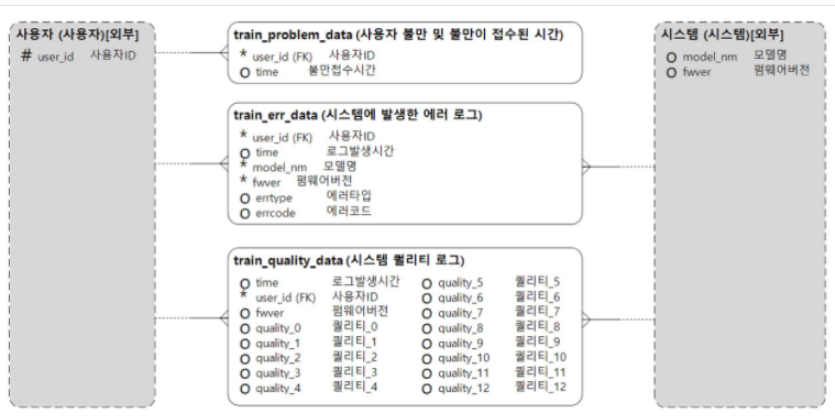


error : system 에러

problem : 사용자 '가' 불만 제기

quality : system 퀄리티



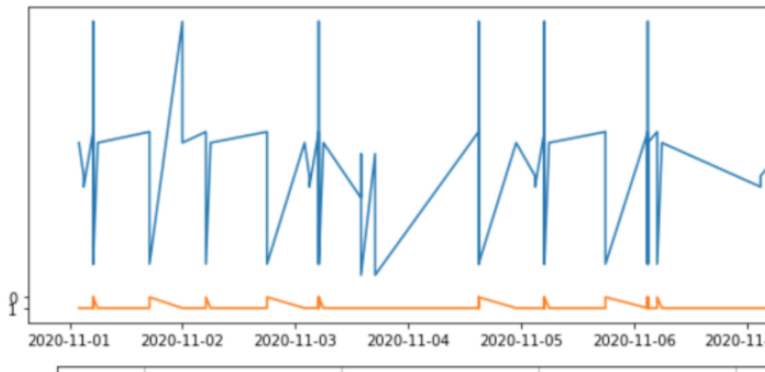
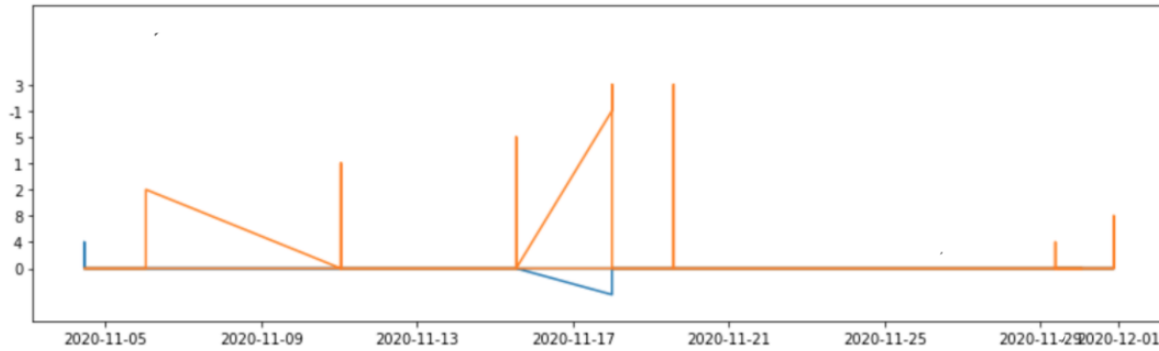
회의 오널 13 14 15 16 /
전처리
17 18 19 20 21 22 23 / 오널

24 25 26 27 28 29 30

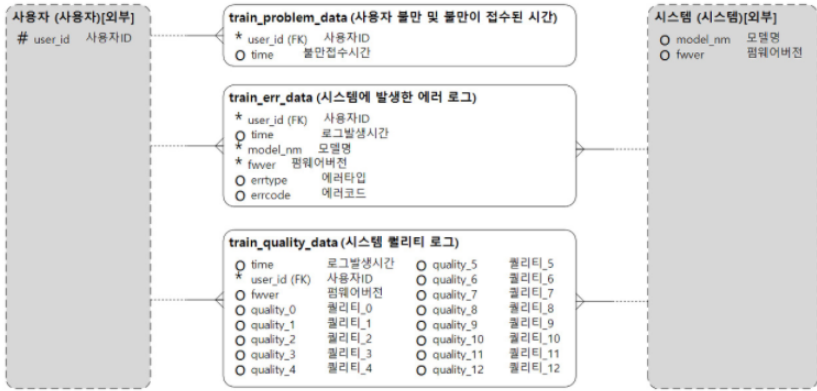
31 1 2 3 /

[https://dacon.io/competitions/official/235687/talkboard/402316?](https://dacon.io/competitions/official/235687/talkboard/402316?page=1&dtype=recent&ptype=pub)
page=1&dtype=recent&ptype=pub

