# **Exp19\_Access\_Ch2\_Cap - Metropolitan Zoo 1.0**

## **Project Description:**

The Metropolitan Zoo tracks its animal data in Excel. The organization decides to use a database to organize the data about the animals, their trainers, and the animal exhibits. In this project, you will open an existing database and create a new table. You will import an Excel file containing information about the animals, and query the database to determine which animals need a checkup. You will also create a query to obtain a listing of the animals in each exhibit.

## **Steps to Perform:**

| **Step** | **Instructions** | **Points Possible** |
| --- | --- | --- |
| 1 | Start Access. Open the downloaded Access file named *Exp19\_Access\_Ch2\_Cap\_Zoo.accdb*. Grader has automatically added your last name to the beginning of the filename. Save the file to the location where you are storing your files. | 0 |
| 2 | Create a new table in Design view. Add the field name **ExhibitID** with the **AutoNumber Data Type**. Add the caption **Exhibit ID**. Set the **ExhibitID** field as the primary key for the table. Save the table using the name **Exhibits**. | 6 |
| 3 | Add the following fields and set their field properties as shown:   |  |  |  |  | | --- | --- | --- | --- | | **Field Name** | **Data Type** | **Field Size Property** | **Caption** | | **ExhibitName** | **Short Text** | **15** | **Exhibit Name** | | **Acres** | **Number** | **Integer** | (none) | | **InitialCost** | **Currency** | (no change) | **Initial Cost** | | **YearlyCost** | **Currency** | (no change) | **Yearly Cost** | | **DateOpened** | **Date/Time** | (no change) | **Date Opened** | | **Show** | **Yes/No** | (no change) | (none) | | 12 |
| 4 | Switch to Datasheet view and save the table. Add the following records, letting Access assign the Exhibit ID:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Exhibit Name | Acres | Initial Cost | Yearly Cost | Date Opened | Show | | **Asia** | **2** | **2000000** | **300000** | **1/15/2011** | **Yes** | | **Africa** | **4** | **3500000** | **500000** | **2/3/2014** | **Yes** | | **The Americas** | **3** | **1500000** | **250000** | **5/15/2005** | **No** |   Close the table. | 9 |
| 5 | Import the downloaded *Zoo.xlsx* workbook as a new table in the current database. Using the Import Spreadsheet Wizard, specify that the first row contains column headings, set the **AnimalID field** to be indexed with no duplicates, and set the **AnimalID field** as the primary key. Import the table with the name *Animals* and do not save the import steps. | 10 |
| 6 | View the Animals table in Design view, and change the field size for the AnimalID field to **Long Integer**. Change the field sizes for the ExhibitID and TrainerID fields to **Long Integer**. Save the table. Click **Yes** in the dialog box indicating that some data may be lost. Close the table. | 6 |
| 7 | Begin establishing relationships in the database by adding the **Animals**, **Exhibits**, and **Trainers** tables to the Relationships window. Close the Show Table dialog box. Resize the field lists so that all fields display. Create a one-to-many relationship between the **ExhibitID field** in the Exhibits table and the **ExhibitID field** in the Animals table, enforcing Referential Integrity. Select the option to cascade update the related fields. | 8 |
| 8 | Create a one-to-many relationship between the **TrainerID field** in the Trainers table and the **TrainerID field** in the Animals table, enforcing Referential Integrity. Select the option to cascade update the related fields. Save and close the Relationships window. | 8 |
| 9 | Create a query using the **Simple Query Wizard**. From the Animals table, add the **AnimalID**, **AnimalType**, and **DateOfLastCheckup fields** (in that order). Ensure the query is a Detail query. Name the query **Checkup List** and finish the wizard. | 10 |
| 10 | View the query in Design view, and then set the criteria for the DateOfLastCheckup field so that only animals whose last checkup was before **1/1/2022** are displayed. | 5 |
| 11 | Sort the query in ascending order by the DateOfLastCheckup field. Save the query. Run the query, and then close the query. | 5 |
| 12 | Create a new query in Design view. Add the **Animals**, **Exhibits**, and **Trainers** tables to the query design window. Add the following fields to the query (in this order):  **AnimalType**  **Origin ExhibitName  FirstName LastName Position** | 9 |
| 13 | Set **The Americas** as the criteria for the ExhibitName field and sort the query in ascending order by Origin. Run the query, and save the query as **Americas Exhibit**. Close the query. | 6 |
| 14 | Copy the **Americas Exhibit** query in the Navigation Pane and paste it with the name **Asian Exhibit**. Modify the query in Design view to replace *The Americas* with **Asia**. Run the query, save the query, and close the query. | 6 |
| 15 | Close all database objects. Close the database and then exit Access. Submit the database as directed. | 0 |

|  |  |
| --- | --- |
| **Total Points** | **100** |