Tony Nahra

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SKILLS

Summary: 25 years experience developing software, managing systems, reporting, planning, evaluating and budgeting
Technologies: MS SQL, Epic systems, Amazon AWS, XML/XSL, HTML5, Web Services, Excel, Access, SharePoint
Programming Languages: Python**,** Pandas, C#, JavaScript, PHP, SQL, VBA, Office365 Add-ins

PROFESSIONAL EXPERIENCE

UI Health Care: CCA division **Jul. 2023 – Present**
Application Developer

Application development and administration of various systems :

- Epic Unified Communication
- Voalte administration
- MS Teams and Sharepoint
- Message Media
- Securitas RTLS

Member of two governance groups: MS-Teams and Message Media

Patient Education Institute **Jul. 2001 – June 2023**
Senior Analyst Programmer

Interactive Tutorial Engine/Player with LMS integration:

- Designed and developed a tutorial player with voice narration, questions, feedback, glossary, scoring features and multilingual capabilities to improve learning outcomes and increase user engagement
- Database Driven LMS with completion records, response analysis and usage reporting
- Worked with major healthcare institutions: NLM, Kaiser Permanente, Cleveland Clinic, HCA and others
- Managed projects across continents and in different languages
- Generated training material and plans

Abu Dhabi Investment Authority **Feb. 1994 – Jun. 2001**
IT Education Consultant

Financial systems data analysis:

- Assisted financial analysts build models, analyze data and cross-reference
- Automated tasks and consolidated data from Reuters, Bloomberg and other sources
- Generated periodic reports, statistical regression, back-testing, and time-series seasonality analysis

CERTIFICATION

Epic Systems	**EpicCare Inpatient Clinical Documentation**	**Oct 2024**
Epic Systems	**Data Courier Mover Badge**	**Nov 2024**

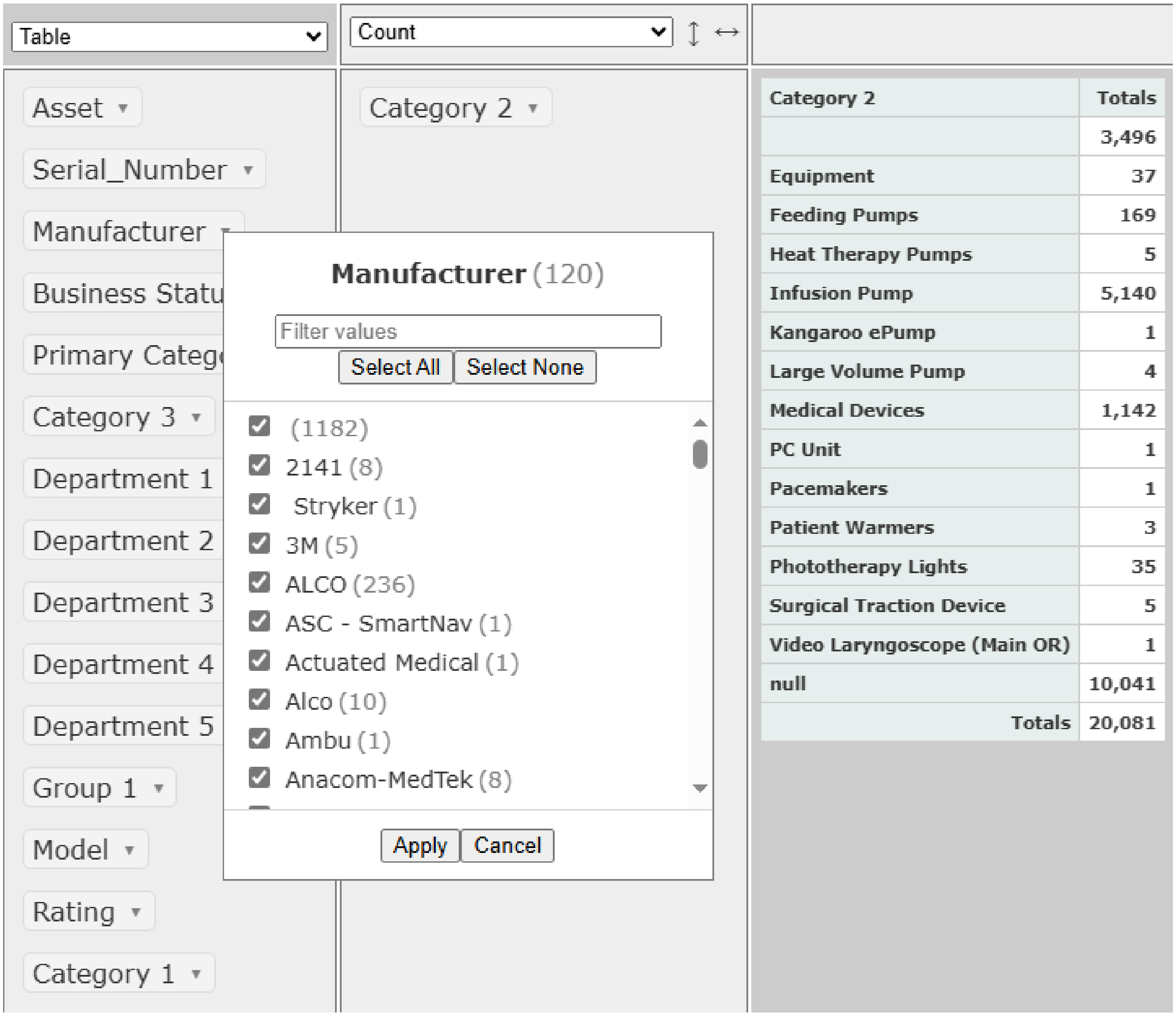
EDUCATION

American University of Beirut	**Beirut, Lebanon**	**Aug 1988**
Bachelor of Engineering	Electrical Engineering	

Screenshots of sample projects

that I designed and developed

An RTLS DrillDown report to show the count of RTLS tags per category.