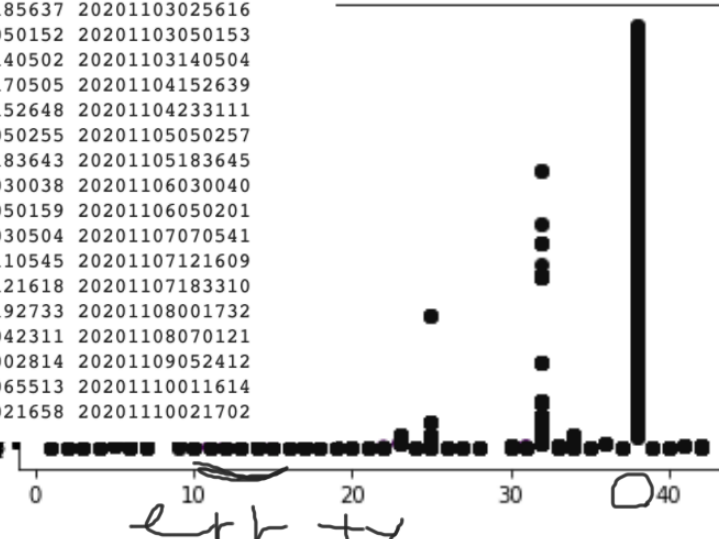
20201110054143]



[20201104110000 20201106010000 20201111010000 20201115130000
20201118001000 20201119141000 20201129090000 20201130010000
20201130210000]
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20201101050516 20201101050522 20201101060903 20201101174754
20201101174756 20201101174803 20201102000824 20201102005521
20201102050310 20201102050312 20201102050319 20201102060831
20201102185629 20201102185631 20201102185637 20201103025616
20201103030504 20201103050150 20201103050152 20201103050153
20201103050158 20201103061017 20201103140502 20201103140504
20201103170503 20201103170504 20201103170505 20201104152639
20201104152641 20201104152643 20201104152648 20201104233111
20201105030504 20201105050254 20201105050255 20201105050257
20201105050302 20201105060755 20201105183643 20201105183645
20201105183651 20201106030036 20201106030038 20201106030040
20201106030045 20201106033756 20201106050159 20201106050201
20201106050207 20201106061114 20201107030504 20201107070541
20201107070542 20201107110543 20201107110545 20201107121609
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20201107192724 20201107192723 20201107192733 20201108001732
20201108001934 20201108002041 20201108042311 20201108070121
20201108070122 20201108070129 20201109002814 20201109052412
20201109065505 20201109065507 20201109065513 20201110011614
20201110021654 20201110021656 20201110021658 20201110021702
20201110054143]



문 제 일어난 것들



?? ??-> quality data
err code
? errtype?quality da

ta? ?? ?? ???

?? error ??? ???????

err type

userid, problem? ?????, problem? ???
?? ????? ?? errtype: errcode ?, ??? ?????, errtype, errcode

```

is_prob = res['user_id'] == 10005
is_err = res['errtype'] == 0
# 조건을 충족하는 데이터를 필터링하여 새로운 변수에 저장합니다.
rr = res[is_prob]
prob_res = res[is_err & is_prob].head().index[0]
#prob.sort_values(by='errtype', ascending=True, inplace=True)
# 결과를 출력합니다.
display(prob_res)
rr.to_csv('output.csv')

```

	datetime	user_id	fwver	errtype	errcode
3857	2020-11-13 12:00:00	10005	0	0	0

problem 제기를 한 사람은 총 5000명
 user 수는 15000명
 10000명이 error는 발생했으나 problem 로그 없음

	datetime	user_id	fwver	errtype	errcode
4302	2020-11-12 23:16:00	10005	04.22.1750	23	connection timeout
4303	2020-11-12 23:16:00	10005	04.22.1750	22	1
4304	2020-11-12 23:16:00	10005	04.22.1750	15	1
4301	2020-11-12 23:16:00	10005	04.22.1750	22	1
4310	2020-11-13 03:27:00	10005	04.22.1750	15	1
4308	2020-11-13 03:27:00	10005	04.22.1750	12	1
4309	2020-11-13 03:27:00	10005	04.22.1750	11	1
4307	2020-11-13 03:27:00	10005	04.22.1750	15	1
4306	2020-11-13 03:27:00	10005	04.22.1750	33	2
4305	2020-11-13 03:27:00	10005	04.22.1750	15	1

