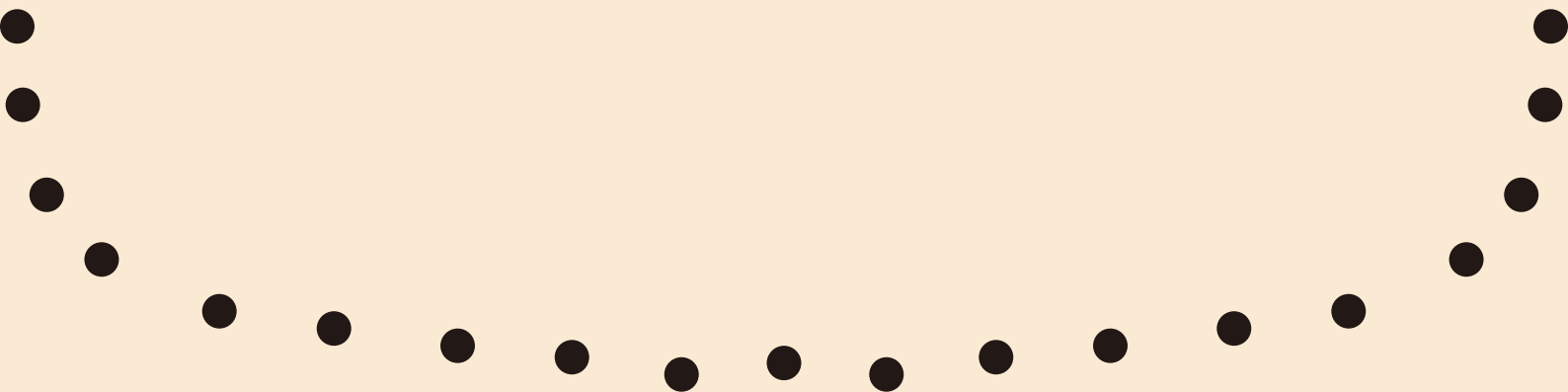
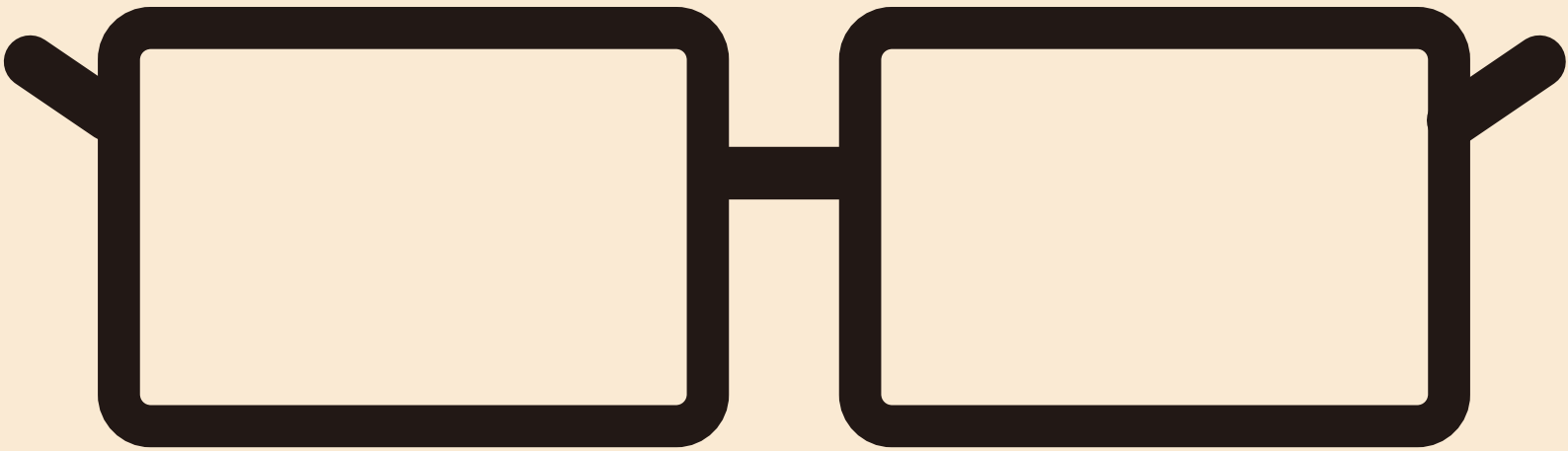


DEVELOPER GUIDE

Home Energy Feedback

Data Analysis

2016-2017



HOW
ARE
PEOPLE
USING
OUR
FEEDBACK?