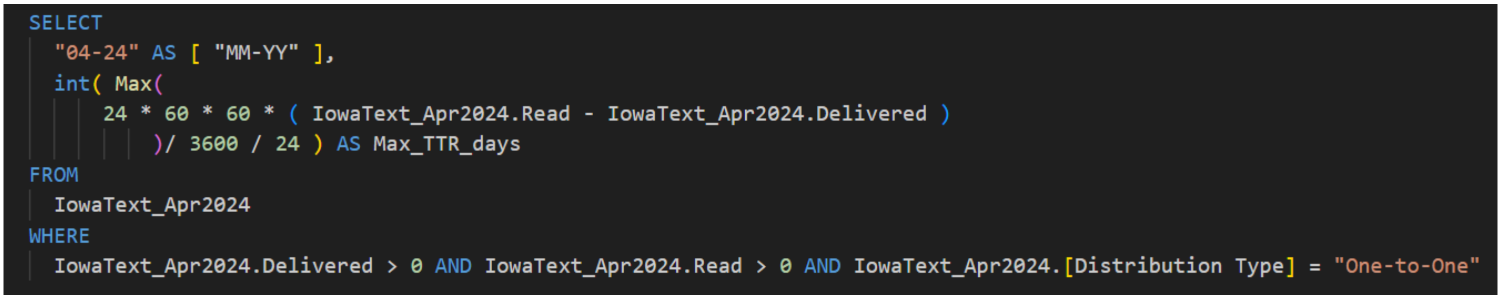


Manufacturer (120)

☑ (1182)
☑ 2141 (8)
☑ Stryker (1)
☑ 3M (5)
☑ ALCO (236)
☑ ASC - SmartNav (1)
☑ Actuated Medical (1)
☑ Alco (10)
☑ Ambu (1)
☑ Anacom-MedTek (8)

Category 2	Totals
	3,496
Equipment	37
Feeding Pumps	169
Heat Therapy Pumps	5
Infusion Pump	5,140
Kangaroo ePump	1
Large Volume Pump	4
Medical Devices	1,142
PC Unit	1
Pacemakers	1
Patient Warmers	3
Phototherapy Lights	35
Surgical Traction Device	5
Video Laryngoscope (Main OR)	1
null	10,041
Totals	20,081

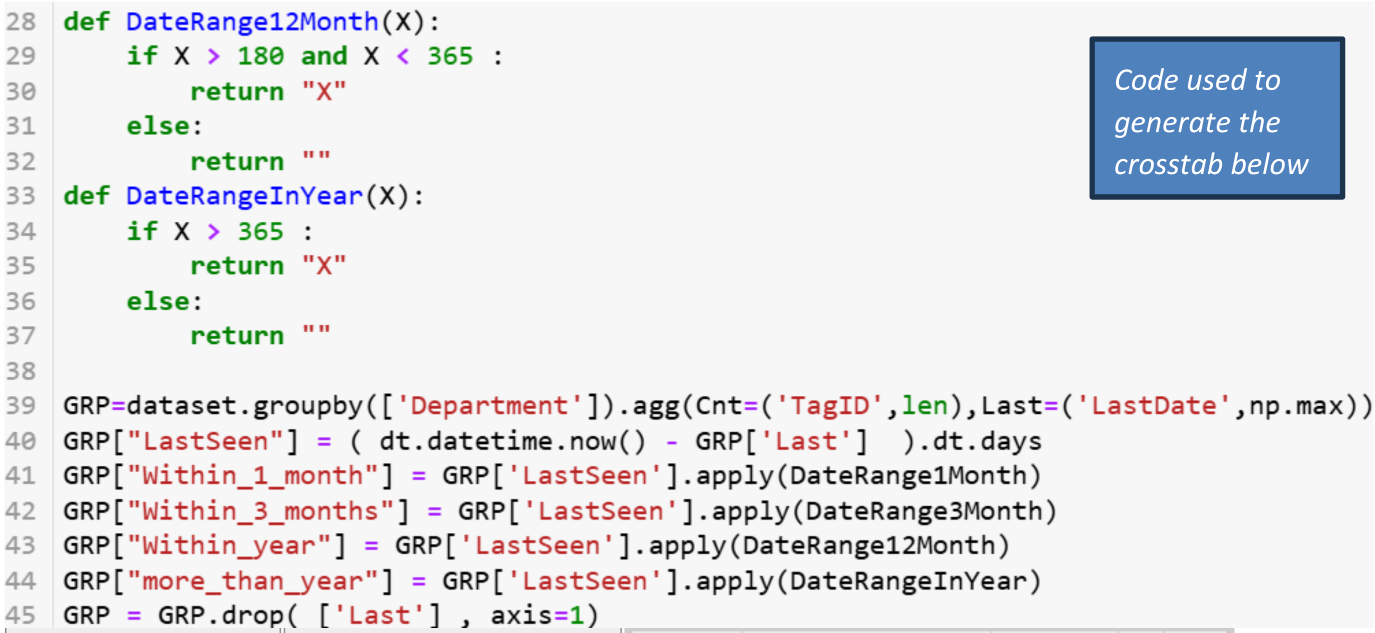
Voalte report to find monthly average Time_To_Read messages then use UNION to combine with other months



```
SELECT
  "04-24" AS [ "MM-YY" ],
  int( Max(
      24 * 60 * 60 * ( IowaText_Apr2024.Read - IowaText_Apr2024.Delivered )
        )/ 3600 / 24 ) AS Max_TTR_days
FROM
  IowaText_Apr2024
WHERE
  IowaText_Apr2024.Delivered > 0 AND IowaText_Apr2024.Read > 0 AND IowaText_Apr2024.[Distribution Type] = "One-to-One"
```

