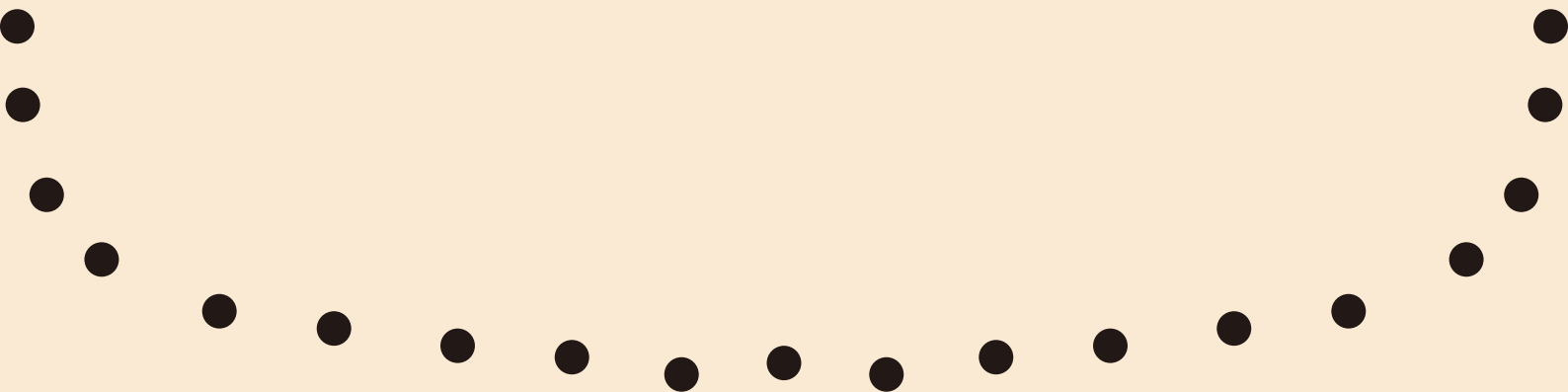
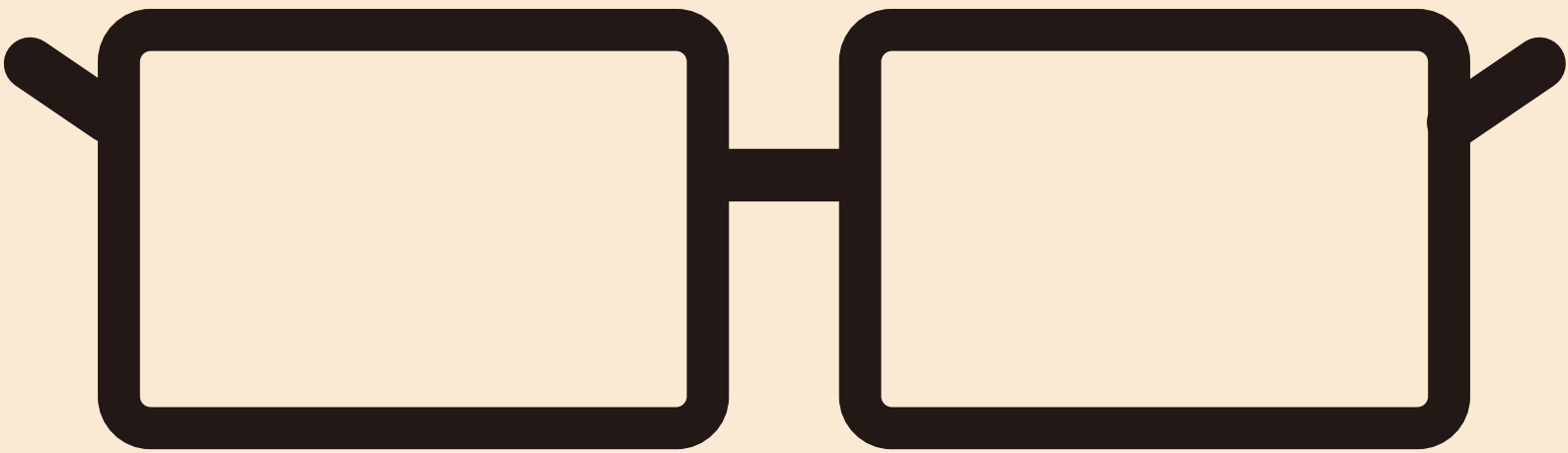


DEVELOPER GUIDE

Home Energy Feedback

Data Analysis

2016-2017



HOW
ARE
PEOPLE
USING
OUR
FEEDBACK?