— IDEAL

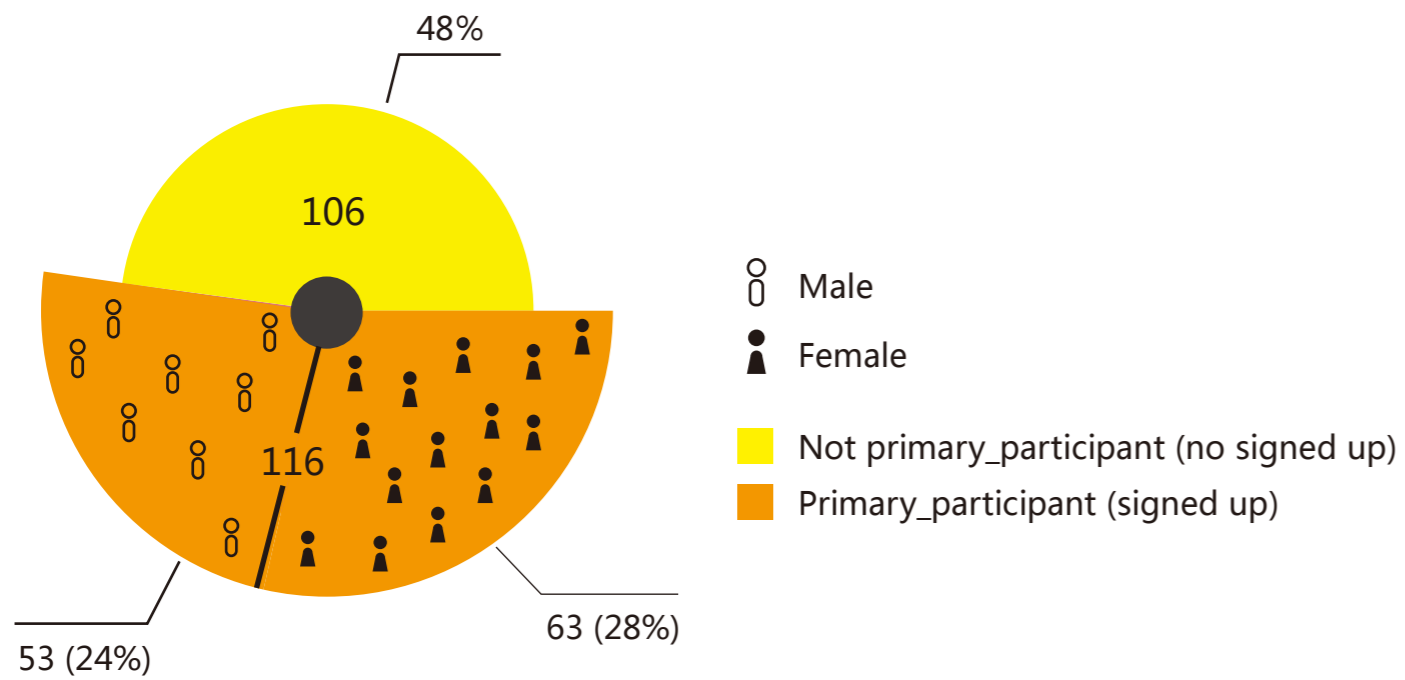
Contents

Who are main participants?

Detail of logins

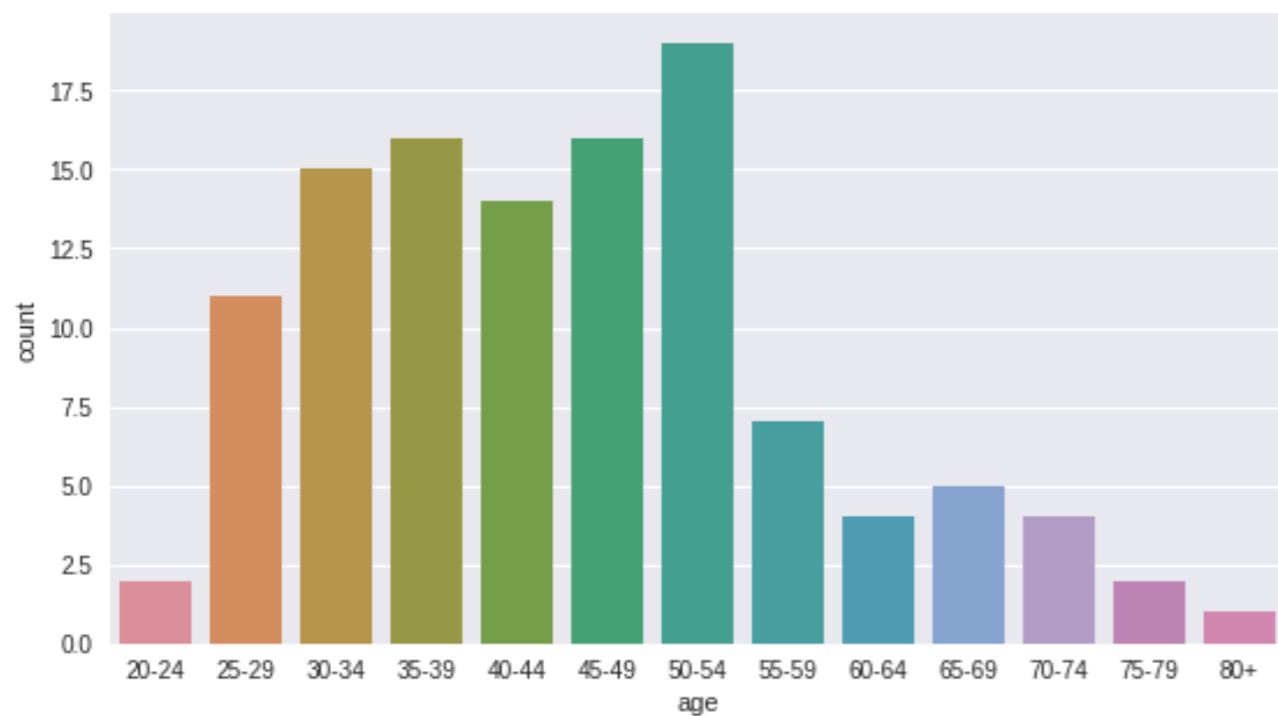
New features released & Login time

Participants Distribution



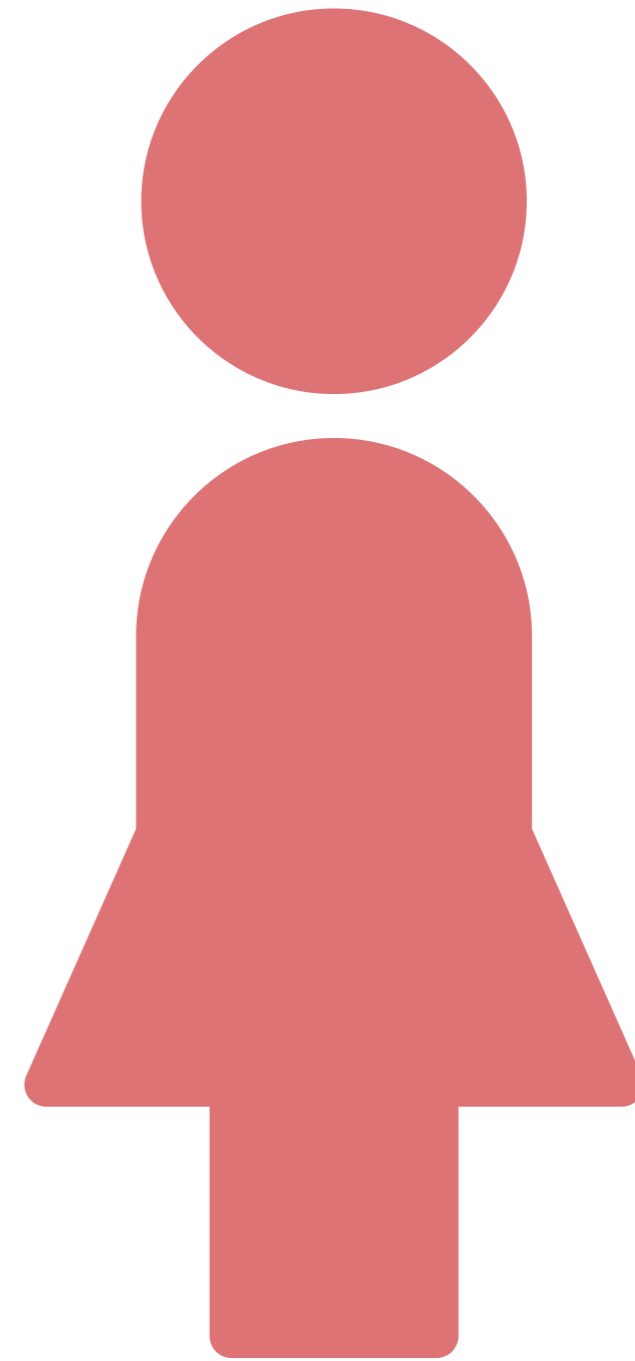
Primary_participant > Not primary_participant
 Female primary participants > Male primary participants

