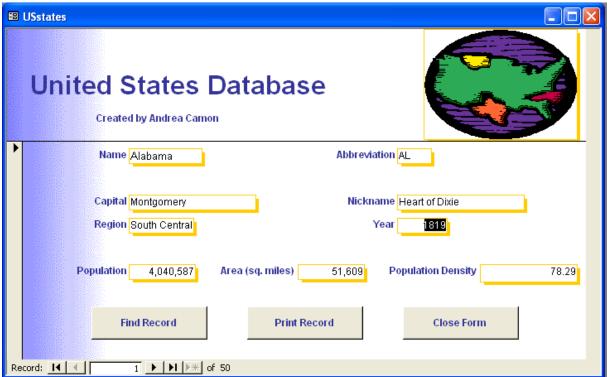
INF 293 Computer Programming for Business Applications Class Work – 4

Creating a form and a report based on a table.

1. Open the **USA** Database found in the Access folder to create a form similar as shown below.



- 2. Create the form using the Form Wizard. Move and size the controls to match the arrangement in the figure.
 - a. **Population density** is a calculated control and is computed by dividing the population by the area. Format the density to two decimal places.
 - b. Add the graphic, following these steps: The form should be opened in Design view.
 - Click the **Unbound Object Frame** tool on the toolbox.
 - Click and drag in the Form Header to size the frame, then release then mouse to display an **Insert Object** dialog box.
 - Click the **Create New Option** button. Select the **Microsoft Word Picture** as the type. Click **OK**.
 - Click the **Insert** menu, then click **Picture** and then click **Clip Art**. Choose the category and picture you want from within the Clip Gallery. Copy and paste the clip art icon into the Access form. Do not be concerned if only a portion of the picture appears on the form.
 - Right click the newly inserted object to display a shortcut menu, and then click the
 Properties dialog box. Select the Size Mode property and select the Stretch from
 the list. If necessary, change the Back Style to Transparent, the Special Effect
 property to Flat, and the Border Style property to Transparent. Close the
 Properties dialog box.
 - c. Replace your name in the report header.

3. Create a report based on **USA** database as shown below.

United States by Region

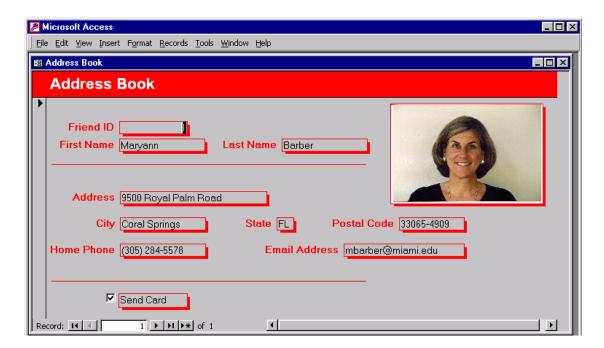
Prepared by Gülsün Töreci



| Region | Name | Capital | Population | Area | Population Density |
|-----------------|---------------|----------------|------------|---------|--------------------|
| Middle Atlantic | Pennsylvania | Harrisburg | 11,881,643 | 45,333 | 262.10 |
| Middle Atlantic | Delaware | Dover | 666,168 | 2,057 | 323.85 |
| Middle Atlantic | New Jersey | Trenton | 7,730,188 | 7,836 | 986.50 |
| Middle Atlantic | New York | Albany | 17,990,455 | 49,576 | 362.89 |
| Middle Atlantic | Maryland | Armapolis | 4,781,468 | 10,577 | 452.06 |
| Mountain | Arizona | Proenix | 3,665,228 | 113,909 | 32.18 |
| Mountain | Colorado | Denwer | 3,294,394 | 104,247 | 31.60 |
| Mountain | Newada | Carson City | 1,201,833 | 110,540 | 10.87 |
| Mountain | Utah | Salt Lake City | 1,722,850 | 84,916 | 2029 |
| Mountain | Idaho | Boise | 1,006,749 | 83,557 | 12.05 |
| Mountain | New Mexico | Santa Fe | 1,515,069 | 121,666 | 12.45 |
| Mountain | Montana | Helera | 799,065 | 147,138 | 5.43 |
| Mountain | Wyoming | Cheyenne | 453,588 | 97,914 | 4.63 |
| New England | New Hampshire | Cancard | 1,109,252 | 9,304 | 119.22 |
| New England | Massachusetts | Boston | 6,016,425 | 8,257 | 728.65 |
| New England | Maine | भाष्ट्राक्र | 1,227,928 | 33,215 | 3697 |
| New England | Rhode Island | Providence | 1,003,464 | 1,214 | 826.58 |
| New England | Verm.ort. | Montpellier | 562,758 | 9,609 | 58.57 |
| New England | Connecticut. | Hattford | 3,287,116 | 5,009 | 656.24 |
| North Central | Michigan | Lansing | 9,295,297 | 58,216 | 159.67 |
| North Central | Iowa. | Des Moines | 2,776,755 | 56,290 | 4933 |
| North Central | Indiana | Indianapolis | 5,544,159 | 36,291 | 152.77 |
| North Central | Illinois | Springfield | 11,430,602 | 56,400 | 202.67 |
| North Central | Minnesta | Minneapolis | 4,375,099 | 84,068 | 52.04 |
| North Central | Kansas | Topeka | 2,477,574 | 82,264 | 30.12 |

- The report lists states by geographic region, and alphabetically within region. It includes a calculated field, **Population Density**, which is computed by dividing a state's population by its area. Summary statistics—are also required as shown in the report. (**Sum()**, **Avg()**, **Max()**, **Min()** functions for **Population** field).
- Note that the report header contains a map of the United States that was taken from the Microsoft ClipArt Gallery. You can insert the object as explained in the previous exercise.
- Be sure to include your name in the Report Header.

4. Following figure displays the Form view of a form to maintain an address book of friends and acquaintances. The picture is an added touch and well worth the effort, but it requires you to obtain pictures of your friends in machine-readable form. Each picture is stored initially in its own file (in GIF or JPEG format). The form and underlying table should be built upon the information in the form and should adhere to the following guidelines.



- a. Create an **Address Book** database containing a table and an associated form, using the above figure as a guide. You can add or delete fields as appropriate, with the exception of the **FriendID** field, which is designated as the primary key. The **FriendID** should be identified as an <u>AutoNumber field</u> whose primary value is created automatically each time a record is added to the table.
- b. Include a logical field (e.g., **SendCard**) in the underlying table. This will enable you to create a report of those people who are to receive a birthday card (or season's greeting card) once the data have been entered.
- c. Include an OLE field in the table, regardless of whether or not you actually have a picture, and be sure to leave space on the form for the picture. Those records that have an associated picture will display the picture in the form; those records that do not have a picture will display a blank space.
- d. To insert a picture into the database, open the table, click in the **OLE** field, pull down the **Insert menu**, and click the **Object** command. Click the **Create Form File** option button, click **Browse** button in the associated dialog box, then select the appropriate file name and location.
- e. Enter data for yourself and three more friends in the completed form.
- 5. Create a report based on **Address Book** database listing friend in alphabetical order.