Working Process description

* Dataset:
  + Space\_info:
    - Delete the unused spaces of space\_id 2, 61, 107, 108, 109, 120, 188, 189, 190, 191
      * Requested from Pickone, to exclude the testing data.
    - Change the space 103’s price to 390 and the time as other in same locate.
      * Requested from Pickone, to correct the data.
  + Real Order:
    - Select the order which status is 2
      * Which means been rented.
    - Select the order between **2017/02/08 to 2019/12/23**
      * The first space creat at 2017/02/08
      * The time of dataset’s lastet updated is ~~2019/11/18~~
      * 2019/12/25: The time of dataset’s lastet updated is 2019/12/23
    - Delete the data of company employees user\_id (1307, 798, 552, 3, 1367, 2899, 6027, 524, 7637, 11161, 14300, 1389, 100, 18374, 19331, 1, 17571, 240)
      * Requested from Pickone, to exclude the testing data.
    - Delete the weird order of space\_id 103 (price 12000)
      * Wrong value.
    - Delete the order of monthly membership(user\_id in god\_account\_view.csv) from their created\_at to delete\_at
      * Requested from Pickone, to exclude the testing data.
    - Add locate\_id ( 1 ~ 32 ) to the same locate spaces.
      * To build up the independent predict model.
    - Add “start\_time\_group” & “End\_time\_group” according to order time
      * To determine the unit of predict section
      * 1: 06:00 ~ 12:00
      * 2: 12:00 ~ 14:00
      * 3: 14:00 ~ 18:00
      * 4: 18:00 ~ 24:00 , 00:00 ~ 06:00
    - Add mrt column to each space\_id
    - Add space\_devices information ( 0 ~ 19 )
* Predict Model Variable:
  + Independent variable
    - status
  + Dependent variable
    - locate\_id ( 1 ~ 32 )
    - ~~size (Temporarily)~~
    - ~~price (Temporarily)~~
    - price\_per\_size
    - ~~start (Temporarily)~~
    - ~~end (Temporarily)~~
    - start\_time\_group ( 1 ~ 4 )
    - end\_time\_group ( 1 ~ 4 )
    - mrt
    - weekday ( 1 ~ 7 )
    - Is\_holiday ( 0, 1 )
    - device\_id ( 0 ~ 19 , except 4, 6, 7, 19)

space amount = 149

locate amount = 32