

COMPUTER FUNDAMENTALS
EDU 201
Module Seven
Class Objectives

Module Seven: Information Management– Skills to be developed: keyboarding, use of basic databases for instruction and information management. Student will complete database tasks with 80% accuracy as determined using an analytic scoring rubric.

Students will develop skills toward course objectives:

1. Use PC hardware and OS, Microsoft Office software to support learning and research.
2. Identify information technologies as powerful tools for accessing information needed to solve relevant problems.
3. Use productivity software to prepare publications and produce creative works.
4. Use technology tools to manage and communicate information.
5. Navigate the Internet using hyperlinks and uniform resource locators (URL).
6. Locate virtual information using Internet directories and search engines.
7. Assess the accuracy, appropriateness and bias of electronic information sources.
8. Practice legal, ethical and responsible use of technology systems, information, and software.

Module Seven Rubric:

Student Name:						
Directions: Rate student performance on each task.						
Database:						
Use general database terminology.	0	2	4	6	8	10
Identify the purpose of a database.	0	2	4	6	8	10
Create a table in Table Design view.						
Create fields in the table.	0	2	4	6	8	10
Create fields with unique values.	0	2	4	6	8	10
Create a form using the Form Wizard.	0	2	4	6	8	10
Add a header to a form.	0	2	4	6	8	10
Manually adjust/size data fields in a form.	0	2	4	6	8	10
Enter data in a form.	0	2	4	6	8	10
Search the database for specific information.	0	2	4	6	8	10
Sort records in ascending and descending order.	0	2	4	6	8	10
Total Points:						

Information Management

As powerful technologies bring the information age into classrooms around the world, a host of “new literacies,” or essential skills emerge. The original basic skills, the “Three R’s” –“Reading”, Riting” and Rithmetic” were sufficient for a previous era. Now students need new “basics” that include an ability to evaluate, organize, synthesize and manage vast information resources.

Module Seven introduces students to the database as a powerful tool for learning and information management. The database allows students to “collect” information and organize it into meaningful tables. Once created, the database makes it possible for information to be reorganized, categorized, sorted, filtered and stored for safekeeping.

Andrew College
COMPUTER FUNDAMENTALS
EDU 201
Activity One

Information Management:

Rationale: Databases are powerful, effective tools for collecting, organizing, managing, manipulating and storing data. The potential of the database is maximized when the search, sort and filter features are used to discover patterns, trends and hidden facts in collections of relevant information.

Task: Design and create a database using Microsoft Access. Create a table to organize and store data using columns and rows within the table to represent fields and records. Use the search, sort and filter tools to query the database.

Activity: Create a database on the American Presidents. Use the database tools to search the information, to identify data trends, make generalizations and extract trivia.

Related Online Activities and Resources:

[Leading and Learning with Technology Online Supplement](#) -

Teach students to sort and classify information by creating databases on a variety of topics of interest to young learners.

[Hide and Freeze Columns in Microsoft Access](#) - Access databases can be so large that data may seem hard to view. No problem! Freeze and hide columns in Table view to see exactly what is needed.

[Sorting Data in Microsoft Access:](#) Create a simple database on dinosaurs and practice sorting the data to learn interesting facts about dinosaurs.

[Filtering Data in Microsoft Access:](#) The database is powerful when data is filtered to produce refined answers to specific questions. Steps for success in filtering data are provided in Microsoft's online Classroom Corner.

Creating A Database of American Presidents



1. Begin a New Database:

- From the **Start** button, select **Programs**. Select and launch Microsoft Access.
- At the Access opening dialog box, select **Blank Access Database**. Click **OK**.
- Save the database as **presidents.mdb** in the C:\My Documents folder. Click **Create**.
- At the next dialog box, click **Create Table in Design View**.

2. First Field Name and Data Type:

- The cursor appears in the first **Field Name** cell. Type "**President**". Press the tab key.
- The **Data Type** automatically sets to **Text**.