Age Group of Primary Participants



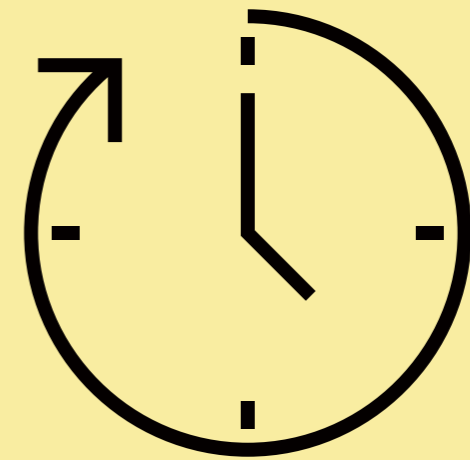
In primary_participant, the largest age group is 50-54 and there are no people in the age group 15-19.

Who are main participants ?



50-54 age

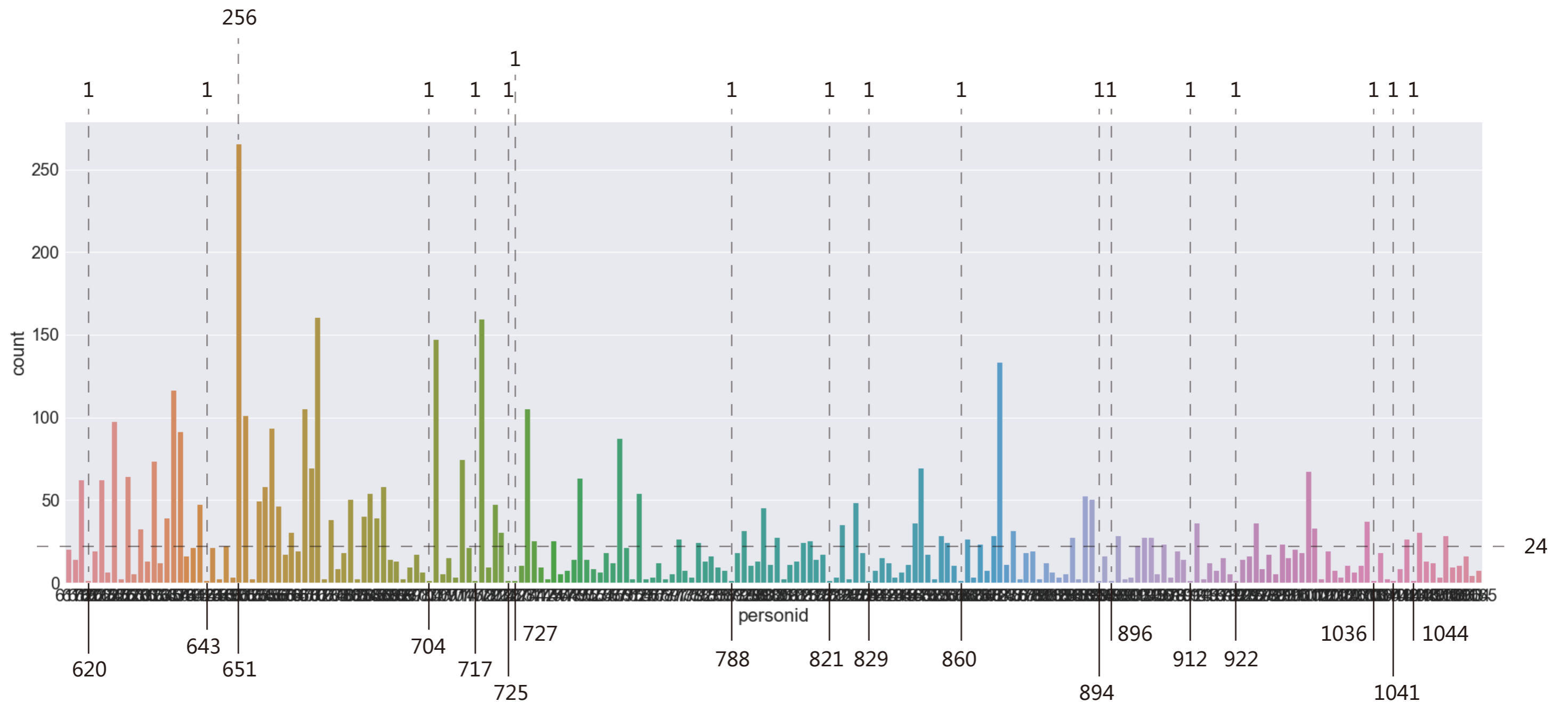
DETAIL OF LOGINS



The plot shows how many times each participant logged into system.

The highest number is 265,
the average is around 24,
and the smallest number is 1.

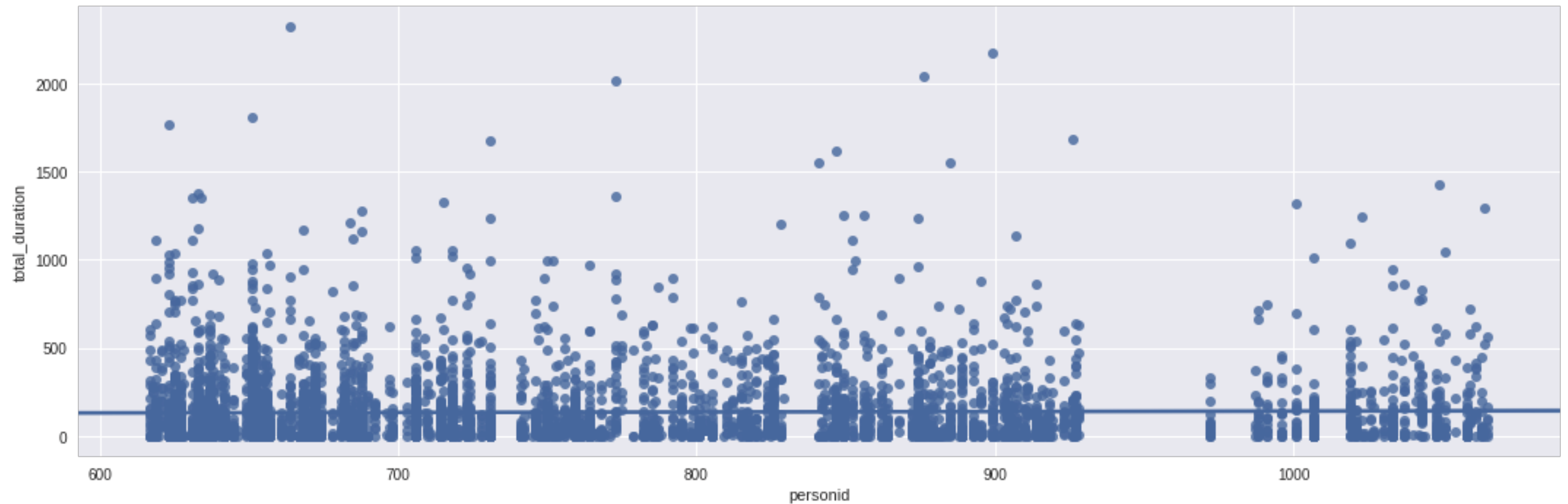
The average number is around 24.

