

Introduction



Enrolling in the Skills Bootcamp program stemmed from my aspiration to transition into a Data Analyst role and forge a lifelong career in Data Analytics. With a background in Sales and Customer Services, I've grasped the pivotal role of data within organizations and developed a passion for leveraging it to drive business value. My proficiency in tools like Excel served as a foundation, and I'm eager to amplify my capabilities by mastering data analysis in Python. I'm enthusiastic about the prospect of diversifying my skill set and creating a tangible impact through data-driven insights. Ultimately, my long-term goal is to continually evolve as a Data Analyst, staying attuned to industry trends and making meaningful contributions to data-centric decision-making processes.

How does data add value to organisations?



As it is the case in my current role, data has proven to be an invaluable tool that allows the business to enhance its performance through informed decisions by drawing insights from historical data but also looking into the future with predictive models. Additionally, using data from existing customers allows to tailor the products and services offered, which improves the overall satisfaction of customers. Keeping informed with the data within our business but also across the broader landscape in a rapidly evolving world is the key to staying ahead of competitor and succeeding.

Analysis of FTSE Data



I was tasked to analyse the data of The Financial Times Stock Exchange 100 (FTSE 100) Index.

Firstly, I work on cleaning the data by deleting a column only containing N/A values and deleting a duplicate row.

```
clean_df = df.copy()
clean_df = clean_df.drop('Strong Buy', axis = 1)
delete_row = clean_df[clean_df['Ticker'] == 'RDSA'].index
clean_df = clean_df.drop(delete_row)
clean_df
```

I then notice that some numerical value are shown as string, I change them to a float datatype.

```
price_df = clean_df.copy()
price_df['Mid-price (p)'] = price_df['Mid-price (p)'].str.replace(',', '')
price_df['Mid-price (p)'] = price_df['Mid-price (p)'].astype(float)
price_df
```

Analysis of FTSE Data



Some of the values needed tidying, I created a function to work through the data. The function is set to remove '%' and to multiply positive values by 100.

```
def format_change(string):
    for i in string:
        if i == '%':
            string = string.replace('%', '')
    string = float(string)
    if string >= 0:
        string *= 100
    return string
```

Based on a list called watchlist, I created a smaller list based on 2 criteria, want to add it to the list if:

- The prices are equal to or lower to the given target price.
- The Buy Ratio is 0.5 or greater.

```
companies_list = []
for company, price in watchlist:
   if comparison_df['Mid-price (p)'][comparison_df['Company'] == company].item() <= price\
   or comparison_df['Buy Ratio'][comparison_df['Company'] == company].item() >= 0.5:
        companies_list.append(company)
```

Analysis of FTSE Data



This project has helped me understand the steps of data cleaning and the importance of clean data for analysis.

As a first project, I have learned that attention to detail is very important working on a project as a singular error in the code could mean it is not running or not returning the right result.

Overall, this project has helped me develop my python and pandas skill and allowed me to understand the reasons why python and pandas are widely use to manipulate data.

[Project Name]



More evidence will be added as I continue to learn through the course