3. Second Field Name and Data Type:

- Press tab twice to move to the second **Field Name** and **Data Type**.
- Type **Order** (a field for the ordinal number of the president's service). Press the tab key.
- Click the drop-down arrow. Select **Number**.

4. Third Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Party** (a field for the president's political party). Press the tab key.
- Click the drop-down arrow. Select **Lookup Wizard**.
- Click the radio button to select "**I will type the values I want.**" Click **Next**.
- Click to select the cell under **Col1**.
 - Type "Federalist". Press **Tab**.
 - Type "Democrat". Press **Tab**.
 - Type "Republican". Press **Tab**.
 - Type "Democrat/Republican". Press **Tab**.
 - Type "Whig".
 - Click **Finish**.

5. Fourth Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Age at Inauguration**. Press the tab key.
- Click the drop-down arrow. Select **Number**.

6. Fifth Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Profession**. Press the tab key.
- Click the drop-down arrow. Select **Text**.

7. Sixth Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Date of Birth**. Press the tab key.
- Click the drop-down arrow. Select **Number**.

8. Seventh Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Birthplace**. Press the tab key.
- Click the drop-down arrow. Select **Text**.

9. Eighth Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Age at Death**. Press the tab key.
- Click the drop-down arrow. Select **Number**.

10. Ninth Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Cause of Death**. Press the tab key.
- Click the drop-down arrow. Select **Text**.

11. Tenth Field Name and Data Type:

- Tap **Enter** twice. A new **Field Name** appears.
- Type **Terms Served**. Press the tab key.
- Click the drop-down arrow. Select **Number**.

12. Save and Close the Table:

- Click the **X** (close box) in the upper right corner to close the table. Click **"yes"** to continue.
- Name the table **"Presidents"**. Click **OK**.
- Click **"yes"** to allow Access to assign a primary key box.

13. Create A Form:

- Open the file **Presidents.mdb**.
- In the **Forms** dialog box, select the **Form Wizard**. Click **OK**.
- At the next window, the Presidents Table and all available fields appear.
- To select all fields, click the double arrow (**>>**). Click **Next**.

- When prompted to select a layout, click **Justified**. Click **Next**.
- When prompted to select a style, click **Expedition**. Click **Next**.
- Click the radio button by **Modify the form's design**. Click **Finish**. The new form appears in **Design View**.

14. Add a Header to the Form.

- Hover the mouse over the divided bar under the **Form Header** bar until the pointer becomes a double arrow. Click, hold and drag down about 1 inch to add room for a **Header**.
- Click the **View** menu and select **Toolbox**. Click the **Aa (Label Button)** button to insert a label.
- Click, hold and drag a label box across the entire area under the **Form Header** bar.
- With the Label box selected, adjust the text to 22-point size. Type "**The American Presidents**". Align the text to the **Center**.
- Save the form.

15. Enter Data in Form View

- Click the **View** menu and select **Form View**.
- Enter one president's information in the first record.
- Click the **Insert** menu and select **Insert New Record** to complete a second record.

Using the Database

1. Open an Existing Database

- Select and open the **Presidents.mdb** file.
- Select the **Table** tab. Double-click to open the **Presidents** table.

2. Resize Fields

- The file names appear across the top of the table.
- Fields may need to be adjusted to display the entire text. Manually re-size fields by clicking end lines, hold and drag to extend the field length.
- A double-click in the field will automatically adjust the field size to fit the text.

3. Search the Database

- **Filter by Selection** (Search the database for specific information.)
- Click in any field (Example: In the **Party** field, select **Whig**.) To filter like information, click the funnel/lightening bolt icon on the top menu bar. The database will filter all records that have **Whig** as the **Party**.
- Return to the full list by clicking the funnel icon to remove the filter.

4. Sort the Records

- Click any field. To sort alphabetically or numerically, select the **Sort Ascending** or the **Sort Descending** buttons.
- To view all presidents in the Whig party, select **Sort Descending** to order in reverse alphabetical order.
- To view the presidents by **Age at Inauguration**, select **Sort Ascending** to view the ages from youngest to oldest.