Tony Nahra

Cell: (319) 594-1358 | email: tony-nahra@uiowa.edu | Web: tonynahra.github.io

SKILLS

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

PROFESSIONAL EXPERIENCE

UI Health Care: CCA division **Jul. 2023 – Present**
Coralville, Iowa, 52241, USA
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**
Coralville, Iowa, 52241, USA
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**
Abu Dhabi, U.A.E.
IT Education Consultant

Financial systems data analysis:

- Assisted financial analysts build models, data warehouse, OLAP and drill down
- 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**

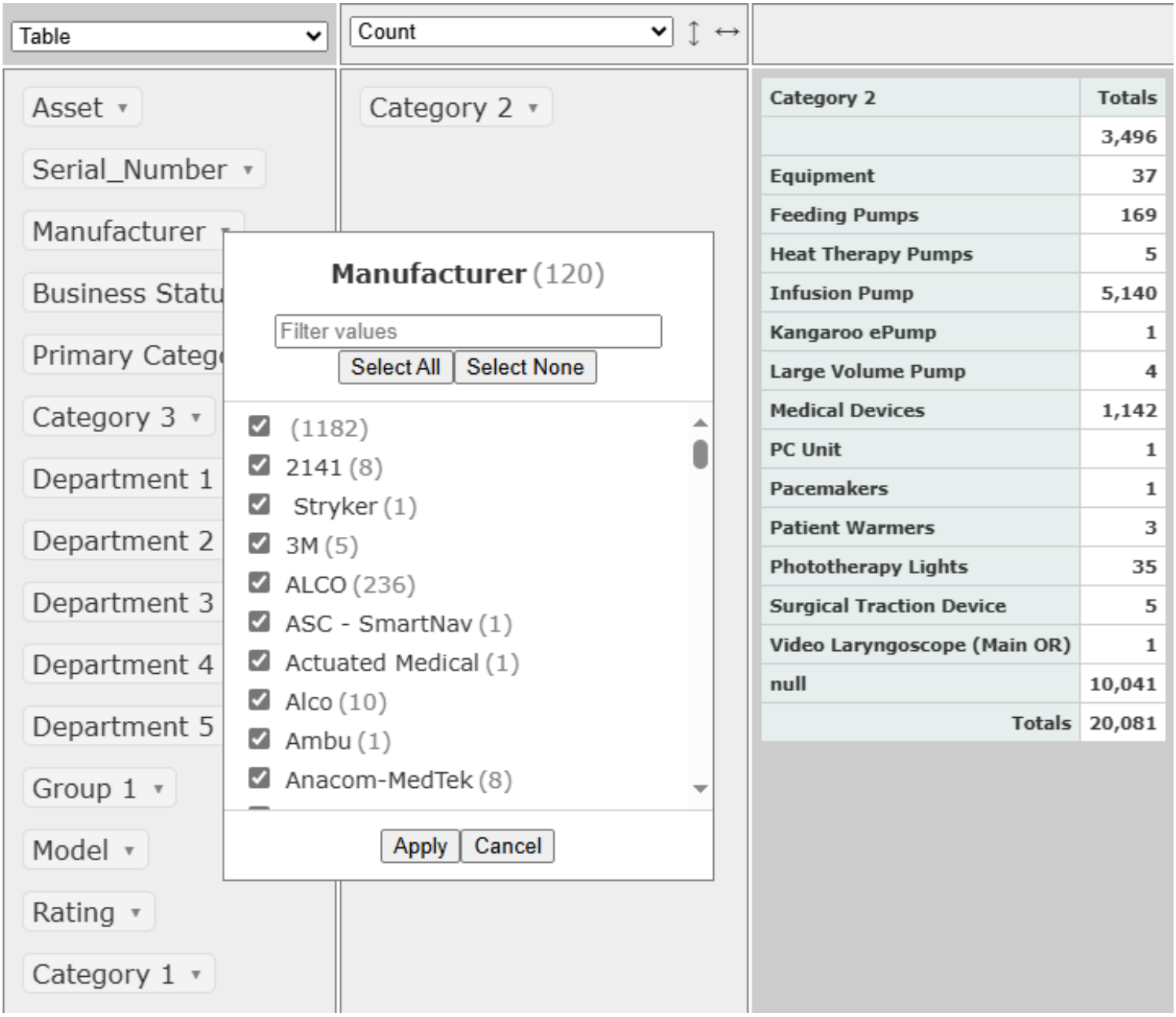
