Notes for DPS ETL project

# Scope of project

Build an ETL stand alone application to parse DPS F19 PRSN orders that come in on an Excel spreadsheet template provided by DPS (Jaime Hirsh) and produce an XML file that is consumable by DPS’s ERP system (IQMS).

# Application description

The program is named Order Wizard. It is a single file (order\_wiz.py) written in Python3 and is a simple command line application. The user is asked for input: file name and order type (Ski, Phantom, Dreamtime or Demo/Rental) and processes the spreadsheet appropriately. The input file is assumed to be in a subdirectory of the application directory called “inputs/”. After the data is parsed, it is formatted as an XML file and placed in the “outputs/” subdirectory.

# Source control

The program source and distribution files are kept in Github at:

https://github.com/clarkekawakami/order\_wiz

# Program output

The format of the XML file is as follows:

<?xml version="1.0" ?>

<orders>

<order>

<customer\_number>45888phantom</customer\_number>

<ship\_address\_id>99</ship\_address\_id>

<buyer\_name>joe phantom</buyer\_name>

<buyer\_email>jphantom@gmail.com</buyer\_email>

<order\_note>phantom note</order\_note>

<ship\_date>10/15/2019</ship\_date>

<po\_number>oct-phan-po</po\_number>

<earned\_discount>0</earned\_discount>

<lines>

<line>

<sku>PHGL2-KIT1</sku>

<quantity>3</quantity>

<net\_price>63.99</net\_price>

</line>

<line>

<sku>PHGL2-KIT36</sku>

<quantity>2</quantity>

<net\_price>2303.64</net\_price>

</line>

<line>

<sku>PHGL-CSF</sku>

<quantity>3</quantity>

<net\_price>2200</net\_price>

</line>

<line>

<sku>PHCS1-110V</sku>

<quantity>1</quantity>

<net\_price>2000</net\_price>

</line>

<line>

<sku>PHC-SERVICEKIT</sku>

<quantity>1</quantity>

<net\_price>0</net\_price>

</line>

<line>

<sku>POP-PHANTOM</sku>

<quantity>1</quantity>

<net\_price>0</net\_price>

</line>

</lines>

</order>

</orders>

The file is named:

<customer\_number>\_<ship\_address\_id>\_<order\_type>

where order\_type is

* S for Ski
* P for Phantom
* D for Dreamtime
* R for Demo/Rental

The file shown above is a Phantom order so it is named 45888phantom\_99\_P.xml.

# Application packaging

A Mac and a PC version are both required and the programs are packaged up into a single executable file for each environment to eliminate the requirement to install and configure python and the required additional modules.

The packaging is accomplished using the “pyinstaller” tool. The command used to build the executable file is :

pyinstaller –F –n order\_wizard order\_wiz.py

-F flag creates a single executable file with python and all other modules required by the program.

-n NAME flag names the executable file NAME. Therefore the above command names the executable order\_wizard (for Mac) and order\_wizard.exe (for PC).

You must run pyinstaller on the target computer type. In other words, to build for the Mac, you have to run pyinstaller on a Mac that has a complete working development environment for this program.

I built the Mac version on my Macbook that I used to develop the program. I then run pyinstaller on Priscilla’s PC laptop on which I installed python and the other required software.