelID** from the **selection box**. Click **Next**. Enter **Travelers** in the **Import to Table box**, if necessary. Click **Finish**. Click **Close**.

2. Import Additional Excel Data

- a. Click the **External Data tab**. Click **Excel**. Select the **Import the source data into a new table in the current database option**. Click **Browse** to select *trips*. Click **Open**, and then click **OK**.
- b. Click **Next** twice. Click the **Indexed arrow**, and then select **Yes (No Duplicates)**. Click **Next**. Click the **Choose my own primary key option**, and then select **TripID**. Click **Next**. Enter a table name of **Trips**. Click **Finish**, and then click **Close**.