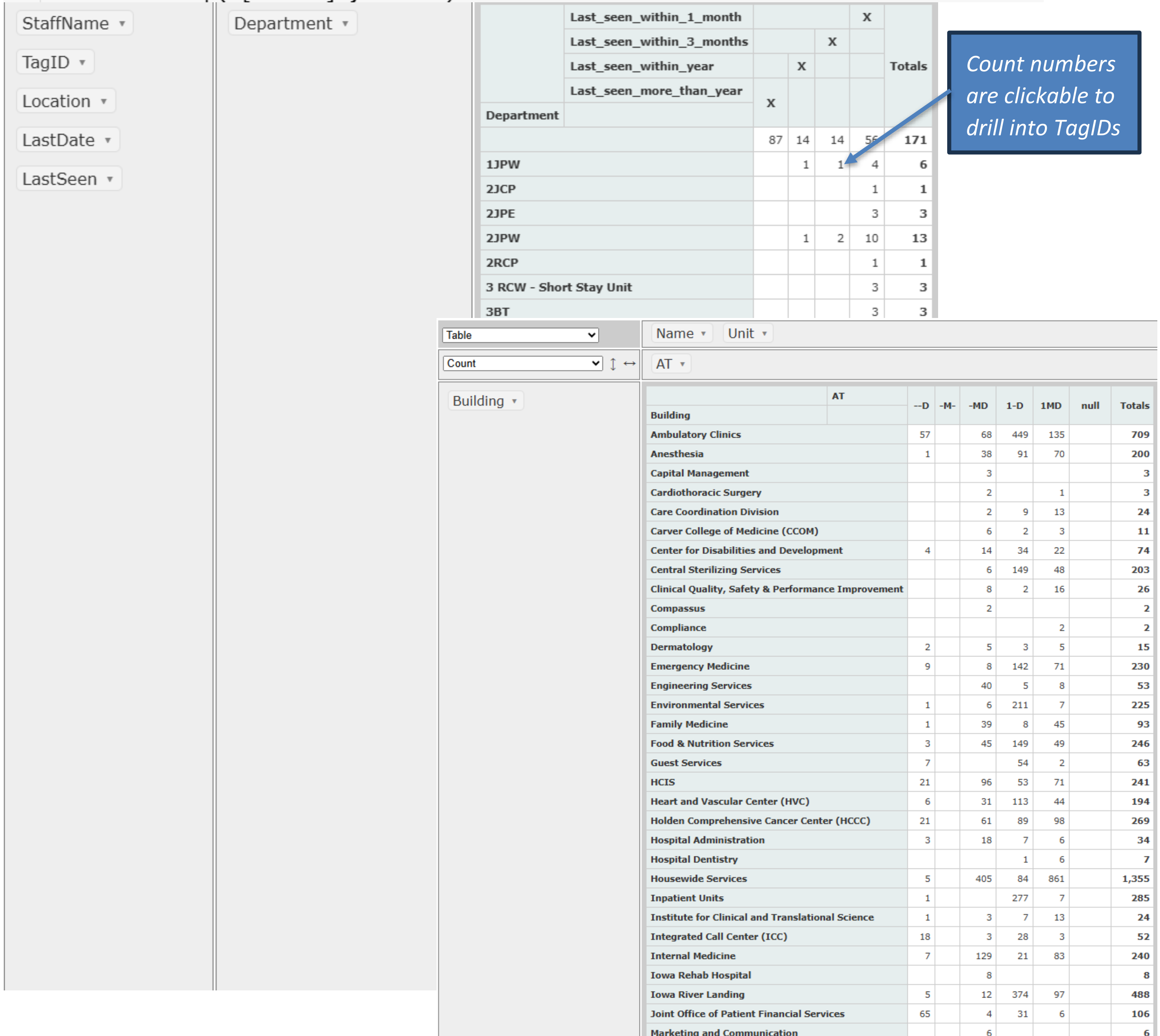
SELECT * from Avg_TTR_Jan_2024 Union SELECT * from Avg_TTR_Feb_2024 Union SELECT * from Avg_TTR_Mar_2024 UNION SELECT * from Avg_TTR_Apr_2024

A DrillDown RTLS report using the LastSeen field to analyze who has not been using their RTLS tag per Dept. / Building



```
def DateRange12Month(X):
    if X > 180 and X < 365 :
        return "X"
    else:
        return ""
def DateRangeInYear(X):
    if X > 365 :
        return "X"
    else:
        return ""

GRP=dataset.groupby(['Department']).agg(Cnt=('TagID',len),Last=('LastDate',np.max))
GRP["LastSeen"] = ( dt.datetime.now() - GRP['Last']  ).dt.days
GRP["Within_1_month"] = GRP['LastSeen'].apply(DateRange1Month)
GRP["Within_3_months"] = GRP['LastSeen'].apply(DateRange3Month)
GRP["Within_year"] = GRP['LastSeen'].apply(DateRange12Month)
GRP["more_than_year"] = GRP['LastSeen'].apply(DateRangeInYear)
GRP = GRP.drop( ['Last'] , axis=1)
```

Code used to generate the crosstab below

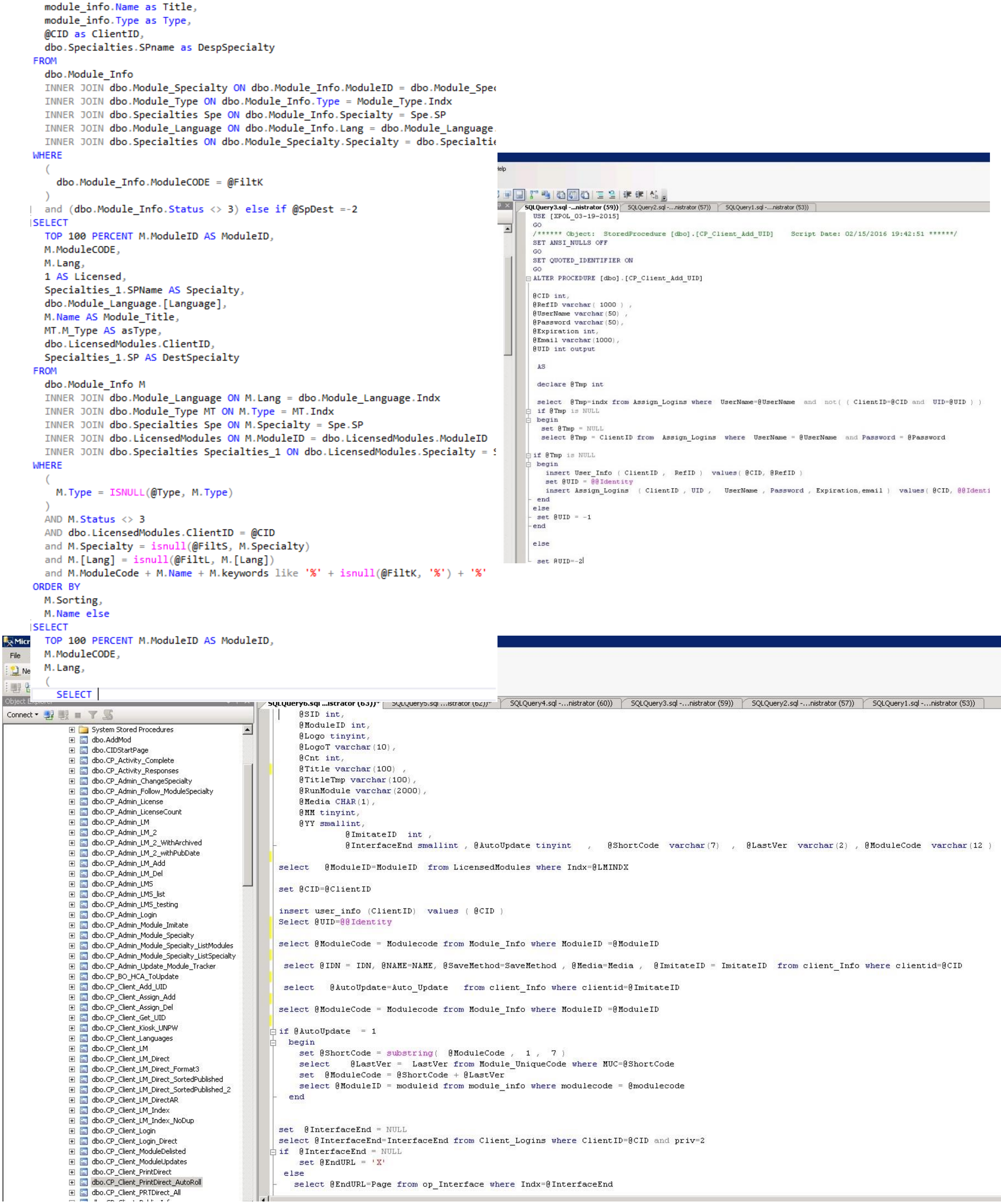


	Last_seen_within_1_month				**X**	**Totals**
	Last_seen_within_3_months			**X**		
	Last_seen_within_year		**X**			
	Last_seen_more_than_year	**X**				
Department						
		87	14	14	56	**171**
1JPW			1	1	4	**6**
2JCP					1	**1**
2JPE					3	**3**
2JPW			1	2	10	**13**
2RCP					1	**1**
3 RCW - Short Stay Unit					3	**3**
3BT					3	**3**