EDUCATION

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

More details and sample projects at **https://tonynahra.github.io/cv**

Screenshots of sample projects that I designed and developed

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



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 calculate 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

```python
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 PIVOT below

Table | Count | Last_seen_within_1_month | Last_seen_within_3_

StaffName | TagID | Location | LastDate | LastSeen

Department

Department	Last_seen_within_1_month	Last_seen_within_3_months	Last_seen_within_year	Last_seen_more_than_year	Totals
	87	14	14	56	171
1JPW		1	1	4	6
2JCP				1	1
2JPE				3	3
2JPW		1	2	10	13
2RCP				1	1

Count numbers are clickable to drill into TagIDs

Table | Count | Name | Unit | AT

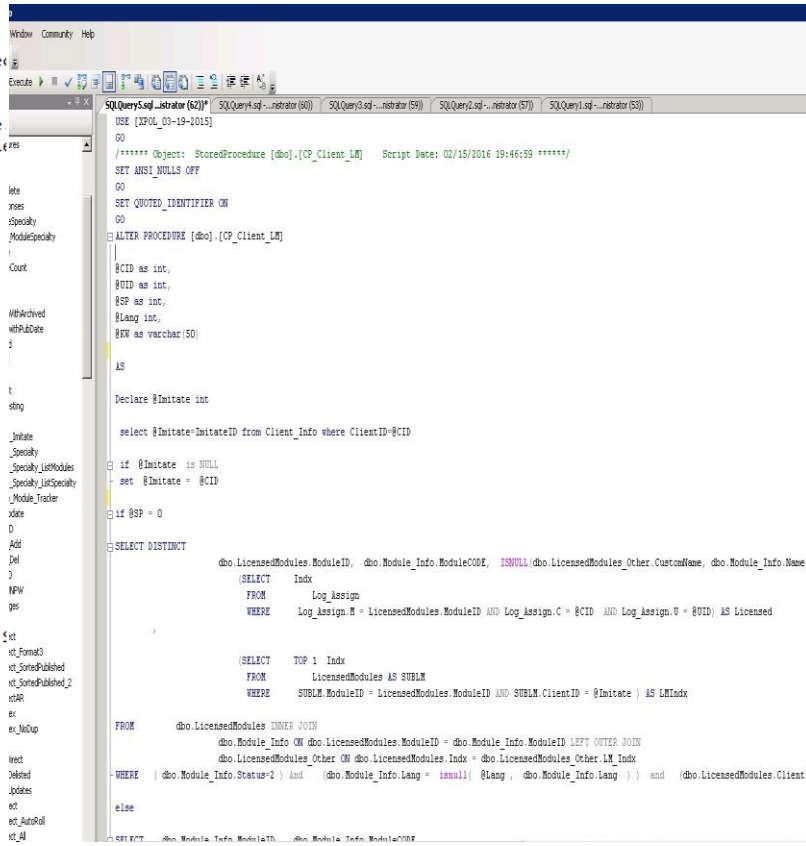
Building

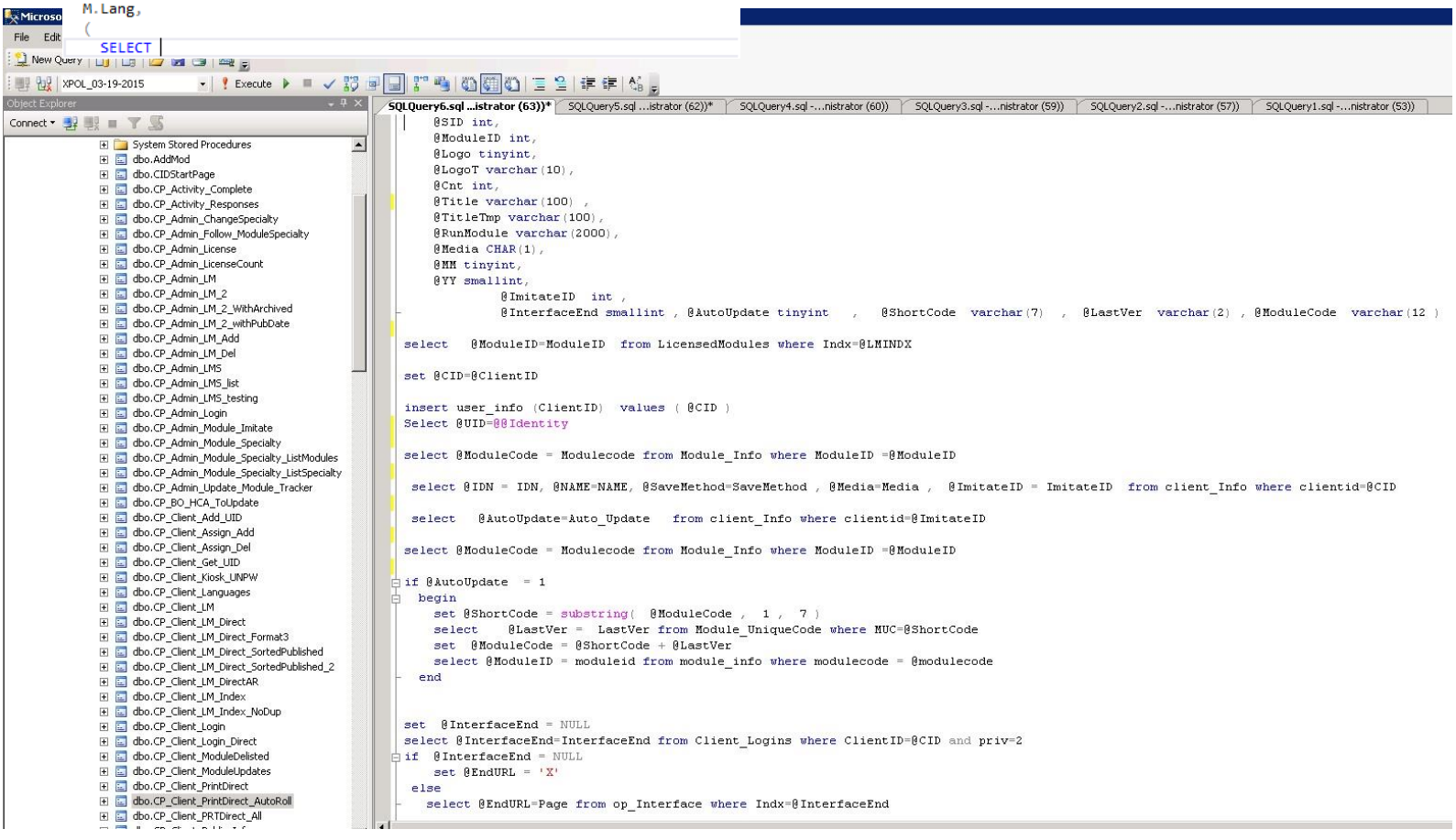
Voalte PIVOT report for who is using which format:
1: VoalteOne
M: Mobile
D: Desktop

Building	AT	--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_Spec
  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.Specialti
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 =
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
```