— IDEAL

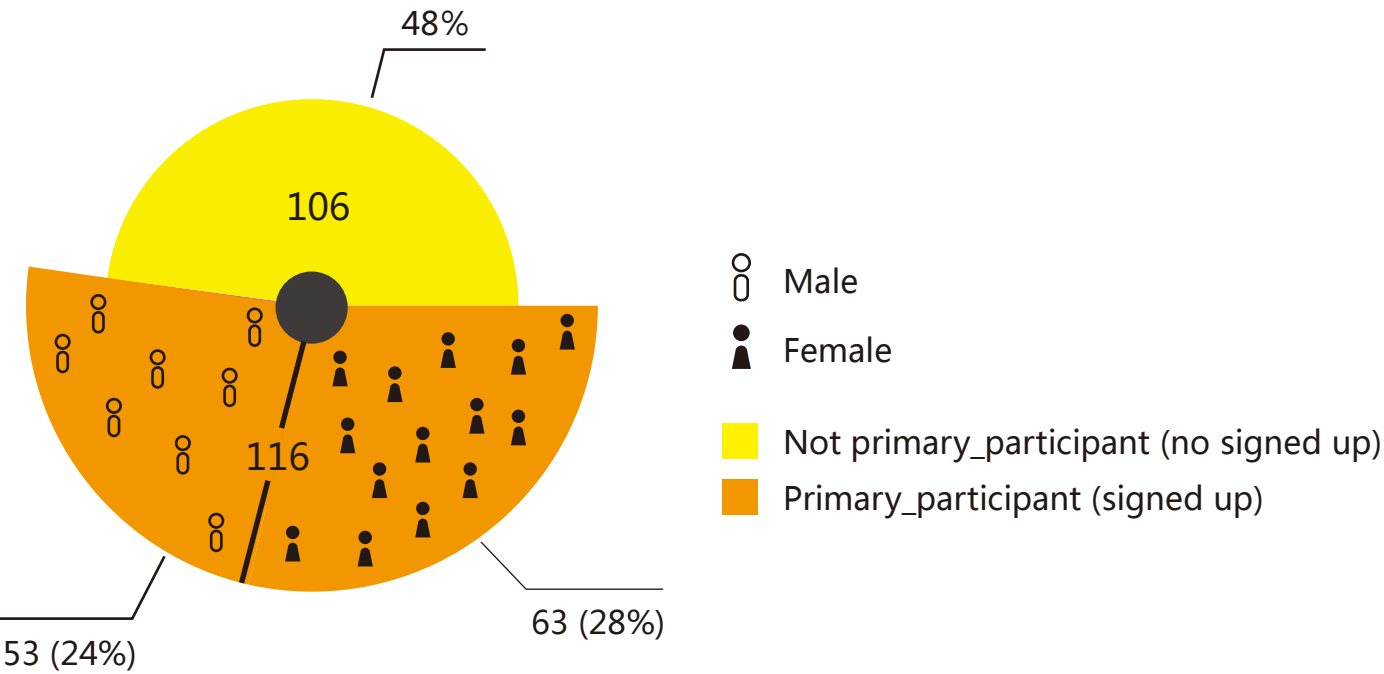
Contents

Who is the main participants?