Count numbers are clickable to drill into TagIDs

	AT						
Building	**--D**	**-M-**	**-MD**	**1-D**	**1MD**	**null**	**Totals**
Ambulatory Clinics	57		68	449	135		**709**
Anesthesia	1		38	91	70		**200**
Capital Management			3				**3**
Cardiothoracic Surgery			2		1		**3**
Care Coordination Division			2	9	13		**24**
Carver College of Medicine (CCOM)			6	2	3		**11**
Center for Disabilities and Development	4		14	34	22		**74**
Central Sterilizing Services			6	149	48		**203**
Clinical Quality, Safety & Performance Improvement			8	2	16		**26**
Compassus			2				**2**
Compliance					2		**2**
Dermatology	2		5	3	5		**15**
Emergency Medicine	9		8	142	71		**230**
Engineering Services			40	5	8		**53**
Environmental Services	1		6	211	7		**225**
Family Medicine	1		39	8	45		**93**
Food & Nutrition Services	3		45	149	49		**246**
Guest Services	7			54	2		**63**
HCIS	21		96	53	71		**241**
Heart and Vascular Center (HVC)	6		31	113	44		**194**
Holden Comprehensive Cancer Center (HCCC)	21		61	89	98		**269**
Hospital Administration	3		18	7	6		**34**
Hospital Dentistry				1	6		**7**
Housewide Services	5		405	84	861		**1,355**
Inpatient Units	1			277	7		**285**
Institute for Clinical and Translational Science	1		3	7	13		**24**
Integrated Call Center (ICC)	18		3	28	3		**52**
Internal Medicine	7		129	21	83		**240**
Iowa Rehab Hospital			8				**8**
Iowa River Landing	5		12	374	97		**488**
Joint Office of Patient Financial Services	65		4	31	6		**106**
Marketing and Communication			6				**6**

MS-SQL stored procedures that I developed for an online training system documenting completion



```
    module_info.Name as Title,
    module_info.Type as Type,
    @CID as ClientID,
    dbo.Specialties.SPname as DespSpecialty
FROM
    dbo.Module_Info
    INNER JOIN dbo.Module_Specialty ON dbo.Module_Info.ModuleID = dbo.Module_Spe
    INNER JOIN dbo.Module_Type ON dbo.Module_Info.Type = Module_Type.Indx
    INNER JOIN dbo.Specialties Spe ON dbo.Module_Info.Specialty = Spe.SP
    INNER JOIN dbo.Module_Language ON dbo.Module_Info.Lang = dbo.Module_Language
    INNER JOIN dbo.Specialties ON dbo.Module_Specialty.Specialty = dbo.Specialtie
WHERE
    (
      dbo.Module_Info.ModuleCODE = @FiltK
    )
    and (dbo.Module_Info.Status <> 3) else if @SpDest =-2
SELECT
    TOP 100 PERCENT M.ModuleID AS ModuleID,
    M.ModuleCODE,
    M.Lang,
    1 AS Licensed,
    Specialties_1.SPName AS Specialty,
    dbo.Module_Language.[Language],
    M.Name AS Module_Title,
    MT.M_Type AS asType,
    dbo.LicensedModules.ClientID,
    Specialties_1.SP AS DestSpecialty
FROM
    dbo.Module_Info M
    INNER JOIN dbo.Module_Language ON M.Lang = dbo.Module_Language.Indx
    INNER JOIN dbo.Module_Type MT ON M.Type = MT.Indx
    INNER JOIN dbo.Specialties Spe ON M.Specialty = Spe.SP
    INNER JOIN dbo.LicensedModules ON M.ModuleID = dbo.LicensedModules.ModuleID
    INNER JOIN dbo.Specialties Specialties_1 ON dbo.LicensedModules.Specialty = S
WHERE
    (
      M.Type = ISNULL(@Type, M.Type)
    )
    AND M.Status <> 3
    AND dbo.LicensedModules.ClientID = @CID
    and M.Specialty = isnull(@FiltS, M.Specialty)
    and M.[Lang] = isnull(@FiltL, M.[Lang])
    and M.ModuleCode + M.Name + M.keywords like '%' + isnull(@FiltK, '%') + '%'
ORDER BY
    M.Sorting,
    M.Name else
SELECT
    TOP 100 PERCENT M.ModuleID AS ModuleID,
    M.ModuleCODE,
    M.Lang,
    (
      SELECT
```

SQLQuery3.sql -...nistrator (59)) | SQLQuery2.sql -...nistrator (57)) | SQLQuery1.sql -...nistrator (53))

```
USE [XPOL_03-19-2015]
GO
/****** Object:  StoredProcedure [dbo].[CP_Client_Add_UID]    Script Date: 02/15/2016 19:42:51 ******/
SET ANSI_NULLS OFF
GO
SET QUOTED_IDENTIFIER ON
GO
ALTER PROCEDURE [dbo].[CP_Client_Add_UID]

@CID int,
@RefID varchar( 1000 ) ,
@UserName varchar(50) ,
@Password varchar(50),
@Expiration int,
@Email varchar(1000),
@UID int output

 AS

 declare @Tmp int

 select  @Tmp=indx from Assign_Logins where  UserName=@UserName  and  not( ( ClientID=@CID and  UID=@UID ) )
 if @Tmp is NULL
 begin
  set @Tmp = NULL
  select @Tmp = ClientID from  Assign_Logins  where  UserName = @UserName  and Password = @Password

if @Tmp is NULL
 begin
   insert User_Info ( ClientID ,  RefID )  values( @CID, @RefID )
   set @UID = @@Identity
   insert Assign_Logins  ( ClientID , UID ,   UserName , Password , Expiration,email )  values( @CID, @@Identi
 end
else
 set @UID = -1
end

else

 set @UID=-2
```