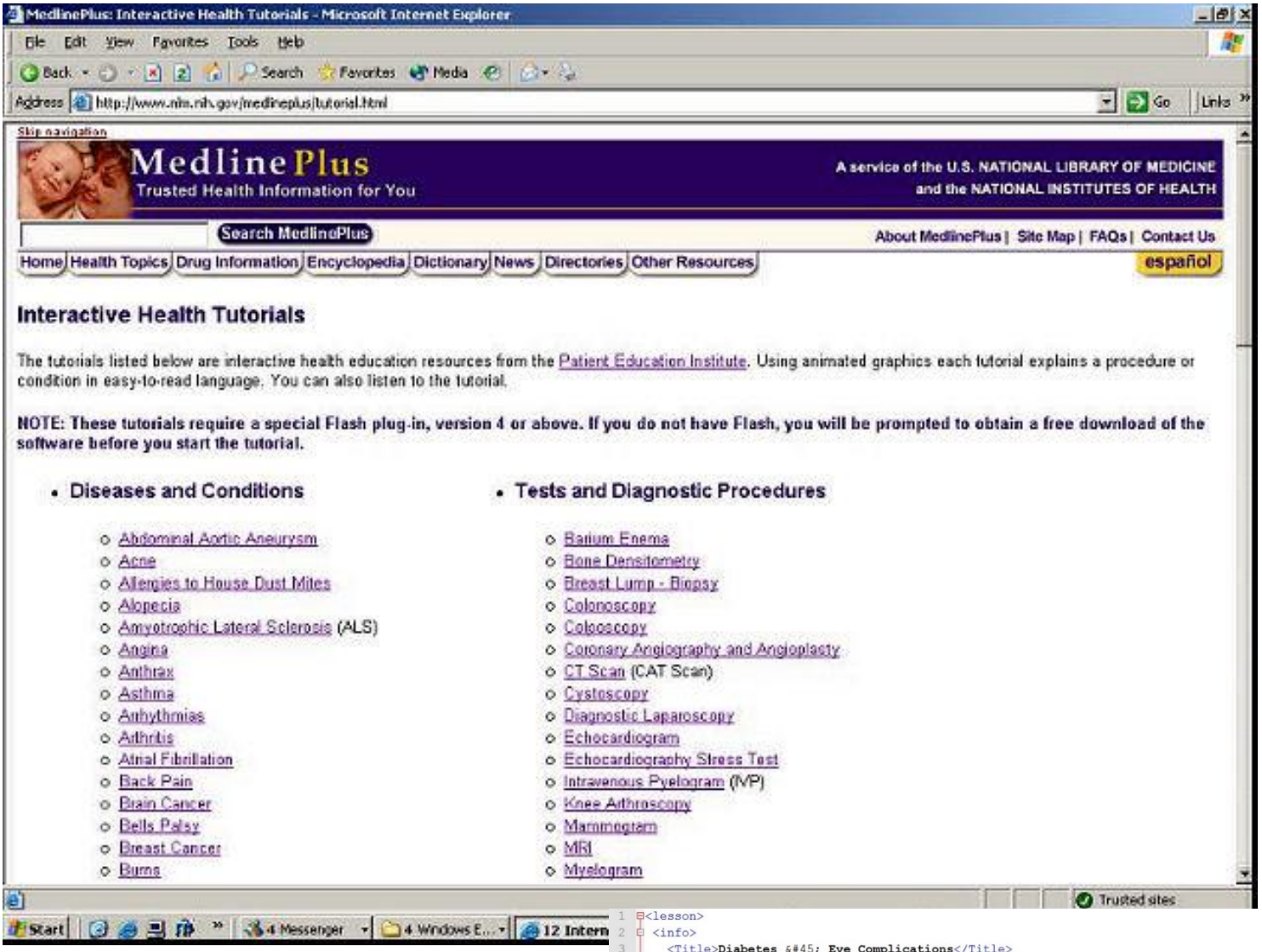


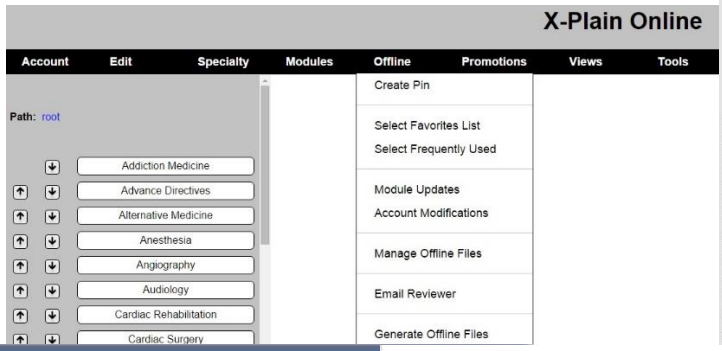
mySql (that does not support PIVOT function) query for cross tabulation

```
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
```

```
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






```
<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" />
```

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.

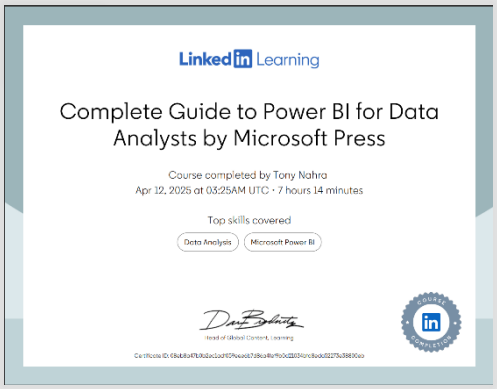
In [1]:
```
import pandas as pd
import os
import glob
import datetime as dt
import re

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',
```

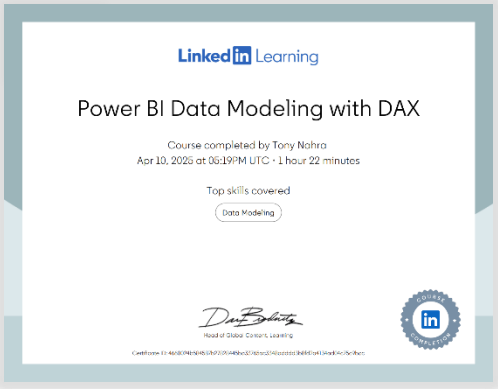
```
    ascending=False).drop_duplicates(['source_address'] ,
    keep='first'
    )