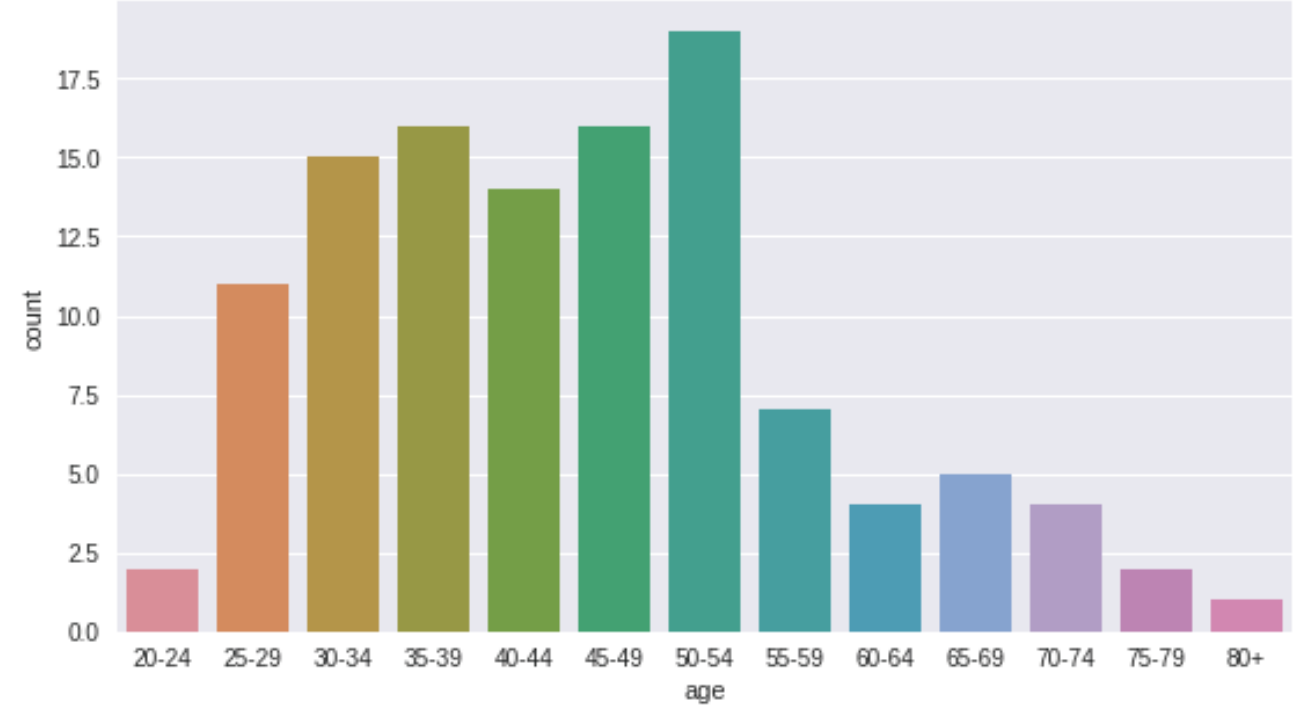
The details of login

New features released & Login time

Participants distribution

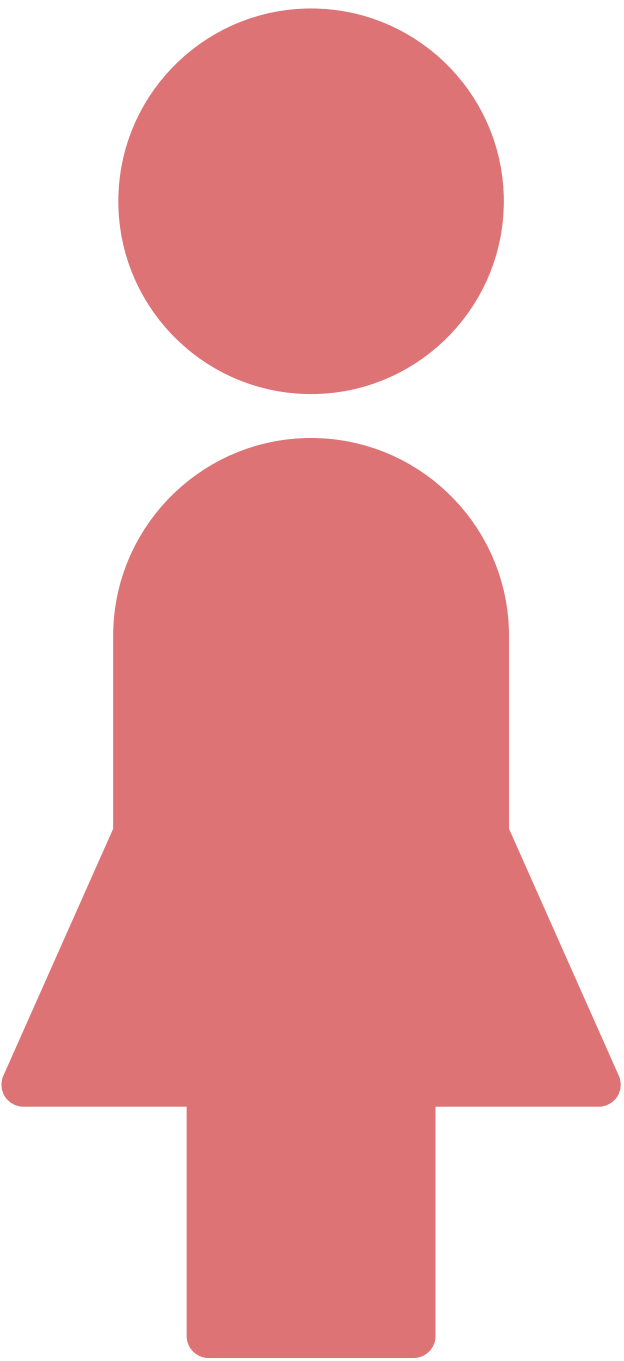


Primary_participant > Not primary_participant
Female primary participants > Male primary participants



In primary_participant, most people in the age 50-54 group, and no people in the age 15-19 group.

Who is the main participants ?



