BRETT REDD – NOTABLE CONSIDERATIONS, SKILLS, & PORTFOLIO

NOTABLE In an effort to ensure my skill set is of utmost benefit to my next employer, I have spent an immense amount of effort CONSIDERATIONS completing additional B.I. training since October 2020. Therefore, in addition to my 10 year background managing, analyzing, and visualizing data in <u>Tableau, Excel, SQL, & Access</u>, please consider the following:

- Through guided learning coursework, I am now able to leverage all facets of <u>Power BI</u>, including the data transformation editor, relationship manager, and computing <u>DAX</u> calculated columns and measures.
- I have taken an additional refresh <u>SQL</u> course to ensure I leverage the appropriate syntax and methodology when computing aggregated functions, joins, conditional expressions, and creating databases and tables.
- I have completed multiple skill levels of coursework, through advanced, coding in <u>Python</u> (over 300 hours). I now have a very fluent understanding of the basics, such as assigning variables, strings/integers/floats, creating/calling lists and dictionaries, using for loops, while loops, if/elif/else, and finally defining classes and functions. Additional training includes writing HTML/CSS, as well as parsing through it to <u>web scrape</u> for data. I have also been trained in flask to integrate python coding into interactive web apps, as well as standing up and passing data through local/cloud based databases. Finally, I have worked with the <u>pandas</u> library in a variety of ways to analyze data, and cleanse/structure data into data frames for outside analysis and visualization, as well as coding library visualization (<u>matplotlib, plotly, seaborn</u>, etc.)

PROFESSIONAL TABLEAU

ACHIEVEMENTS

- Developed site selection dashboards to support brokerage activities in choosing the best industrial or office space for their clients. Dashboards included interactive scoring variables, through the use of parameters driving LOD calcs, to assign priorities to various scoring components. Components typically included: labor supply, labor cost, labor sustainability, labor competition, RE cost for available market options.
 - Developed Talent Management Dashboards (esrp) to identify employee culture through assignment of Experian mosaic profiles. Leveraged this info to identify which mosaic categories were typically aligned with optimal tenure and performance to garner insight, and funnel recruitment marketing activities. Conducted drive time analysis to determine where potential employees of similar mosaic categories could be found.
 - Developed HR dashboards (CBRE) for insight into company demographics and to monitor time to fill requisitions within the project management service line.
 - Developed comprehensive dashboards to support marketing and annual reporting of CBREs project management service line in the Americas.
 - Developed operational dashboards to support monitoring of KPIs, cash flow, staffing, closeout, and data management for CBRE client PMO. Required the use of Access/SQL to join data from multiple sources.
 - Developed client satisfaction / NPS (net promoter score) survey dashboards to draw insights into areas of success and opportunity.
 - Developed a variety of health care dashboards (WellPath), in support of health care operational performance, claims management, patient wellness, 3rd party provider performance, pharmacy Rx distribution, and staffing.

EXCEL-BASED DATA ANALYSIS ACHIEVEMENTS

- Received "Bravo" Award for developing project management operational dashboards for CBREs largest financial client, using Access, excel, excel VBA macros, etc. This led to being recognized as a best practice to be leveraged on other accounts. Leveraged this methodology when upgrading dashboards to Tableau on other accounts.
- Created automated data management / data integrity reports leveraging Access SQL design manager to join data from multiple sources, and write conditional statements to identify missing data and data discrepancies.

SME – DEVELOPMENT OF KAHUA PROJECT MANAGEMENT SOFTWARE

Selected to serve as a reporting SME, as well as participate in all application design reviews and UAT testing for project management software rolled out company-wide for CBRE. My primary objective was to ensure appropriate analysis methodologies, and data management capabilities, would be possible in the out-of-the-box offering.

SKILLS SQL (PostGreSQL, SSMS) / SSIS / SSRS

Python3 (Jupyter Notebooks/ PyCharm / Repl.It) HTML(5) / CSS / Bootstrap Tableau Prep / Alteryx / Tableau Dashboard Dev PowerBI Dashboard Dev/ PowerQuery / PowerPivot / DAX Calculated Columns & Measures MS Office Suite / Excel / MS Project / Visio Various project management applications (Kahua / Proliance / SKIRE / Expesite, etc.)

PORTFOLIO Snapshots of dashboard views and visualizations I have created through guided learning coursework, and in my free time can be found below. In addition, interactive Tableau views I have created on Tableau public for "work out Wednesday" challenges can be found here: https://public.tableau.com/profile/vizzyredds#!/?newProfile=&activeTab=0

TABLEAU

*Developed when between careers in 2019, leveraging my real estate license to sale homes.