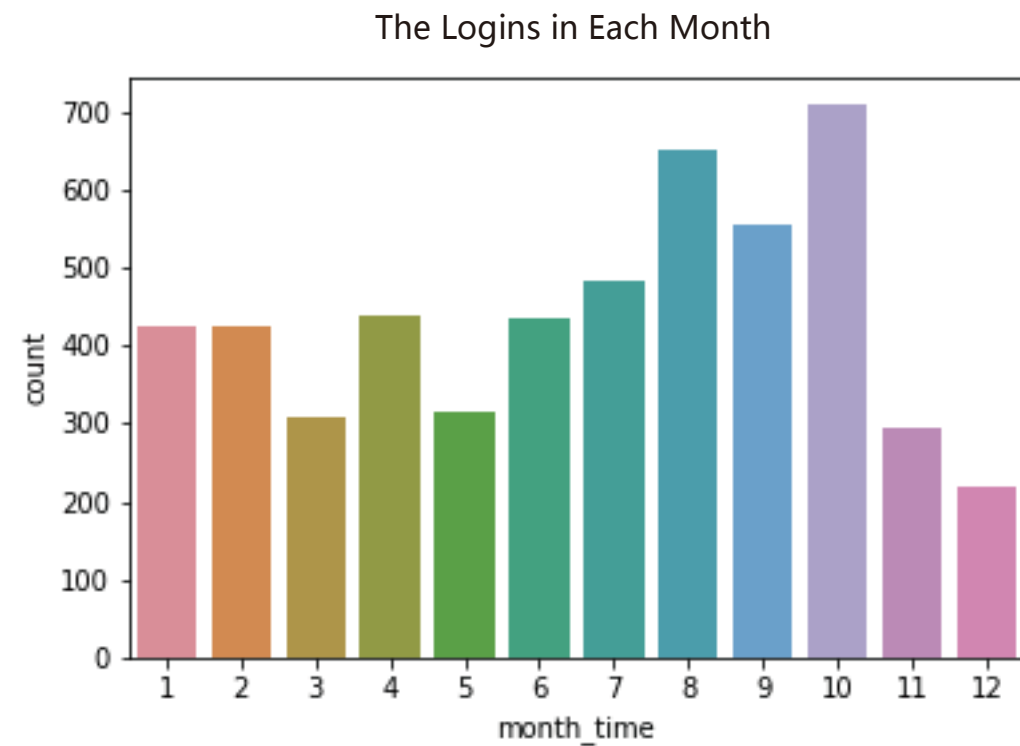


The plot shows the relationship between log in duration (second) and person id.

Most participant log in duration are below 500 second (8 minute 20 second), and there are only very few people logged in over 2000 second (33 minute 20 seconds).

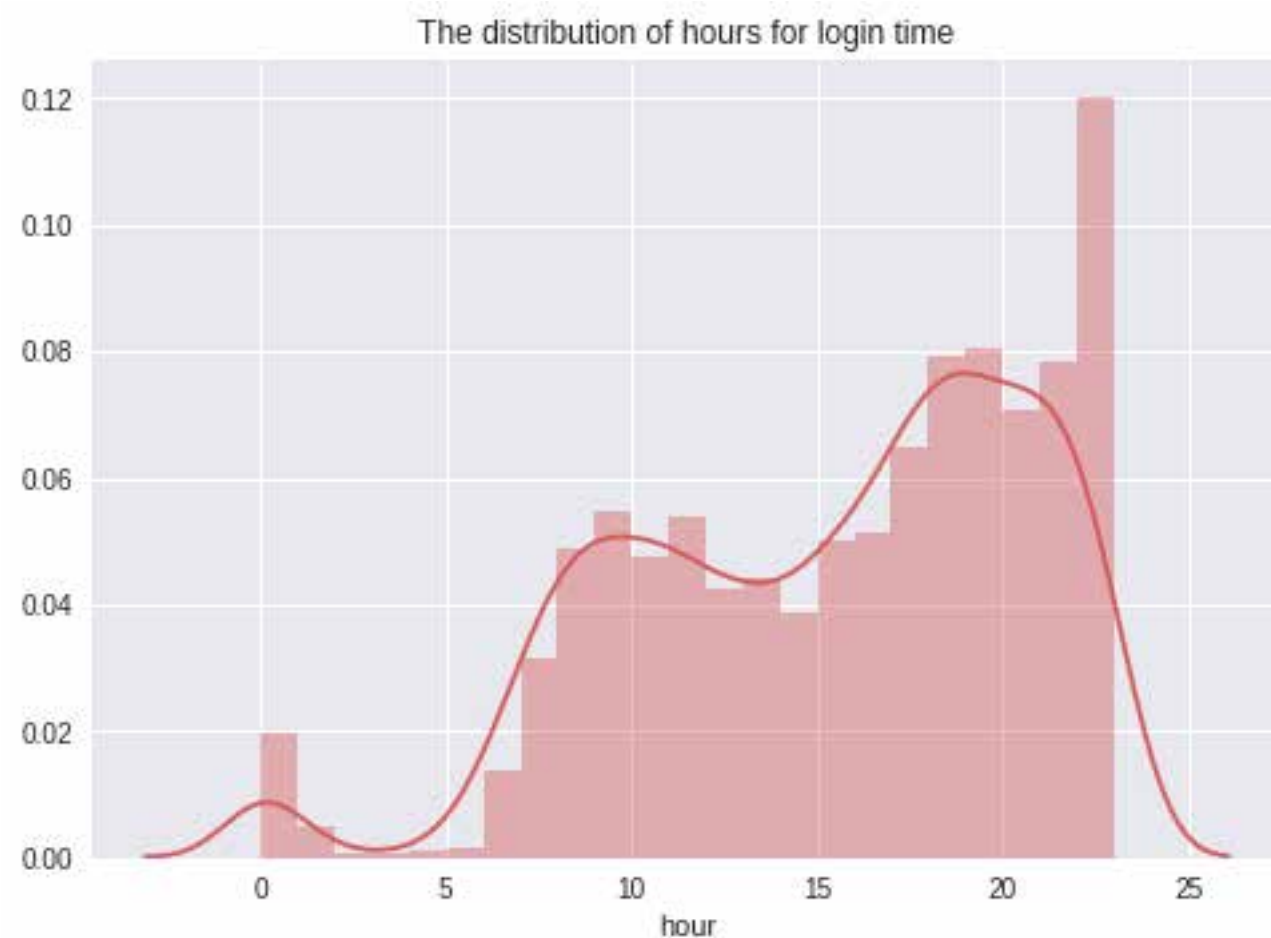
Most participants' login durations are less than 500s (00:08:20).