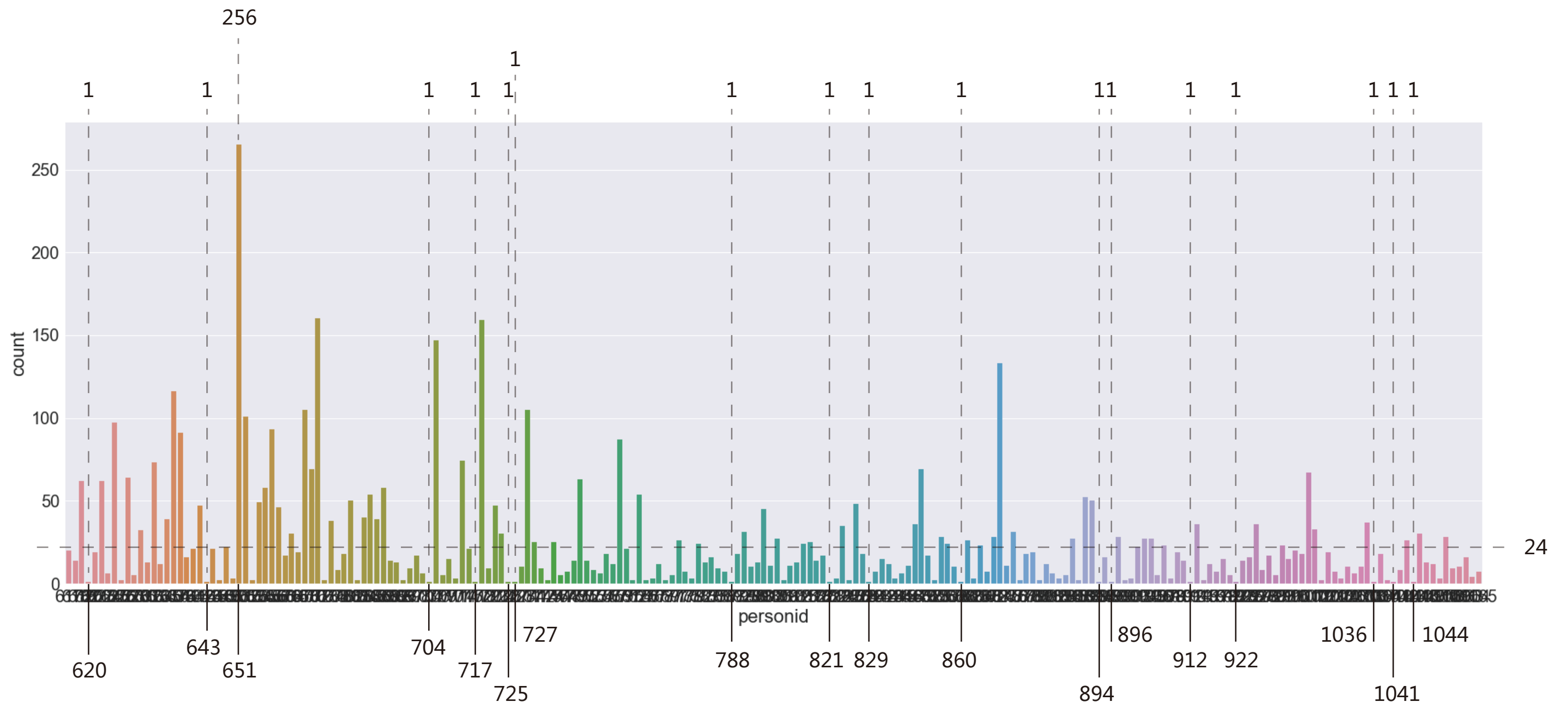
50-54 age

THE DETAILS OF LOGIN

The plot shows
the number of each participant login to system.

