**DBAS 1001**

**Introduction to Database Management**

**Assignment # 6**

**Background:**

**The Sample Database** –

* You have been provided with a sample database called **appt\_sched\_master.accdb,** its ERD and Data Dictionary via the shared drive.
* Copy this database to your local drive, as many of your future assignments will require you to construct and save application objects, to load and manipulate data, and to run functional demonstrations using the sample database.
* Ensure you keep a regularly updated backup copy of the database along with your working copy. If you wreck your working copy, the master copy on the shared drive will not contain any of your changes.

**Entering Data to the Database –**

* Via a DBMS-supplied GUI interface
  + any dbms will generally provide some GUI interface, a “spreadsheet-like” read-write view of the data physically residing in the tables as an aid in data entry.
  + The MS Access implementation of this is called the datasheet view.
  + Users, through this view have the ability to INSERT new rows of data, UPDATE or make changes to the data already residing in the table, or even to DELETE entire rows of data from the table.
* Via the SQL INSERT statement
  + The SQL INSERT statement uses a VALUES clause to pass a **single entire row of data** to a database table.
  + INSERT INTO tablename [ (optional column list) ] VALUES (value list);
  + INSERT INTO person VALUES (1, ‘bob’, ‘2 first st’, 1234567, ‘gwl’);
  + INSERT INTO person (p\_name, p\_id) VALUES (‘bob’, 1);
  + note the VALUES list and columns list are separated with commas
  + note constant numbers are expressed without quotes, and that character strings are enclosed in single quotes
  + note values supplied to DATE datatyped fields should be julian numbers – the platform of choice will have a string-to-date conversion function to handle this, but will often supply some form of “implicit” conversion – just don’t count on it.
  + note the values supplied in the value list and the columns supplied in the column list must be the same in number and order.
* Via an application interface
  + Programming platforms ranging from the object-oriented languages such as Java to the scripting platforms like PHP give developers the ability to create widely deployed user-friendly GUI interfaces so that end users can manipulate data in an environment that closely simulates how they actually do business.
  + One such interface is MS Access Forms.
  + The MS Access Form Wizard gives the developer the ability to quickly create a form that is **bound** to a single database table, specifically designed to give the end user the ability to view data from the table, insert rows of data into the table, update data contained in the rows of the table, and delete rows of data from the table. The Access form saves changes to data in the table based on user events on the form, such as the clicking of a mouse button, or navigation from one record to another.

**Your Work:**

1. Copy **appt\_sched\_master.accdb** to your local drive. Rename it appropriately. Make a backup copy.
2. Code, test and save an “Append Query” for each of the database tables in your copy of **appt\_sched\_master.accdb**.
3. Using the MS Access 2010 Form Wizard, code, test and save a form for each of the tables in your copy of **appt\_sched\_master.accdb**, where:
   1. The form must be bound to a single database table;
   2. The form must open in read-write mode; and
   3. Upon opening, the form must retrieve all of the bound table’s existing records and place focus on the first record.
4. Using any of the three data entry methods detailed above, populate your copy of **appt\_sched\_master.accdb** with:
   1. At least five rows of data in each parent-level table;
   2. At least ten rows of data in each child-level table; and
   3. At least twenty rows of data in each grandchild-level table.
5. Make a memo with:
   1. Existing system – The Appointment Scheduling System Design documentation from Assg4 and the **appt\_sched\_master.accdb** from the shared drive;
   2. Requirement – to complete each of the tasks listed in the “Your Work section of this assignment;
   3. Analysis –
      1. Supply the ERD and reference the Data Dictionary;
      2. Screenshot a Datasheet view of one of your tables and supply a one paragraph explanation of how to enter a row of data using the Datasheet View;
      3. Supply the INSERT statement you used for one of your parent tables, one of your child tables, and one of your grandchild tables – for each, explain why or why not you used a column list, and what each of the values in your VALUES clause means; and
      4. Supply a small screenshot of each of your data entry forms **IN FORM VIEW** and for each explain exactly what you have to type into which text box to enter the values for a new row, and what action you have to perform in order for the values you have entered to actually be inserted to the database table.
   4. Recommendation – Please accept the demonstration as evidence of the per-specification functionality of the data entry application.
6. Demonstrate the functionality of your database application by:
   1. Using the datasheet view to enter a person to the person table, and then doing something to prove that the row actually got inserted;
   2. Using one of your append queries to enter an appointment for the person you just inserted, and then doing something to prove the row actually got inserted; and
   3. Using one of your Data Entry forms to add an app\_svc record for the appointment you just inserted, and then doing something to prove the row actually got inserted.

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ASSIGNMENT SIX MARKING RUBRIC

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| --- | --- | --- | --- |
| MARKING POINTS | 0 | 1 | 2 |
| Memo Format | Not used | incomplete | Complete |
| Professionalism | Illegible spelling; poor paragraph structure; poor grammar: affecting user acceptance of the finished work | Errors exist that do not affect user acceptance of finished work | Finished work has a level of professionalism acceptable to standards as negotiated with the client or his/her representative |
| Existing system details | Not present | incomplete | As applicable, enough details regarding existing system to form conclusions regarding requirements |
| Requirements | Not stated | Incomplete or inaccurate | Clear, measurable requirements for deliverables, including stage of development required i.e. design, prototype, implementation, testing |
| Analysis | Not present | Incomplete or inaccurate | complete as per the list in Assg6 Your Work Section 5c. |
|  | 0 | 1..9 | 10 |
| Recommendation | Not present | -1 point for each omission from the specs and -5 points for not matching analysis | successful demo as per specs in Assg6 Your Work Section 6. |
| Totals | 0 | 1..19 | 20 |