Participants tend to login to system in autumn, top 3 months of login are October, August, and September respectively.

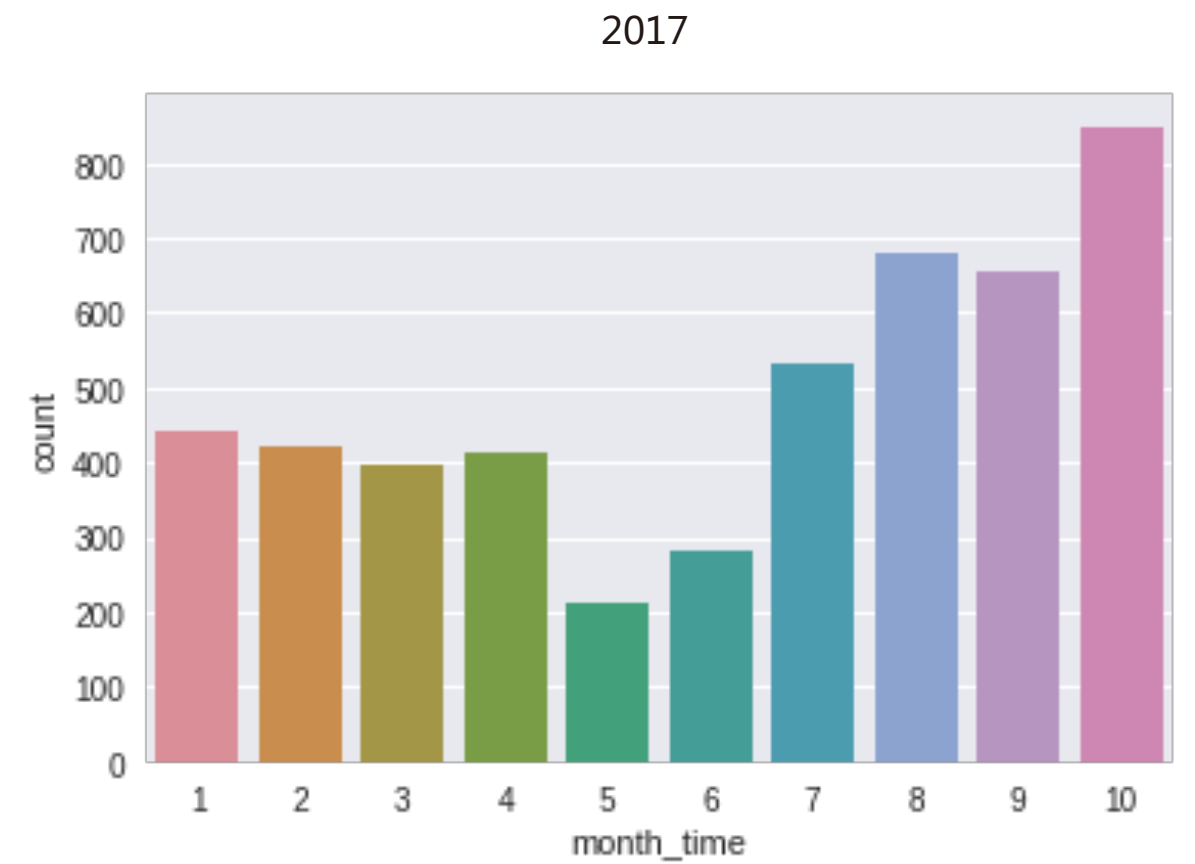
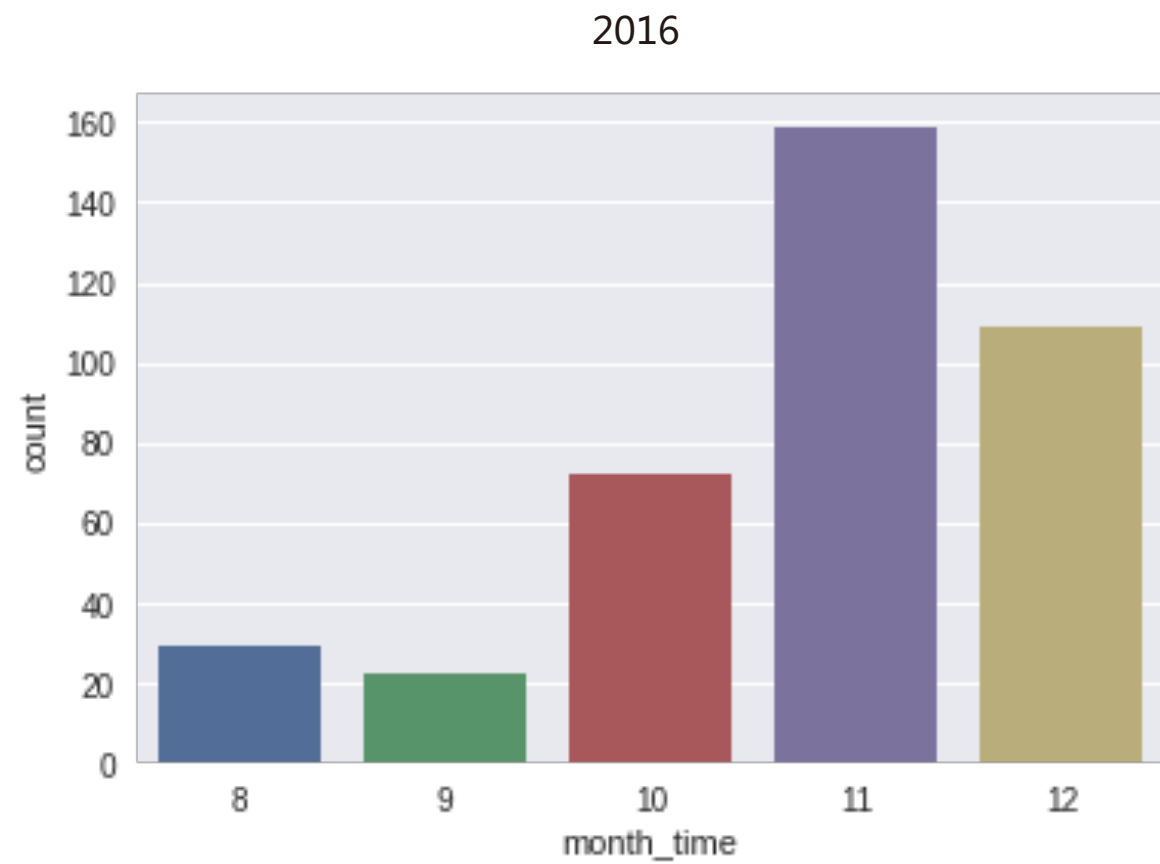
Participants tend to login to system in autumn.