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

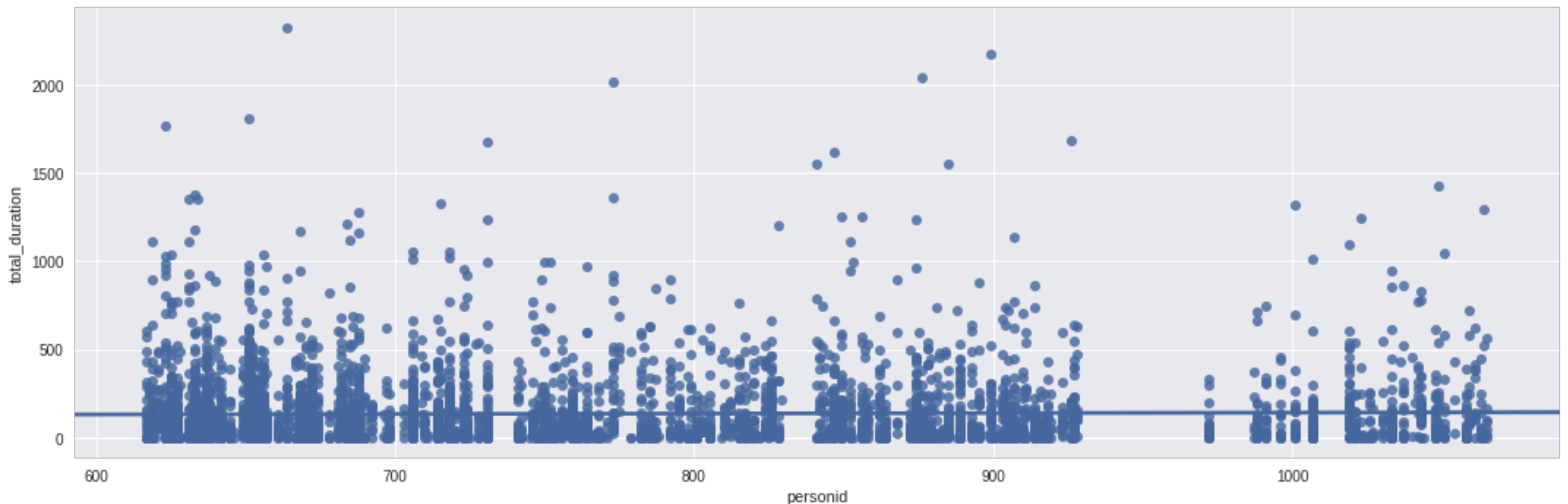
The average number is around 24.