Object Explorer

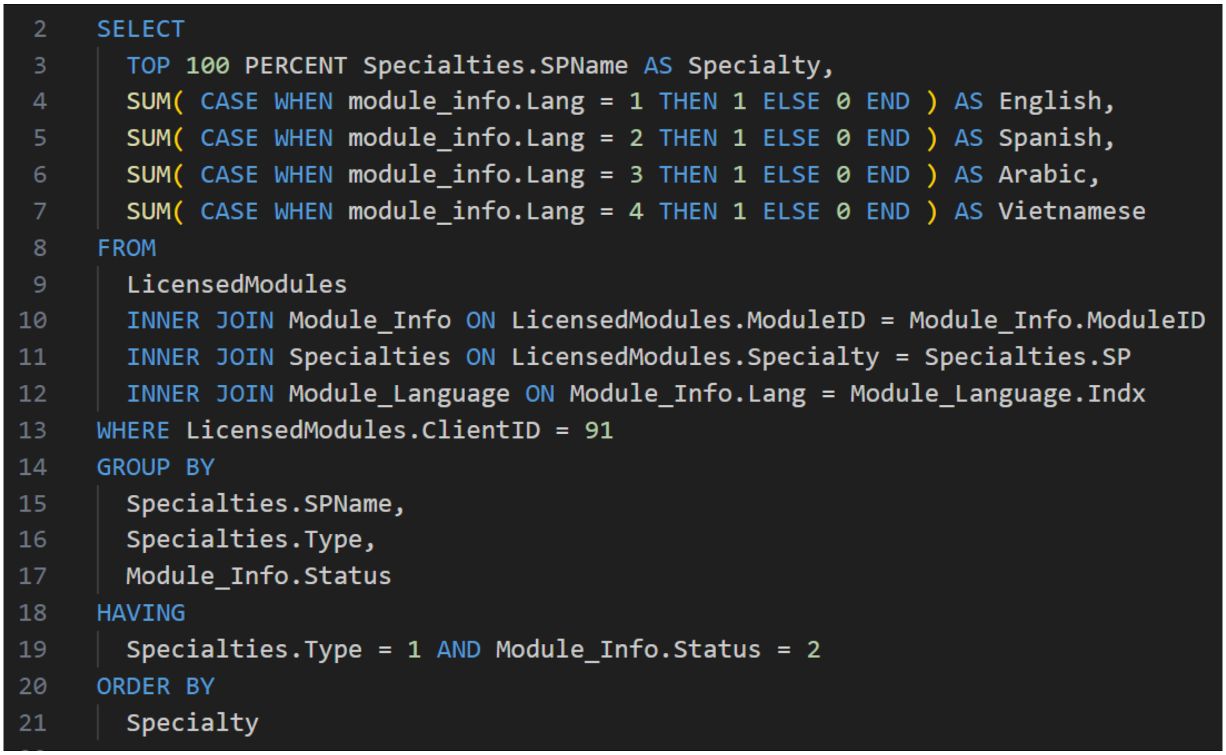
Connect ▾

- System Stored Procedures
- dbo.AddMod
- dbo.CIDStartPage
- dbo.CP_Activity_Complete
- dbo.CP_Activity_Responses
- dbo.CP_Admin_ChangeSpecialty
- dbo.CP_Admin_Follow_ModuleSpecialty
- dbo.CP_Admin_License
- dbo.CP_Admin_LicenseCount
- dbo.CP_Admin_LM
- dbo.CP_Admin_LM_2
- dbo.CP_Admin_LM_2_WithArchived
- dbo.CP_Admin_LM_2_withPubDate
- dbo.CP_Admin_LM_Add
- dbo.CP_Admin_LM_Del
- dbo.CP_Admin_LMS
- dbo.CP_Admin_LMS_list
- dbo.CP_Admin_LMS_testing
- dbo.CP_Admin_Login
- dbo.CP_Admin_Module_Imitate
- dbo.CP_Admin_Module_Specialty
- dbo.CP_Admin_Module_Specialty_ListModules
- dbo.CP_Admin_Module_Specialty_ListSpecialty
- dbo.CP_Admin_Update_Module_Tracker
- dbo.CP_BO_HCA_ToUpdate
- dbo.CP_Client_Add_UID
- dbo.CP_Client_Assign_Add
- dbo.CP_Client_Assign_Del
- dbo.CP_Client_Get_UID
- dbo.CP_Client_Kiosk_UNPW
- dbo.CP_Client_Languages
- dbo.CP_Client_LM
- dbo.CP_Client_LM_Direct
- dbo.CP_Client_LM_Direct_Format3
- dbo.CP_Client_LM_Direct_SortedPublished
- dbo.CP_Client_LM_Direct_SortedPublished_2
- dbo.CP_Client_LM_DirectAR
- dbo.CP_Client_LM_Index
- dbo.CP_Client_LM_Index_NoDup
- dbo.CP_Client_Login
- dbo.CP_Client_Login_Direct
- dbo.CP_Client_ModuleDelisted
- dbo.CP_Client_ModuleUpdates
- dbo.CP_Client_PrintDirect
- dbo.CP_Client_PrintDirect_AutoRoll
- dbo.CP_Client_PRTDirect_All