The system is most frequently used between around 17 : 00 - 24 : 00, especially around 23:00.

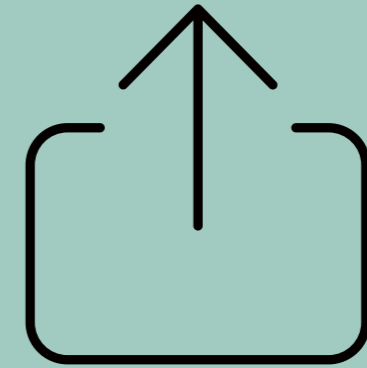
Participants tend to login to system at night

Count of Logins in Each Month in 2016 and 2017

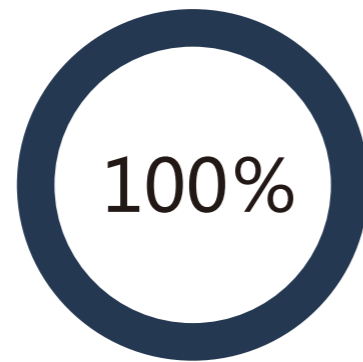


The frequency of people's logins did not drop off overtime as their logins reached the maximum in October 2017

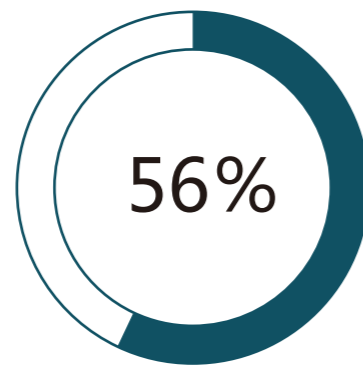
NEW
FEATURES
RELEASED
AND
LOGIN
TIME



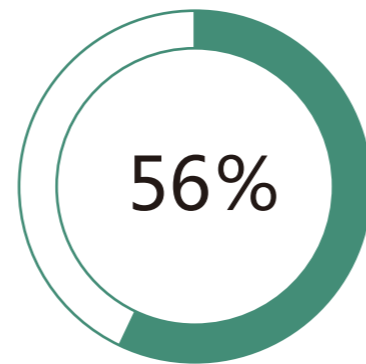
Proportion of users received each feature