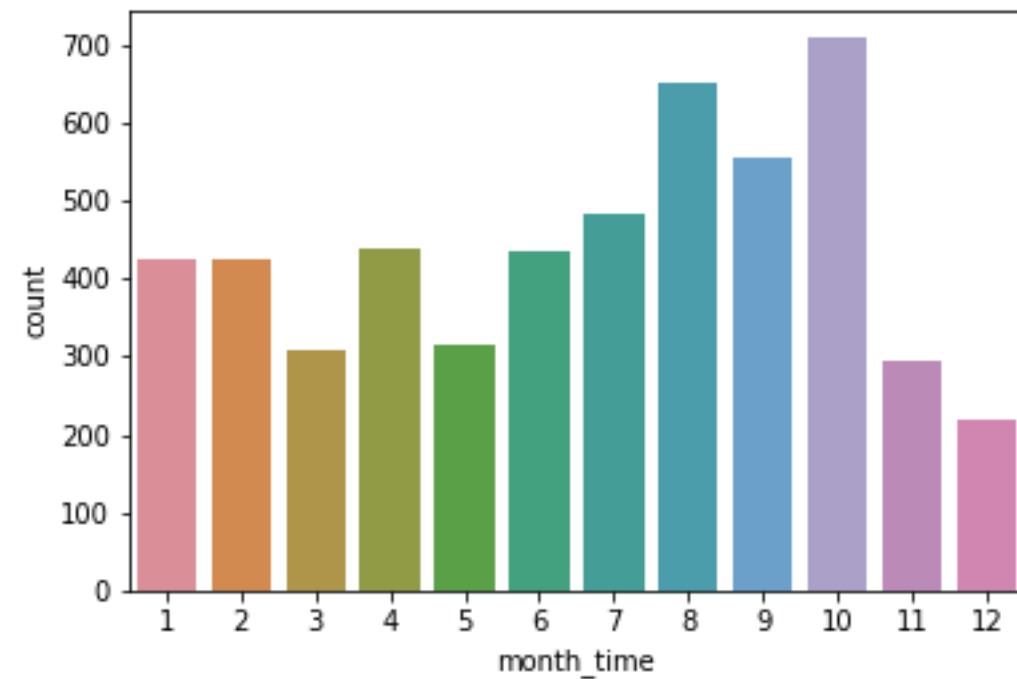


The plot shows
the relationship between
log in duration (second) and person id.