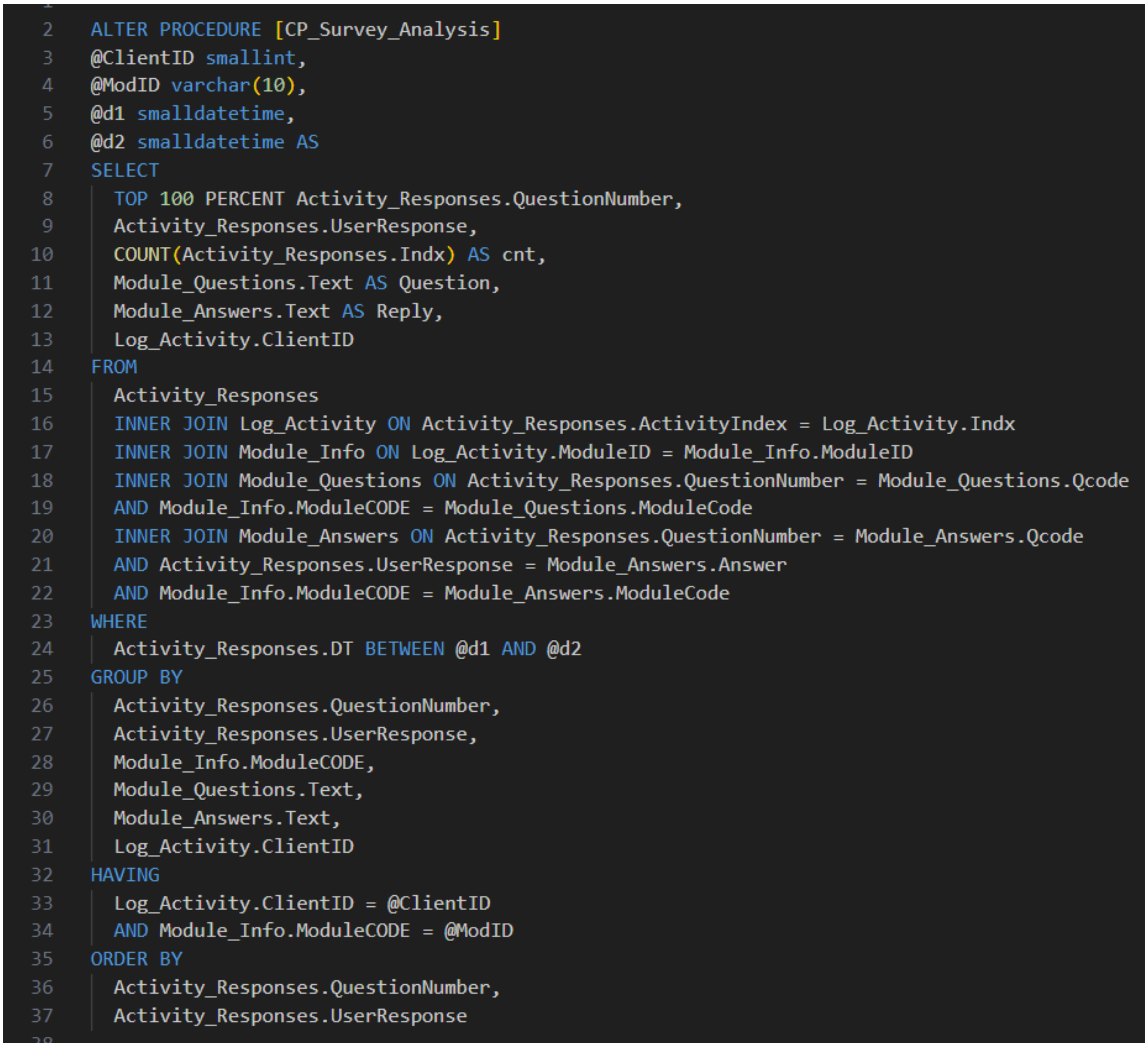
SQLQuery6.sql ...istrator (63))* | SQLQuery5.sql ...istrator (62))* | SQLQuery4.sql -...nistrator (60)) | SQLQuery3.sql -...nistrator (59)) | SQLQuery2.sql -...nistrator (57)) | SQLQuery1.sql -...nistrator (53))

```
    @SID int,
    @ModuleID int,
    @Logo tinyint,
    @LogoT varchar(10),
    @Cnt int,
    @Title varchar(100)  ,
    @TitleTmp varchar(100),
    @RunModule varchar(2000),
    @Media CHAR(1),
    @MM tinyint,
    @YY smallint,
            @ImitateID  int ,
            @InterfaceEnd smallint , @AutoUpdate tinyint    ,   @ShortCode  varchar(7)   ,  @LastVer  varchar(2) , @ModuleCode  varchar(12 )

select   @ModuleID=ModuleID  from LicensedModules where Indx=@LMINDX

set @CID=@ClientID

insert user_info (ClientID)  values ( @CID )
Select @UID=@@Identity

select @ModuleCode = Modulecode from Module_Info where ModuleID =@ModuleID

 select @IDN = IDN, @NAME=NAME, @SaveMethod=SaveMethod , @Media=Media ,  @ImitateID = ImitateID  from client_Info where clientid=@CID

 select   @AutoUpdate=Auto_Update   from client_Info where clientid=@ImitateID

select @ModuleCode = Modulecode from Module_Info where ModuleID =@ModuleID

if @AutoUpdate  = 1
  begin
    set @ShortCode = substring(  @ModuleCode ,  1 ,  7 )
    select    @LastVer =  LastVer from Module_UniqueCode where MUC=@ShortCode
    set  @ModuleCode = @ShortCode + @LastVer
    select @ModuleID = moduleid from module_info where modulecode = @modulecode
  end


set  @InterfaceEnd = NULL
select @InterfaceEnd=InterfaceEnd from Client_Logins where ClientID=@CID and priv=2
if  @InterfaceEnd = NULL
    set @EndURL = 'X'
 else
   select @EndURL=Page from op_Interface where Indx=@InterfaceEnd
```