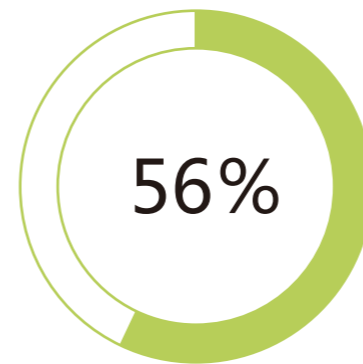
WEEK_VIEW



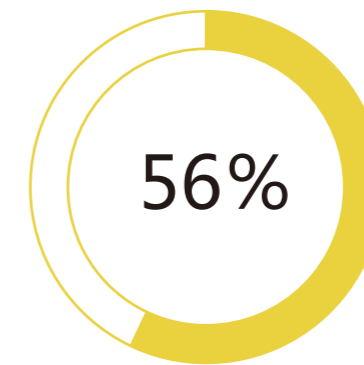
MINUTE_VIEW



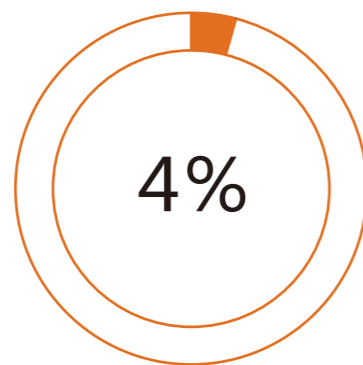
ENHANCED_VIEW



COMPARE_CHART



DUAL_CHART

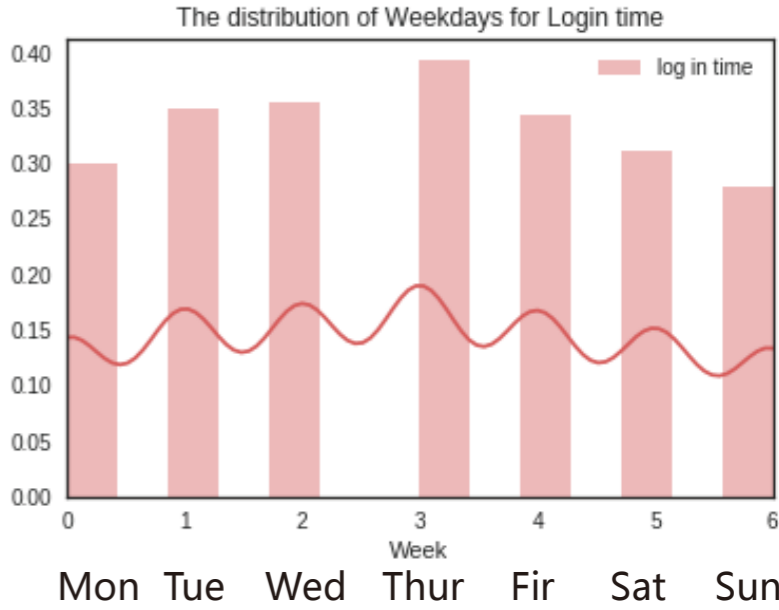


HEATING_INTERVENTION

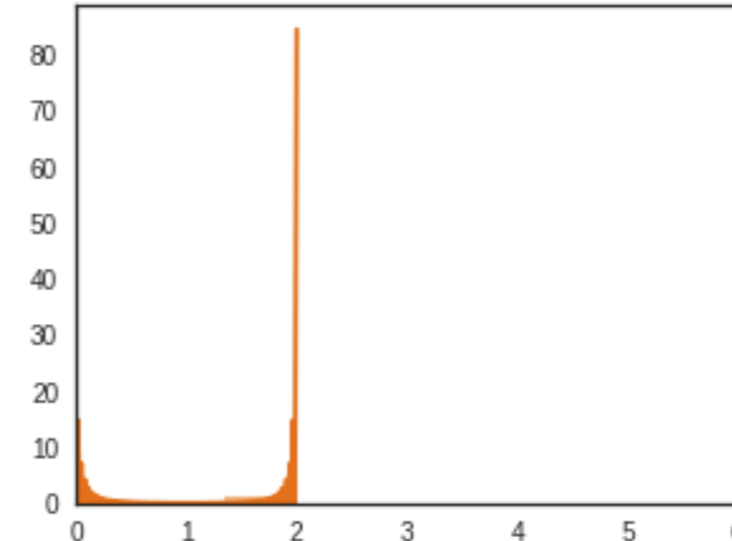
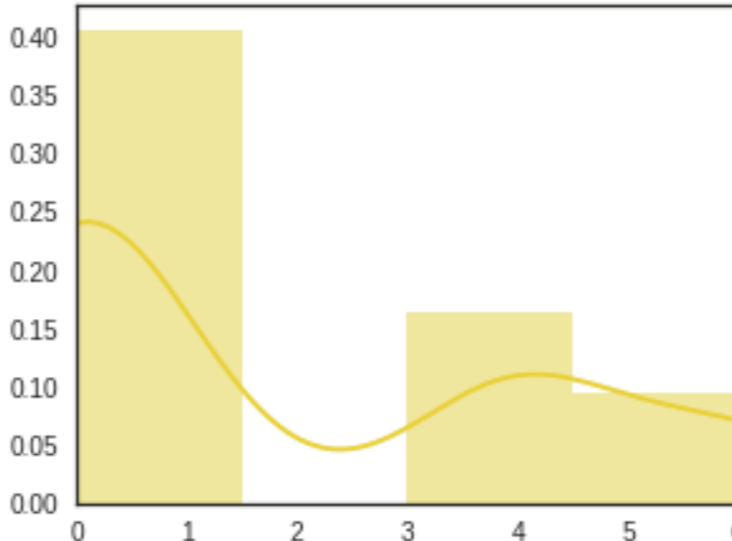
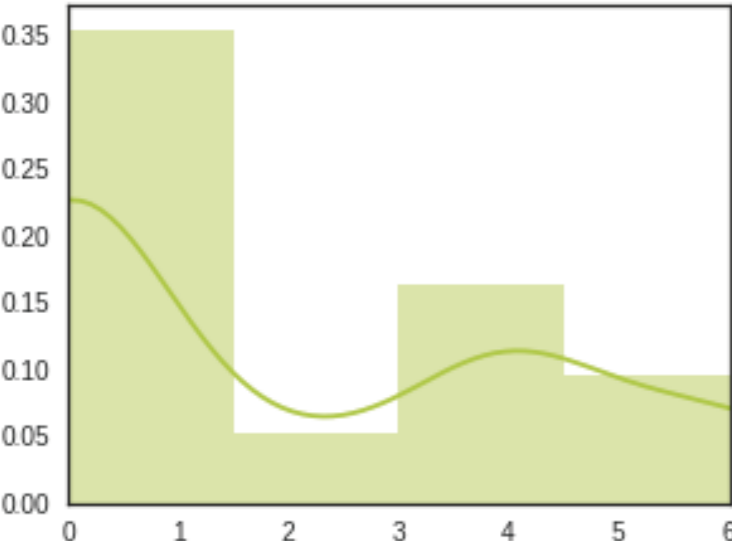
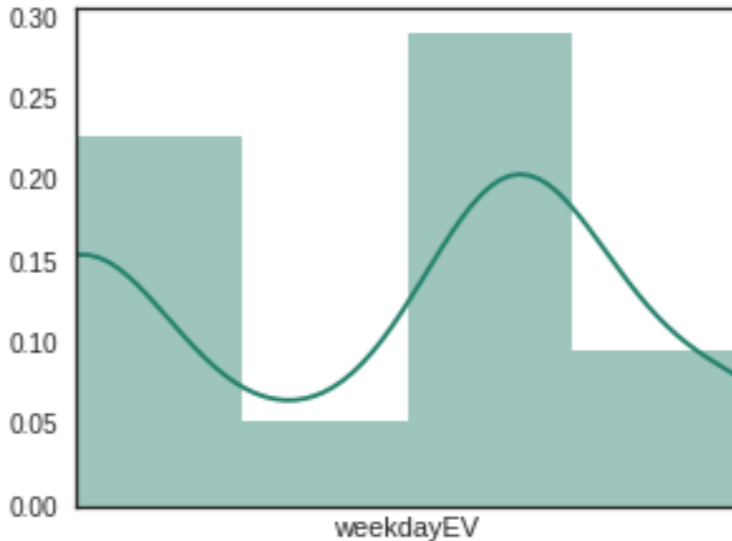
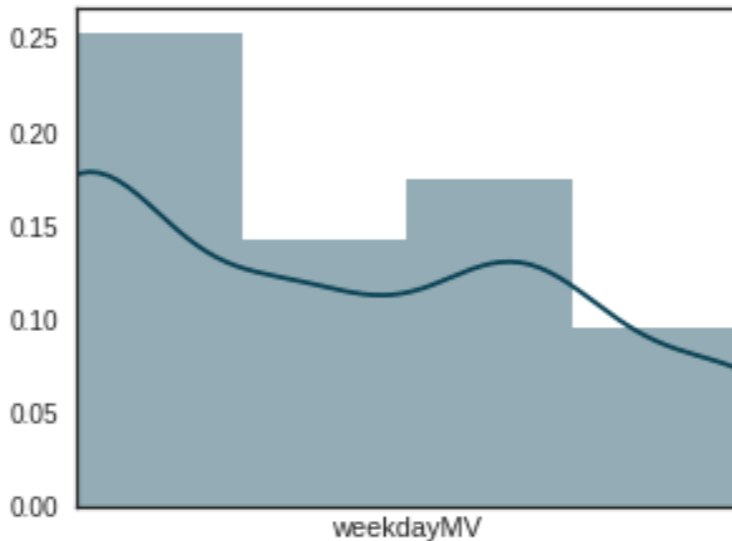
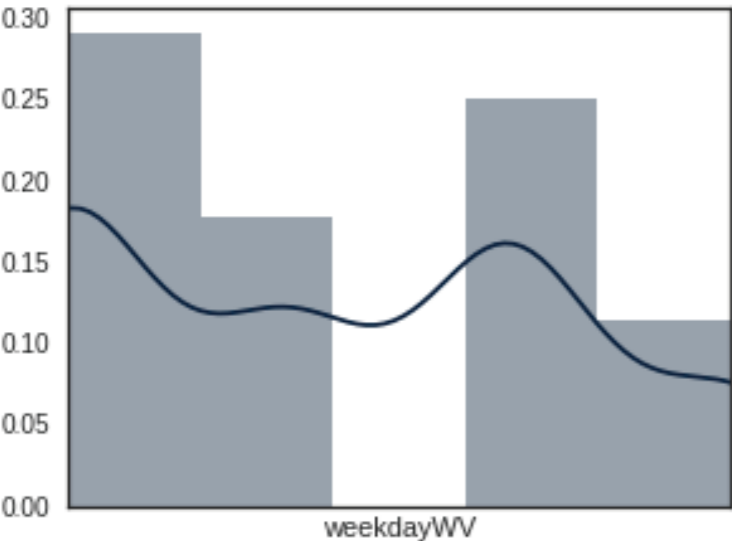
The plots show every features except HEATING INTERVENTION has two peak time of releasing on Monday and Friday.

