Completing the PSHC Database

Constructing queries for the Puget Sound Health Clinic

Review of SCCHC Operation

- Part II of Project 3 looks at the next set of operations: the interaction between client and doctor, the request for tests and the handling of those tests as they go to and from the test labs
  - Enter client data, health professional data
  - Queue client for visit with health professional
  - Health professional fills out consultation chart
  - Order tests
  - Label specimens
  - Compare specimens to manifest (send to labs)
  - Record results from test outcome

The Order Button

- Like any command button control, the database developer places it on the form and programs the event handler
- The difference for Access is that the handler will prepare for different operations… so selecting the right option is important
Computing the Tracking Number

❖ After completing the form wizard, the command button event handler has the following code:

```
Option Compare Database
Option Explicit
Private Sub XXX_Click()
On Error GoTo Err_XXX_click
DoCmd.DoMenuItem acFormBar, acRecordsMenu, 5, , acMenuVer70
Exit_XXX_Click:
Exit Sub
Err_XXX_click:
MsgBox Err.Description
Resume Exit_XXX_Click
End Sub
```

Tracking number computation here

Enter the Tracking Number

❖ The tracking number field is something the user cannot enter (locked field) and cannot change, in the click event of the order button enter code that will:

   ❖ Place the cursor in the tracking number field
   ❖ Unlock the field
   ❖ Assign the field a new value:
     
     ```
     YYY.Text = "PSHC" & Hex((12 * (Year(Date) - Year("05/02/02")) + Month(Date)) * 1000000 + VisitID)
     ```
   
   ❖ Lock the field down so no changes can be made by the user

❖ What is the tracking number?

   ❖ The letters “PSHC” followed by the computer’s hexadecimal encoding of the number of months since the creation of the database plus the current month number multiplied by one million, plus the VisitID

❖ The tracking number is reversible, but not easily associated with a person or a visit.

The Results …

Click on Order to create the tracking number if tests are requested

PSHC Design Thus Far

❖ The PSHC has the following components so far:

   ❖ tblClient table with frmClient, this form includes a command button to open frmAppointment which starts rows of data in the tblVisit
   ❖ tblHealthPro table and frmHealthClinicStaff form
   ❖ tblVisit Table and frmConsultation Form with Order button to set the tracking number

❖ Now all you need to do is prepare for the post-visit processing (determining what tests are to be done, entering results, etc)

❖ The main idea in “post visit” processing is to build new tables from the data in the Visit table

❖ These virtual tables (views) are produced through queries
The queries you will use are questions to the database system asking to view the requested data in a new (virtual) table. 

Records with specific properties can be tested. We can create a query that keeps only those entries where the Tracking field is not empty and a drug test was requested.

After identifying the table and columns to be shown, edit the criteria. Changes in the query are visible.
Criteria For Testing in QBE

❖ How would you make sure it's the current date?
❖ How would you get all tests requested on the list?

Criteria on the same line are combined with AND, on separate lines they are combined with OR

Wrapping Up the PSHC Database

❖ Create frmConsultation
❖ Set the tracking number for ordered tests
❖ Build the Main Manifest query
❖ From the main manifest, build manifests for each test offered
❖ Labels and Reports can be built from the same manifest queries
❖ Build additional queries that will prompt a user for the date and recreate the virtual tables, allowing them to enter results returned from the labs.
   ❖ Use the Visit table for these queries

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