MS-SQL stored procedures for cross tabulation and statistical reporting

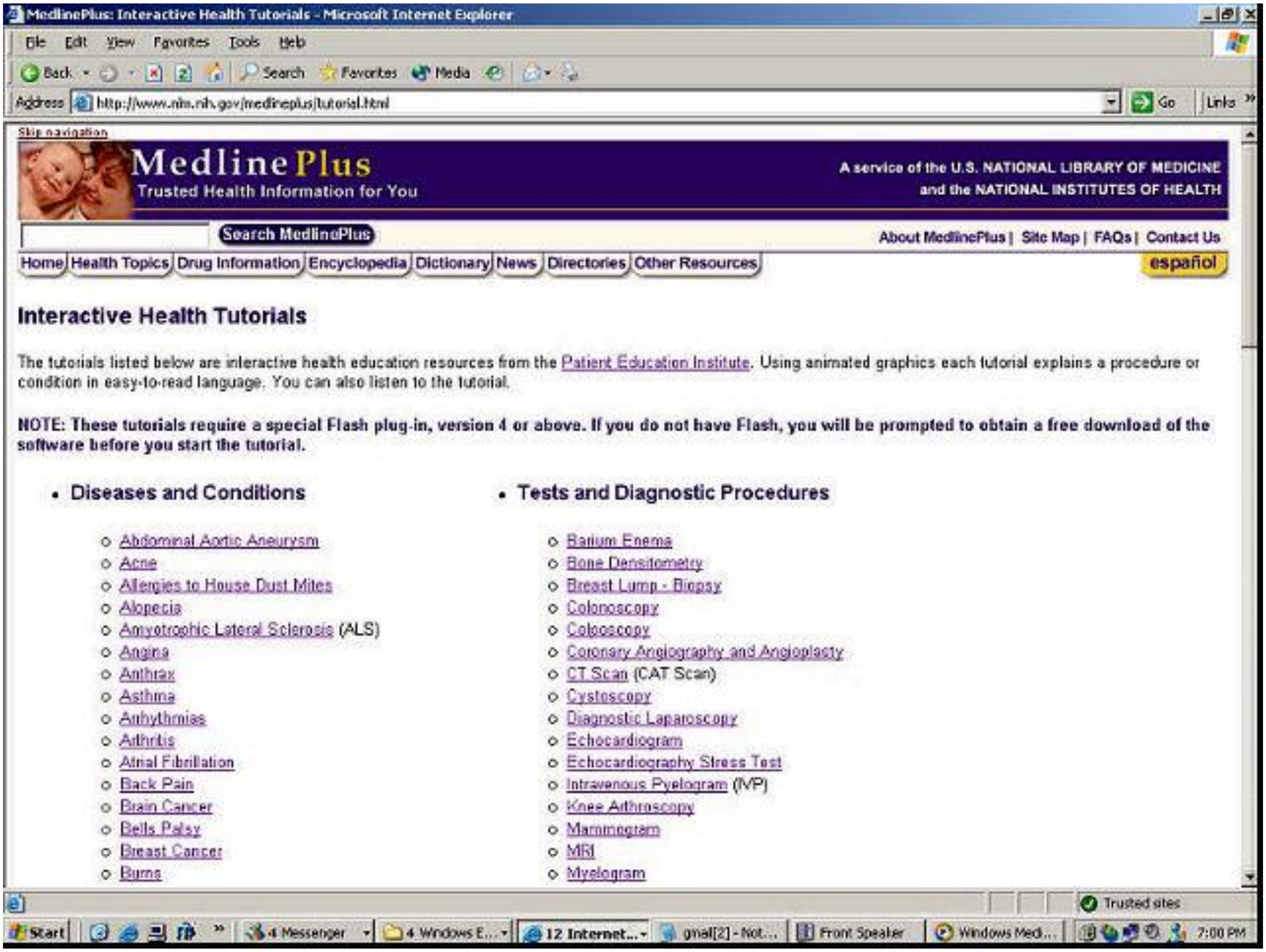


```sql
SELECT
    TOP 100 PERCENT Specialties.SPName AS Specialty,
    SUM( CASE WHEN module_info.Lang = 1 THEN 1 ELSE 0 END ) AS English,
    SUM( CASE WHEN module_info.Lang = 2 THEN 1 ELSE 0 END ) AS Spanish,
    SUM( CASE WHEN module_info.Lang = 3 THEN 1 ELSE 0 END ) AS Arabic,
    SUM( CASE WHEN module_info.Lang = 4 THEN 1 ELSE 0 END ) AS Vietnamese
FROM
    LicensedModules
    INNER JOIN Module_Info ON LicensedModules.ModuleID = Module_Info.ModuleID
    INNER JOIN Specialties ON LicensedModules.Specialty = Specialties.SP
    INNER JOIN Module_Language ON Module_Info.Lang = Module_Language.Indx
WHERE LicensedModules.ClientID = 91
GROUP BY
    Specialties.SPName,
    Specialties.Type,
    Module_Info.Status
HAVING
    Specialties.Type = 1 AND Module_Info.Status = 2
ORDER BY
    Specialty
```



```sql
ALTER PROCEDURE [CP_Survey_Analysis]
@ClientID smallint,
@ModID varchar(10),
@d1 smalldatetime,
@d2 smalldatetime AS
SELECT
    TOP 100 PERCENT Activity_Responses.QuestionNumber,
    Activity_Responses.UserResponse,
    COUNT(Activity_Responses.Indx) AS cnt,
    Module_Questions.Text AS Question,
    Module_Answers.Text AS Reply,
    Log_Activity.ClientID
FROM
    Activity_Responses
    INNER JOIN Log_Activity ON Activity_Responses.ActivityIndex = Log_Activity.Indx
    INNER JOIN Module_Info ON Log_Activity.ModuleID = Module_Info.ModuleID
    INNER JOIN Module_Questions ON Activity_Responses.QuestionNumber = Module_Questions.Qcode
    AND Module_Info.ModuleCODE = Module_Questions.ModuleCode
    INNER JOIN Module_Answers ON Activity_Responses.QuestionNumber = Module_Answers.Qcode
    AND Activity_Responses.UserResponse = Module_Answers.Answer
    AND Module_Info.ModuleCODE = Module_Answers.ModuleCode
WHERE
    Activity_Responses.DT BETWEEN @d1 AND @d2
GROUP BY
    Activity_Responses.QuestionNumber,
    Activity_Responses.UserResponse,
    Module_Info.ModuleCODE,
    Module_Questions.Text,
    Module_Answers.Text,
    Log_Activity.ClientID
HAVING
    Log_Activity.ClientID = @ClientID
    AND Module_Info.ModuleCODE = @ModID
ORDER BY
    Activity_Responses.QuestionNumber,
    Activity_Responses.UserResponse
```

Database export to XML for a MedlinePlus static website project


MedlinePlus: Interactive Health Tutorials - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.nlm.nih.gov/medlineplus/tutorial.html
Go Links
Skip navigation
MedlinePlus
Trusted Health Information for You
A service of the U.S. NATIONAL LIBRARY OF MEDICINE
and the NATIONAL INSTITUTES OF HEALTH
Search MedlinePlus
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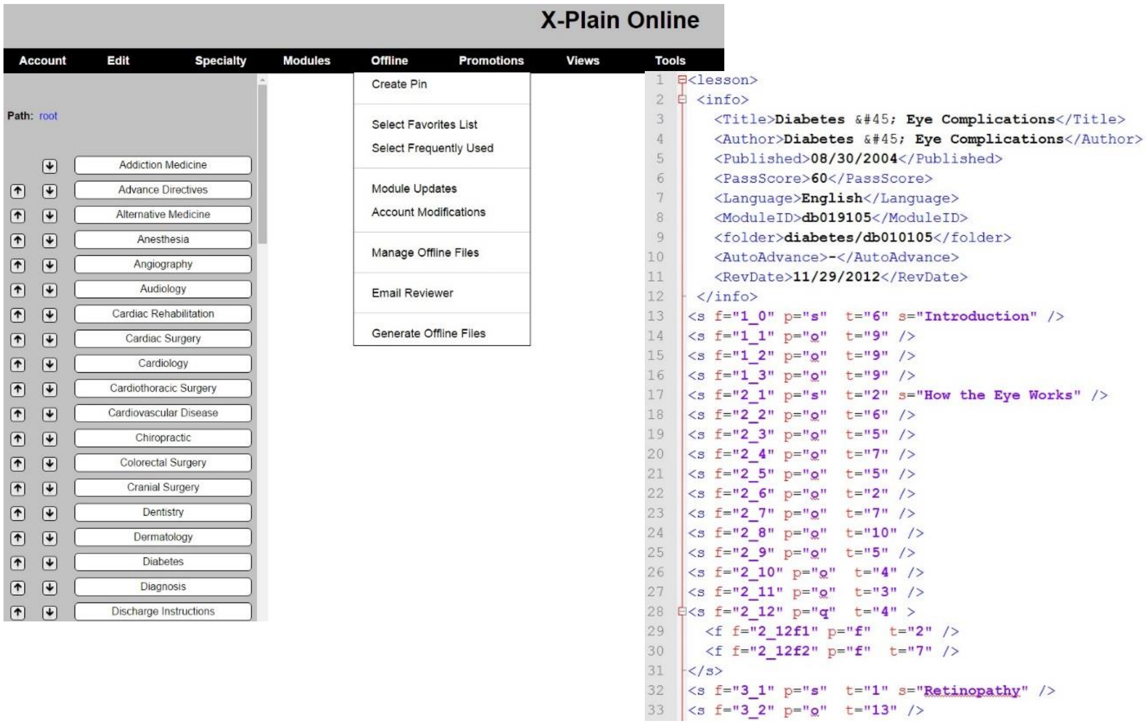
Home Health Topics Drug Information Encyclopedia Dictionary News Directories Other Resources
español
Trusted sites
Start
4 Messenger
4 Windows E...
12 Internet...
gnail[2] - Not...
Front Speaker
Windows Medi...
7:00 PM

Interactive Health Tutorials

The tutorials listed below are interactive health education resources from the Patient Education Institute. Using animated graphics each tutorial explains a procedure or condition in easy-to-read language. You can also listen to the tutorial.