*Also developed when between careers in 2019, leveraging my real estate license to sale homes.



POWERBI

*Simple dashboard developed through the new PowerBI section, as of 2021, on the Workout Wednesday website.



*Developed as a milestone project within the Maven Analytics Up & Running PowerBI Udemy course.



*Also developed as a milestone project within the Up & Running Maven Analytics PowerBI Udemy course.



*Also developed as a milestone project within the Up & Running Maven Analytics PowerBI Udemy course.



```
PYTHON SCRIPTING – GOOGLE PLACES API
import requests
import pandas as pd
# VARIABLES
MSA = 'Raleigh-Durham-Cary'
CITY = 'Raleigh Durham'
STATE = 'NC'
MILE_RADIUS = 40
KEYWORDS = 'Stone & Tile'
# CALCULATED VARIABLES
RADIUS = MILE_RADIUS*1609.34
TARGET = f'{CITY} {STATE}'
KEYWORD_SEARCH = f'{TARGET} {KEYWORDS}'
pd.set_option('display.max_rows', None)
pd.set_option('display.max_columns', None)
pd.set_option('display.width', None)
pd.set_option('display.max_colwidth', None)
google_place_api = 'https://maps.googleapis.com/maps/api/place/findplacefromtext/json'
google_nearby_api = 'https://maps.googleapis.com/maps/api/place/nearbysearch/json'
google_api_key =
target_params = {
    'input': TARGET,
    'inputtype': 'textquery',
    'fields': 'name, formatted_address, geometry',
    'key': google_api_key
}
payload = {}
headers = {}
targ_response = requests.get(url=google_place_api, headers=headers, data=payload, params=target_params)
target_loc_data = targ_response.json()
lat = float(target_loc_data['candidates'][0]['geometry']['location']['lat'])
lng = float(target_loc_data['candidates'][0]['geometry']['location']['lng'])
search_params = {
    'location': f'{lat}, {lng}',
    'keyword': KEYWORD_SEARCH,
    'language': 'en',
     'radius': RADIUS,
     'rankby': 'prominence',
     'key': google_api_key
}
search_return = requests.get(url=google_nearby_api, headers=headers, data=payload, params=search_params)
json_list = search_return.json()
df = pd.json_normalize(json_list['results'])
df = df[['name', 'vicinity', 'geometry.location.lat', 'geometry.location.lng']]
df.columns = ['business_name', 'address', 'lat', 'lng']
add_list = []
city_list = []
for x in df['address']:
    if ',' in x:
         add_list.append(x.split(', ')[0])
         city_list.append(x.split(', ')[1])
    else:
         add_list.append(' ')
         city_list.append(x)
df['address'] = add_list
df['city'] = city_list
df['State'] = STATE
df['MSA'] = MSA
print(df)
```

PYTHON SCRIPTING - WEB SCRAPE OF DATA TABLE, PASSED INTO LOCAL SQL DATABASE

Course: 100 days of Code - The Complete Python Pro Bootcamp

```
import pandas as pd
from sqlalchemy import create_engine
pd.set_option('display.max_rows', None)
pd.set_option('display.max_columns', None)
pd.set_option('display.width', None)
pd.set_option('display.max_colwidth', None)
conn_string = 'postgresql+psycopg2://postgres: @localhost:5432/Degree_Salary_DB'
db = create_engine(conn_string)
conn = db.connect()
table_from_html = pd.read_html("https://www.payscale.com/college-salary-report/majors-that-pay-you-back/bachelors")
df = table_from_html[0].copy()
df.columns = ["ranking", "major", "deg_type", "early_career_pay", "mid_career_pay", "high_meaning"]
for page_no in range(2, 35):
    table_from_html = pd.read_html(f"https://www.payscale.com/college-salary-report/majors-that-pay-you-back/bachelors/page_no}")
    page_df = table_from_html[0].copy()
   page_df.columns = ["ranking", "major", "deg_type", "early_career_pay", "mid_career_pay", "high_meaning"]
  df = df.append(page_df, ignore_index=True)
# Clean columns
@df.replace({"^Rank:": "", "^Major:": "", "^Degree Type:": "", "^Early Career Pay:\$": "",
            "^Mid-Career Pay:\$": "", "^% High Meaning:": "", ",": ""}, regex=True, inplace=True)
df['early_career_pay'] = df['early_career_pay'].astype(int)
df['mid_career_pay'] = df['mid_career_pay'].astype(int)
df.to_sql('deg_sal_data', con=conn, if_exists='replace', index=False)
```