Journey PPT

Shell Training
Week 5 – 18/9/2023 to 22/9/2023

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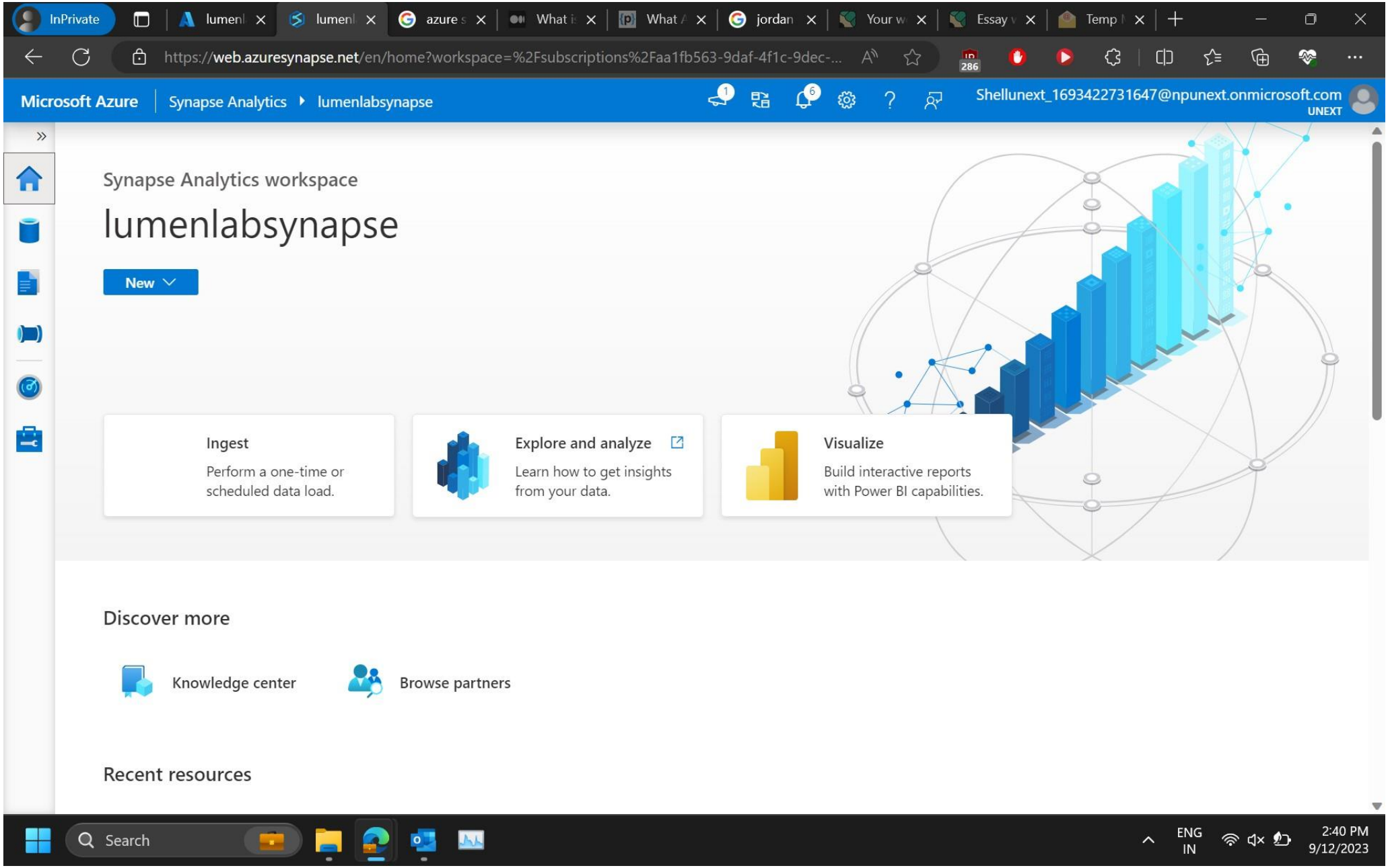
Associate Data Engineer

Day 1 -

- Doubt Solving session
- Repitation of Azure Data Factory
- Hands-on on Azure Data Factory
- loading the dataset into the storage account
- Creation of pipeline
- Fetching, updating rows of a table and getting affected in ADF and data storage
- Creating the dataflow and CDC for the instances

Day 2 -

- Azure Synapse Analytics
- Introduction to Azure Synapse Analytics
- Mapping of data flow
- Creation of pipeline, Data Ingestion and Preparation
- Write and execute SQL queries
- Understanding query performance optimization technique
- Exploring more options like manage, linked device creation
- Explanation with theory and practical for all of the above concepts.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Microsoft Azure
Synapse Analytics
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UNEXT
Synapse Analytics workspace
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New
Ingest
Perform a one-time or scheduled data load.
Explore and analyze
Learn how to get insights from your data.
Visualize
Build interactive reports with Power BI capabilities.
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Day 3 -

- Data Visualization using Power-Bi
- Understanding and exploring about Power-Bi
- Connecting to the various sources
- Data load and transformation- removing duplicates, adding column, slicers, and group
- Introduction to Dax and calculated column
- Implicit and explicit measures
- Row-level security and aggregation function

Day 4 -

- Understanding various chart-type
- Report and models
- Dashboard
- Hands-on
- Recap
- Scenario-based chart preparation

Day 5 -

- Introduction to Python
- Variables, data types
- Features of python
- Creating a small data set
- Exploring functions like zip, enumerate
- Working on Lists, Dictionary, for-loop

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Run Code

```
temperature = [78, 82, 79, 85, 88]
humidity = [60, 65, 62, 58, 57]
precipitation = [0.0, 0.2, 0.0, 0.0, 0.0]


weather_data = list(zip(dates, temperature, humidity, precipitation))
```

In [2]:
```
print(weather_data)
```
```
[('2023-09-01', 78, 60, 0.0), ('2023-09-02', 82, 65, 0.2), ('2023-09-03', 79, 62, 0.0), ('2023-09-04', 85, 58, 0.
0), ('2023-09-05', 88, 57, 0.0)]
```

In [3]:
```
print(enumerate(weather_data))
```
```
<enumerate object at 0x7fdcc8aac630>
```

In [4]:
```
print(list(enumerate(weather_data)))
```
```
[(0, ('2023-09-01', 78, 60, 0.0)), (1, ('2023-09-02', 82, 65, 0.2)), (2, ('2023-09-03', 79, 62, 0.0)), (3, ('2023-
09-04', 85, 58, 0.0)), (4, ('2023-09-05', 88, 57, 0.0))]
```

In [5]:
```
for day, details in enumerate(weather_data):
    print(day, details)
```
```
0 ('2023-09-01', 78, 60, 0.0)
1 ('2023-09-02', 82, 65, 0.2)
2 ('2023-09-03', 79, 62, 0.0)
3 ('2023-09-04', 85, 58, 0.0)
4 ('2023-09-05', 88, 57, 0.0)
```

In [9]:
```
for day, details in enumerate(weather_data):
    if(details[1] >= 80):
        print(f"Temp is greater than 80F on day {day+1}")
```
```
Temp is greater than 80F on day 2
Temp is greater than 80F on day 4
Temp is greater than 80F on day 5
```

In [12]:
```
for i in range(len(weather_data)):
    if(weather_data[i][1] >= 80):
        print(f"Temp is greater than 80F on day {i+1}")
```
```
Temp is greater than 80F on day 2
Temp is greater than 80F on day 4
Temp is greater than 80F on day 5
```

In [ ]:

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Run Code

In [5]:
```
for day, details in enumerate(weather_data):
    print(day, details)
```

```
0 ('2023-09-01', 78, 60, 0.0)
1 ('2023-09-02', 82, 65, 0.2)
2 ('2023-09-03', 79, 62, 0.0)
3 ('2023-09-04', 85, 58, 0.0)
4 ('2023-09-05', 88, 57, 0.0)
```

In [9]:
```
for day, details in enumerate(weather_data):
    if(details[1] >= 80):
        print(f"Temp is greater than 80F on day {day+1}")
```

```
Temp is greater than 80F on day 2
Temp is greater than 80F on day 4
Temp is greater than 80F on day 5
```

In [12]:
```
for i in range(len(weather_data)):
    if(weather_data[i][1] >= 80):
        print(f"Temp is greater than 80F on day {i+1}")
```

```
Temp is greater than 80F on day 2
Temp is greater than 80F on day 4
Temp is greater than 80F on day 5
```

In [13]:
```
weather_dict = {}

for i in range(len(weather_data)):
    if(weather_data[i][1] >= 80):
        weather_dict[weather_data[i][0]] = "Hot Day"
    else:
        weather_dict[weather_data[i][0]] = "Cold Day"
```

In [14]:
```
print(weather_dict)
```

```
{'2023-09-01': 'Cold Day', '2023-09-02': 'Hot Day', '2023-09-03': 'Cold Day', '2023-09-04': 'Hot Day', '2023-09-0
5': 'Hot Day'}
```

In [15]:
```
user = "Gaurav Singh"
temp = 50
forecast = "Sunny"

print(f"Hello {user}, the current temperature is {temp}C, and the forecast is {forecast}")
```

```
Hello Gaurav Singh, the current temperature is 50C, and the forecast is Sunny
```

In [ ]:

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Thank you for your time.