WEEK_VIEW, MINUTE_VIEW, COMPARE_CHART and DAUL_CHART were released the most on Monday while ENHANCED_VIEW released the most on Friday.

HEATING_INTERVENTION was released the most on Wednesday.

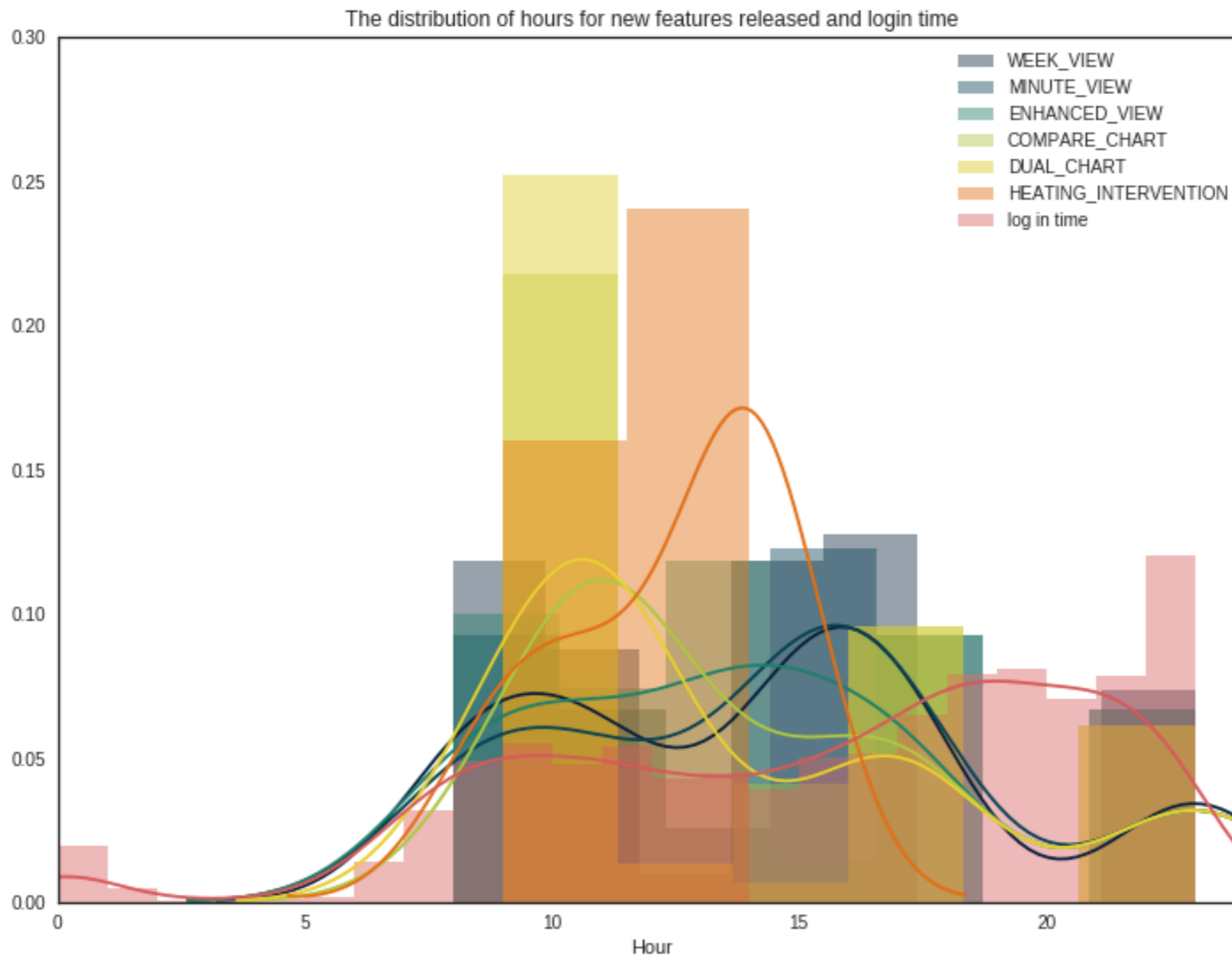


Suggestion: The release weekdays did not need to be adjusted as they were not related to login date.



- WEEK_VIEW
- MINUTE_VIEW
- ENHANCED_VIEW
- COMPARE_CHART
- DAUL_CHART
- HEATING_INTERVENTION

Mon Tue Wed Thur Fir Sat Sun Mon Tue Wed Thur Fir Sat Sun Mon Tue Wed Thur Fir Sat Sun



The plot demonstrates that all features were released between 8:00 to 23:00.

Every function except HEATING INTERVENTION has three release peak time a day. The first peak is around 9:00 - 11:00, the second is between 15:00 - 17:00, the third is between 21:00 - 23:00.

The HEATING INTERVENTION is still very special. It was released most between 13:00 - 15:00.

For the login time, participants often login to system between around 9:00 - 11:00, which is same with the first peak of new features released, and between about 17 : 00 - 24 : 00, especially around 23:00.

Suggestion: The released hour of the new features in a day might need to be adjust to later ones to be closer to the peak of users' login hours.

Brochure Design

Yi Shen

Data Analysis

Yi Shen

Jerry Lin

Hsin Chieh Tsai