

# Structured Transformation NFT

Joins NFT data with enriched USD data

Input:

- Data Content:
  - Enriched USD Data
  - NFT Data
- Data Type: Parquet
- Data Destination: Processed Layer

Output:

- Data Content: NFT Data
- Data Type: Parquet
- Data Destination: Structured Layer

\*\* Notebook is simply for reference and only takes in a sample collection

```
from pyspark.sql.functions import broadcast
from Azure_configs import processed_data_path, structured_data_path
import datetime
```

```
today=datetime.date.today().strftime('%m-%d-%y')
```

```
def Structured_transformation_nft():
    today=datetime.date.today().strftime('%m-%d-%y')

    processed_nft_df= spark.read.parquet(f'{processed_data_path}/{today}/NFT_Collection/')

    processed_usd_df=spark.read.parquet(f'{processed_data_path}/{today}/USD_Price/NFT=**/')

    structured_nft_DF=processed_nft_df.join(broadcast(processed_usd_df),processed_nft_df['txn_date']==processed_usd_df['txn_date'],'left').drop(processed_usd_df['txn_date'])
    structured_nft_DF.show(10,truncate=False)
    structured_nft_DF.write.mode('overwrite').parquet(f'{structured_data_path}/{today}/NFT_Collection/')

    return structured_nft_DF
```

Structured\_transformation\_nft()

	NFT	token_id	num_sales	username	owner_address	txn_date	payment_amt	payment_type	USD_Rate
[CryptoPunks]	9998	4	0xef764bac8a438e7...	0xef764bac8a438e7...	[2021-10-28 23:50:37]	124457.06752488602	ETH	4288.22	
[CryptoPunks]	7804	2	null	0xf4b4a58974524e1...	[2021-03-11 00:48:39]	4200.0	ETH	1827.06	
[CryptoPunks]	3100	2	null	0x7b8961f67382c51...	[2021-03-11 20:57:01]	4200.0	ETH	1827.06	
[CryptoPunks]	4156	5	TheReal4156	0x4c1194386e12156...	[2021-12-09 20:38:17]	2500.0	ETH	4111.92	
[CryptoPunks]	5217	2	-----	0xe301612b0751f6d...	[2021-07-30 21:24:47]	2250.0	ETH	2463.61	
[CryptoPunks]	8857	2	null	0xdf37ac79f8e9b69...	[2021-09-11 18:41:23]	2000.0	ETH	3266.43	
[CryptoPunks]	2140	3	GaryVee	0xd6a984153acb6c9...	[2021-07-30 18:36:56]	1600.0	ETH	2463.61	
[CryptoPunks]	7252	2	null	0x0a8f4037729acbb...	[2021-08-24 06:34:02]	1600.0	ETH	3172.57	
[CryptoPunks]	2338	4	null	0x7cd3fc0e4ef9589...	[2021-08-06 18:18:56]	1500.0	ETH	2892.36	
[CryptoPunks]	6275	2	null	0xbd4fd6759d77e3a...	[2021-09-04 21:39:01]	1319.0	ETH	3887.01	
[CryptoPunks]	2681	3	null	0xd75233704795206...	[2022-01-06 23:52:03]	900.0	ETH	3406.48	
[CryptoPunks]	8888	2	null	0x999e77c988c4c14...	[2021-08-28 14:24:55]	888.0	ETH	3246.78	
[CryptoPunks]	3831	6	Cozomo_de_Medici	0xce90a7949bb7889...	[2021-07-30 23:45:46]	850.0	ETH	2463.61	
[CryptoPunks]	6649	6	null	0x2e675eeae4747c2...	[2021-07-31 14:11:48]	810.0	ETH	2531.75	
[CryptoPunks]	6965	4	null	0x1251122f1d77fa4...	[2021-02-19 14:27:08]	800.0	ETH	1957.47	
[CryptoPunks]	8472	2	Cozomo_de_Medici	0xce90a7949bb7889...	[2021-07-30 23:46:38]	700.0	ETH	2463.61	
[CryptoPunks]	3011	4	-----	0xe301612b0751f6d...	[2021-04-27 15:44:22]	667.0	ETH	2667.93	
[CryptoPunks]	2890	2	null	0x266892ed0d40ea5...	[2021-01-23 19:12:33]	605.0	ETH	1234.1	