NOTE: These tutorials require a special Flash plug-in, version 4 or above. If you do not have Flash, you will be prompted to obtain a free download of the software before you start the tutorial.

- Diseases and Conditions
  - Abdominal Aortic Aneurysm
  - Acne
  - Allergies to House Dust Mites
  - Alopecia
  - Amyotrophic Lateral Sclerosis (ALS)
  - Angina
  - Anthrax
  - Asthma
  - Arrhythmias
  - Arthritis
  - Atrial Fibrillation
  - Back Pain
  - Brain Cancer
  - Bells Palsy
  - Breast Cancer
  - Burns
- Tests and Diagnostic Procedures
  - Barium Enema
  - Bone Densitometry
  - Breast Lump - Biopsy
  - Colonoscopy
  - Colposcopy
  - Coronary Angiography and Angioplasty
  - CT Scan (CAT Scan)
  - Cystoscopy
  - Diagnostic Laparoscopy
  - Echocardiogram
  - Echocardiography Stress Test
  - Intravenous Pyelogram (IVP)
  - Knee Arthroscopy
  - Mammogram
  - MRI
  - Myelogram



```
<lesson>
 <info>
   <Title>Diabetes &#45; Eye Complications</Title>
   <Author>Diabetes &#45; Eye Complications</Author>
   <Published>08/30/2004</Published>
   <PassScore>60</PassScore>
   <Language>English</Language>
   <ModuleID>db019105</ModuleID>
   <folder>diabetes/db010105</folder>
   <AutoAdvance>-</AutoAdvance>
   <RevDate>11/29/2012</RevDate>
 </info>
<s f="1_0" p="s"  t="6" s="Introduction" />
<s f="1_1" p="o"  t="9" />
<s f="1_2" p="o"  t="9" />
<s f="1_3" p="o"  t="9" />
<s f="2_1" p="s"  t="2" s="How the Eye Works" />
<s f="2_2" p="o"  t="6" />
<s f="2_3" p="o"  t="5" />
<s f="2_4" p="o"  t="7" />
<s f="2_5" p="o"  t="5" />
<s f="2_6" p="o"  t="2" />
<s f="2_7" p="o"  t="7" />
<s f="2_8" p="o"  t="10" />
<s f="2_9" p="o"  t="5" />
<s f="2_10" p="o"  t="4" />
<s f="2_11" p="o"  t="3" />
<s f="2_12" p="q"  t="4" >
  <f f="2_12f1" p="f"  t="2" />
  <f f="2_12f2" p="f"  t="7" />
</s>
<s f="3_1" p="s"  t="1" s="Retinopathy" />
<s f="3_2" p="o"  t="13" />
```

MessageMedia OPT_OUT report generator

Instructions

Generate a Message Media csv export
Drop the csv file in csv subfolder
Run the Python script below
The generated CSV file will be stored in 'Message Media/Reports' folder

Subject : Messagemedia OPT_OUT for 2025-01-12_to_2025-01-20

Hello

Here is the messagemedia OPT_OUT report.

In [1]:

```
import pandas as pd
import os
import glob
import datetime as dt
import re

SRC_FILE = sorted( filter( os.path.isfile, glob.glob('csv/*.csv')))[0]
print(SRC_FILE)
rep = pd.read_csv( SRC_FILE , chunksize=10000,
                      low_memory=False ,
                      index_col=False ,
                      header=0 ,
                      usecols=[
                           'source_address',
                           'destination_address',
                           'action',
                           'timestamp_localtime',
                           'content',
                           'timestamp',
                           'account_name'
                      ] ,
                      dtype="string"
                 )

df = pd.concat(
    (x.query("action in ['OPT_OUT','OPT_IN'] ") for x in rep),
    ignore_index=True
    )
FN  = df['timestamp'].str[0:10].str.strip().min() + '_'
FN += df['timestamp'].str[0:10].str.strip().max()

RepPath = "file:///S:/Comm%20&%20Coll%20Apps%20(CCA)/Message%20Media/Reports/"
RepPath += FN + ".csv"
print( RepPath )

df['source_address'] = df['source_address'].str[1:]
df = df.query(" `account_name` == 'UIHealthCare (Main)' " )

dfDupe = df[df.duplicated(subset=['source_address'], keep=False)]
dfDupe = dfDupe.sort_values(
    'timestamp',
    ascending=False).drop_duplicates(['source_address'] ,
    keep='first'
    )

dfDupe = dfDupe.reset_index(drop=True)
dfDupe = dfDupe.drop( dfDupe.query(" `action`=='OPT_OUT' ").index)

print('')
print('Duplicates')
print('OPT_IN -----------------------------------------------------')

if dfDupe.empty:
    print('No duplicates')
else:
    #print(dfDupe.to_markdown())
    dfDupe.to_csv( 'output/' + FN + ".csv" , mode='a')

df = df.sort_values(
    ['timestamp','source_address'],
    ascending=[False, True]
    ).drop_duplicates(['source_address'])

a_index = df.set_index('source_address').index
b_index = dfDupe.set_index('source_address').index

mask = ~a_index.isin(b_index)
df = df.loc[mask]
df = df.sort_values('timestamp', ascending=True )
df = df.reset_index(drop=True)
df = df.drop(['destination_address'], axis=1)
df = df.drop(['timestamp'], axis=1)

print('')
print('Result -----------------------------------------------------------------')
df.to_csv( 'output/' + FN + ".csv" , index=False )
df.to_csv(
    "S:/Comm & Coll Apps (CCA)/Message Media/Reports/" + FN + ".csv" ,
    index=False
    )
#print(df.to_markdown())
```

```
csv\2025-02-10_02-08-16_detail_all.csv
file:///S:/Comm%20&%20Coll%20Apps%20(CCA)/Message%20Media/Reports/2025-02-02_2025-02-
08.csv

Duplicates
OPT_IN -----------------------------------------------------

Result -----------------------------------------------------------------
```

In [ ]: