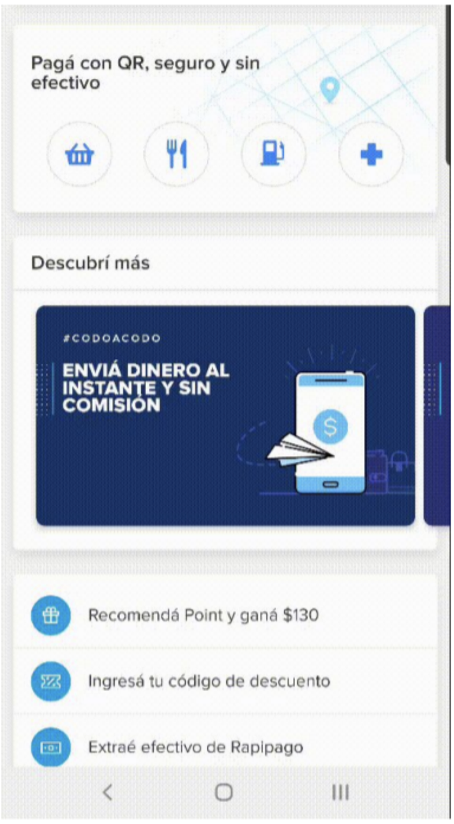
Description

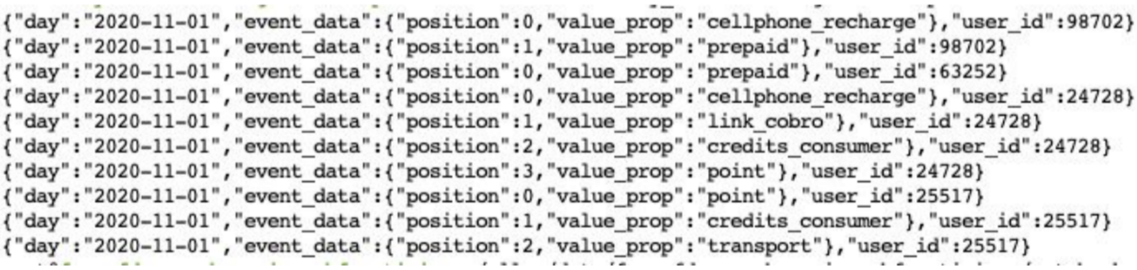
From the exercise on the Mercado Pagos business unit, we expect you to develop a Machine Learning model to predict the order in a group of value proposals - aka value props- in the carousel app name ‘Descubrí Más’.


Pagá con QR, seguro y sin efectivo
Descubrí más
#CODOACODO
ENVIÁ DINERO AL INSTANTE Y SIN COMISIÓN
Recomendá Point y ganá $130
Ingresá tu código de descuento
Extraé efectivo de Rapipago

Your task is to build a pipeline using Python with their libraries. There are 3 inputs with data from different sources and the outcome should be a dataset ready to be used by the model.

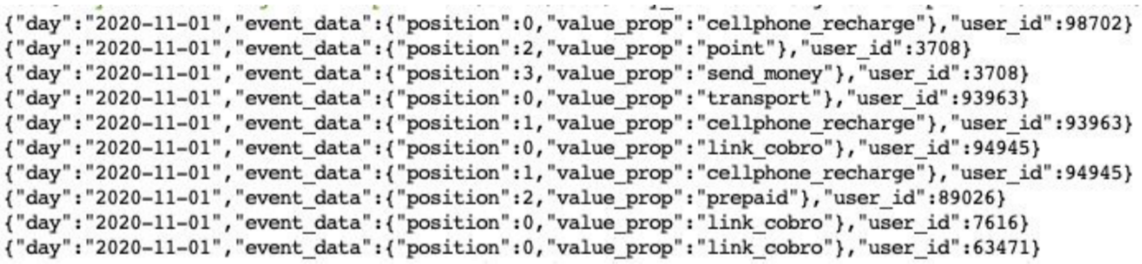
Data Sources

- **Prints** (prints.json) a month historical data of displayed value props to the users in json lines format (a json per line), i.e:



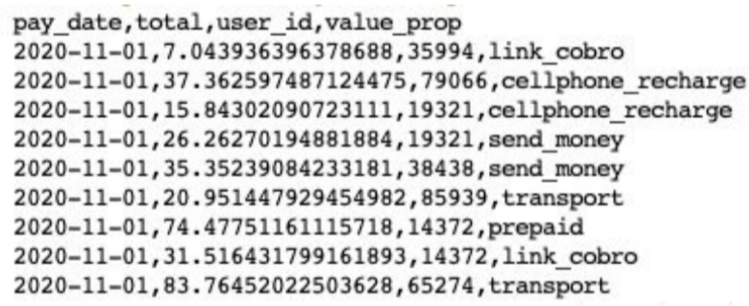
```
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"cellphone_recharge"},"user_id":98702}
{"day":"2020-11-01","event_data":{"position":1,"value_prop":"prepaid"},"user_id":98702}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"prepaid"},"user_id":63252}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"cellphone_recharge"},"user_id":24728}
{"day":"2020-11-01","event_data":{"position":1,"value_prop":"link_cobro"},"user_id":24728}
{"day":"2020-11-01","event_data":{"position":2,"value_prop":"credits_consumer"},"user_id":24728}
{"day":"2020-11-01","event_data":{"position":3,"value_prop":"point"},"user_id":24728}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"point"},"user_id":25517}
{"day":"2020-11-01","event_data":{"position":1,"value_prop":"credits_consumer"},"user_id":25517}
{"day":"2020-11-01","event_data":{"position":2,"value_prop":"transport"},"user_id":25517}
```

- **Taps** (taps.jason) a month historical data with the clicked value props by the users, using json lines format as well, i.e:



```
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"cellphone_recharge"},"user_id":98702}
{"day":"2020-11-01","event_data":{"position":2,"value_prop":"point"},"user_id":3708}
{"day":"2020-11-01","event_data":{"position":3,"value_prop":"send_money"},"user_id":3708}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"transport"},"user_id":93963}
{"day":"2020-11-01","event_data":{"position":1,"value_prop":"cellphone_recharge"},"user_id":93963}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"link_cobro"},"user_id":94945}
{"day":"2020-11-01","event_data":{"position":1,"value_prop":"cellphone_recharge"},"user_id":94945}
{"day":"2020-11-01","event_data":{"position":2,"value_prop":"prepaid"},"user_id":89026}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"link_cobro"},"user_id":7616}
{"day":"2020-11-01","event_data":{"position":0,"value_prop":"link_cobro"},"user_id":63471}
```

- **Payments** (pays.csv) a month historical data with payments made by users, using json lines format, i.e:



```
pay_date,total,user_id,value_prop
2020-11-01,7.043936396378688,35994,link_cobro
2020-11-01,37.362597487124475,79066,cellphone_recharge
2020-11-01,15.84302090723111,19321,cellphone_recharge
2020-11-01,26.26270194881884,19321,send_money
2020-11-01,35.35239084233181,38438,send_money
2020-11-01,20.951447929454982,85939,transport
2020-11-01,74.47751161115718,14372,prepaid
2020-11-01,31.516431799161893,14372,link_cobro
2020-11-01,83.76452022503628,65274,transport
```

Expected results

The expected result must have the following information:

- Prints from the last week
- For each print:
    - A field indicating if the value props were clicked or not
    - Each of the value props views number in the last 3 weeks prior to the print mentioned before.
    - Number of times a user clicked on each of the value props in the last 3 weeks prior to the print mentioned before.
    - Number of payments made by the user for each value props in the last 3 weeks prior to the print mentioned before.
    - Accumulated payments made by the user for each value props in the last 3 weeks prior to the print mentioned before.

Deliverable

- Python code
- A document with a brief explanation of the decisions made