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())
```

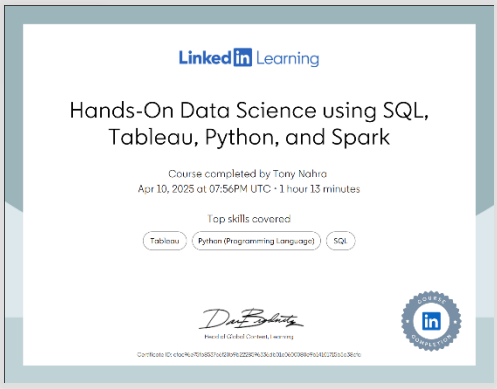
```
csv\2025-02-10_02-08-16_detail_all.csv
file:///S:/Comm%20&%20Coll%20Apps%20(CCA)/Message%20Media/Reports/2025-02-02_2025-02-08.csv

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

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

In [ ]:


Epic is pleased to present this certificate to
Tony Nahra
in
EPICCARE INPATIENT CLINICAL DOCUMENTATION
VERONA
Epic
WISCONSIN
Training Status
CERTIFIED - VERONA
Version
2024 Versions
Awarded on
OCTOBER 26, 2024
JUDITH FAULKNER
CARL DVORAK
Epic


LinkedIn Learning
Complete Guide to Power BI for Data Analysts by Microsoft Press
Course completed by Tony Nahra
Apr 12, 2025 at 03:25AM UTC · 7 hours 14 minutes
Top skills covered
Data Analysis
Microsoft Power BI

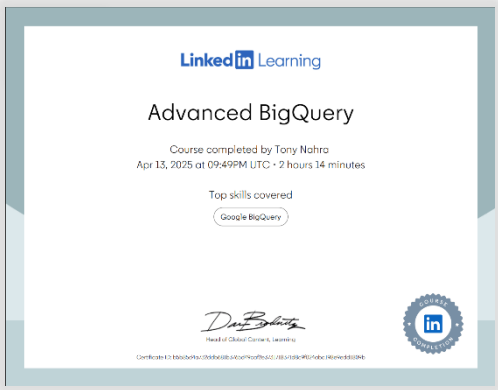

LinkedIn Learning
Power BI Data Modeling with DAX
Course completed by Tony Nahra
Apr 10, 2025 at 06:19PM UTC · 1 hour 22 minutes
Top skills covered
Data Modeling


LinkedIn Learning
Hands-On Data Science using SQL, Tableau, Python, and Spark
Course completed by Tony Nahra
Apr 10, 2025 at 07:56PM UTC · 1 hour 13 minutes
Top skills covered
Tableau
Python (Programming Language)
SQL


LinkedIn Learning
SQL for Data Analysis
Course completed by Tony Nahra
Apr 11, 2025 at 02:51PM UTC · 1 hour 10 minutes
Top skills covered
Data Analysis
SQL


LinkedIn Learning
Power BI for Finance
Course completed by Tony Nahra
Apr 09, 2025 at 10:43PM UTC · 2 hours 18 minutes
Top skills covered
Trend Analysis
Financial Modeling
Microsoft Power BI


LinkedIn Learning
Python Data Analysis
Course completed by Tony Nahra
Apr 11, 2025 at 08:16PM UTC · 3 hours 43 minutes
Top skills covered
Data Analysis
Statistical Data Analysis
Python (Programming Language)


LinkedIn Learning
Advanced BigQuery
Course completed by Tony Nahra
Apr 13, 2025 at 09:49PM UTC · 2 hours 14 minutes
Top skills covered
Google BigQuery


LinkedIn Learning
Implementing a Data Warehouse with SQL Server 2022
Course completed by Tony Nahra
Apr 14, 2025 at 02:22AM UTC · 2 hours 36 minutes
Top skills covered
Data Warehousing
Microsoft SQL Server


LinkedIn Learning
Customer Service: Serving Internal Customers
Course completed by Tony Nahra
Nov 07, 2024 at 05:57PM UTC · 51 minutes
Top skills covered
Internal Customers
Customer Service