problem → 시간

error ↓ 누적

user

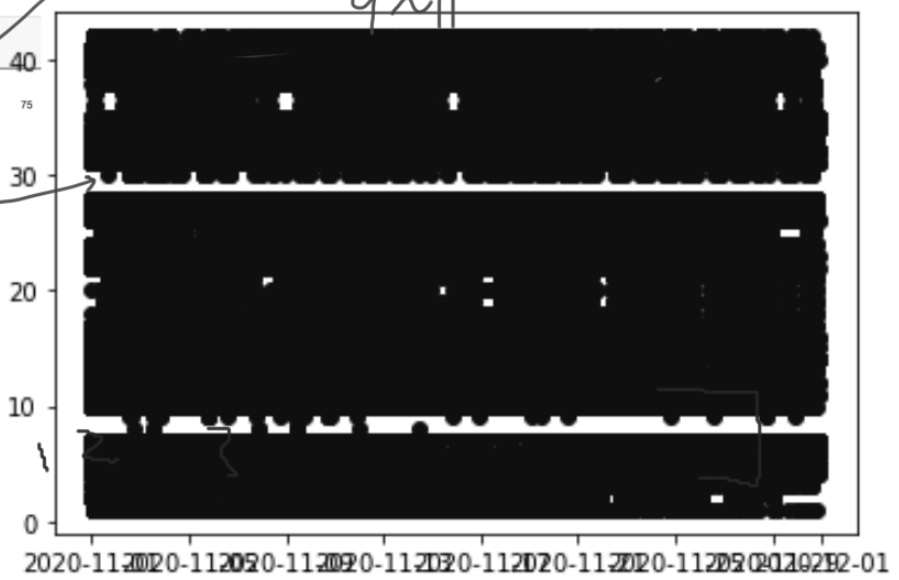
error

fwver

subplot

user model

9~11



error

2 ↓
0

problem

errtype 1

0

user 1

user 2

sequence 15

품제이별

problem 제기 user 5000 → errtype ↗ → 1
 X 10000 → 0

userid	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
10000	0	0	8	104	0	1	1	0	0	7	15	16	1	10	59	61	0	0	0	0	0	0	0	0	0	32	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10001																																										
10002																																										
...																																										

↓
 SUM

$$\frac{\text{SUM}[4]}{5000} = 0.5 \quad \checkmark$$

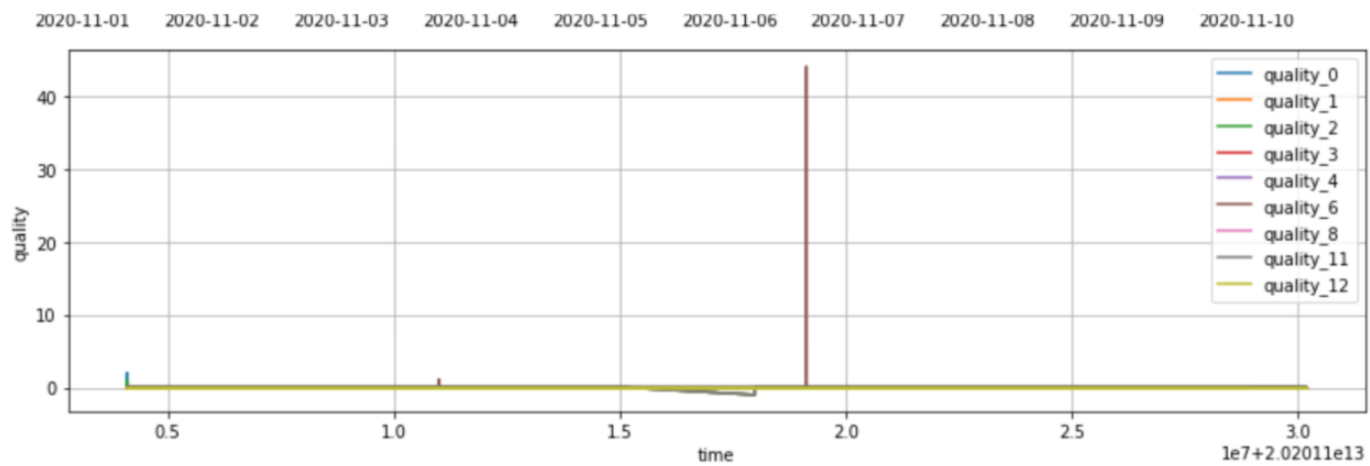
$$\frac{\text{SUM}[4]}{10000} = 20$$

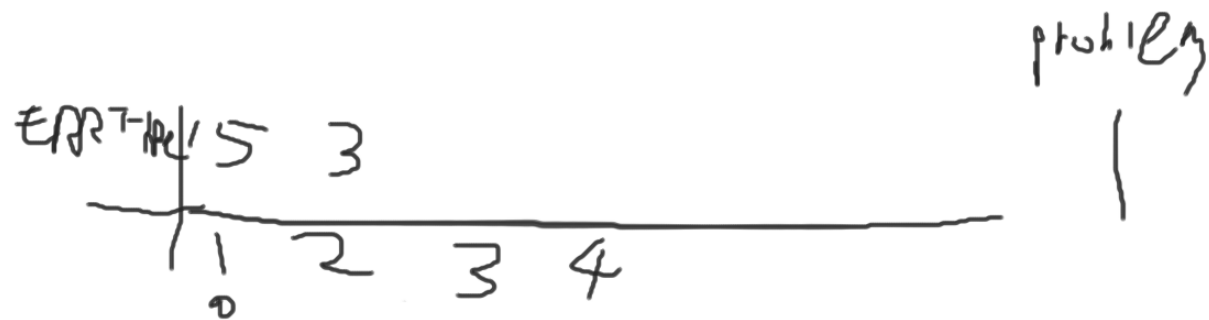


quality

time

2020-11-01





123

