EventDrivenTimeAnalysis

October 27, 2023

```python
[10]: from main import main
      import pandas as pd
      import plotly.express as px
```

```python
[2]: result = pd.DataFrame()
     dfs = []
     keys = []
     time = 30 * 60
     for i in range (time + 1, time * 50 + 1, time):
         df = main(i)
         dfs.append(df)
         keys.append(str(i) + " seconds")
     result = pd.concat(dfs, axis=1, keys=keys)
```

```python
[3]: slice_data = result.loc['End of simulation']
     fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
       ↪title="sample figure")
     fig.show()
```

```python
[4]: slice_data = result.loc['Average shopping duration']
     fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
       ↪title="sample figure")
     fig.show()
```

```python
[5]: slice_data = result.loc['Average shopping duration (complete)']
     fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
       ↪title="sample figure")
     fig.show()
```

```python
[6]: slice_data = result.loc['Drop percentage at Baker']
     fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
       ↪title="sample figure")
     fig.show()
```

```python
[7]: slice_data = result.loc['Drop percentage at Butcher']
     fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
       ↪title="sample figure")
```

```
fig.show()
```

[8]:
```
slice_data = result.loc['Drop percentage at Cheese']
fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
  ↪title="sample figure")
fig.show()
```

[9]:
```
slice_data = result.loc['Drop percentage at Cashier']
fig = px.line(x=result.columns.get_level_values(0).unique(), y=slice_data,
  ↪title="sample figure")
fig.show()
```