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

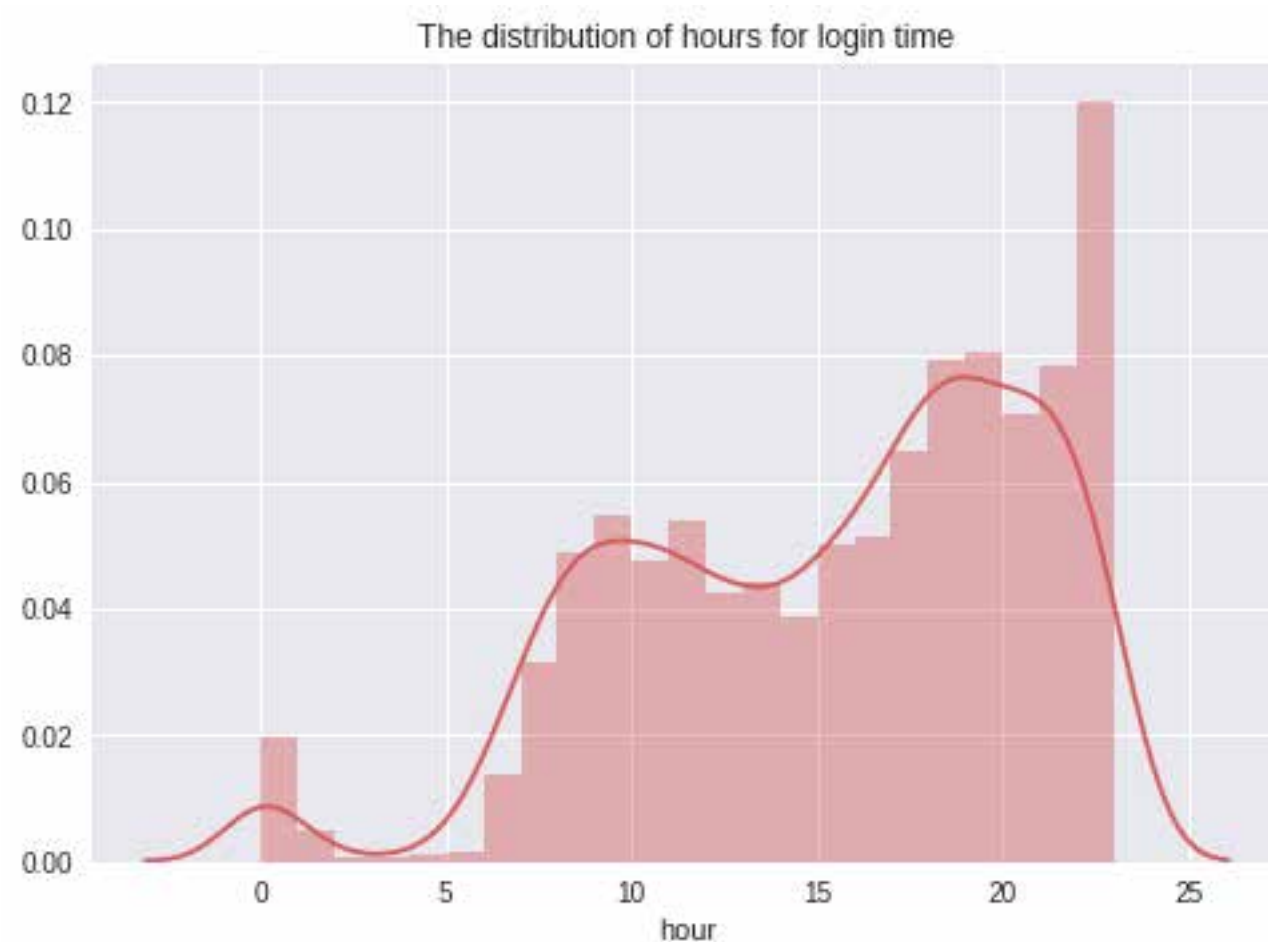
Many participants login less than 500s (00:08:20).





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.

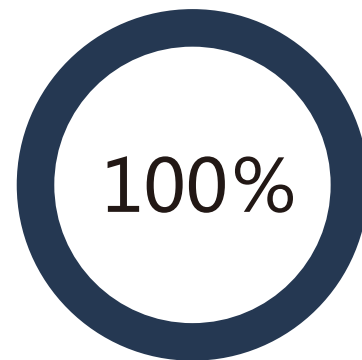


The system is most frequently used between around 17 : 00 - 24 : 00, especially around 23:00.

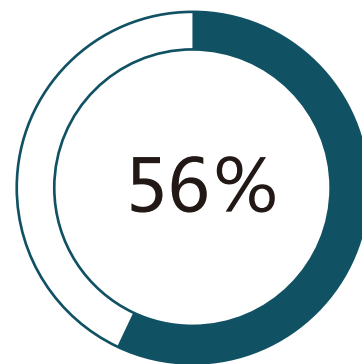
Participants tend to login to system at night

NEW
FEATURES
RELEASED
AND
LOGIN
TIME

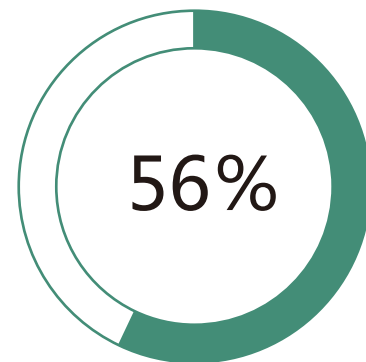
Proportion of users received each feature



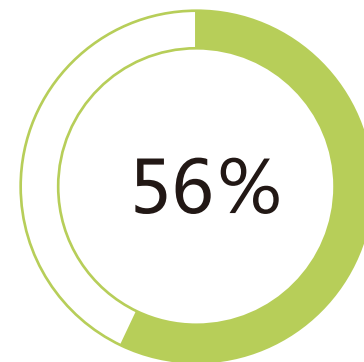
WEEK_VIEW



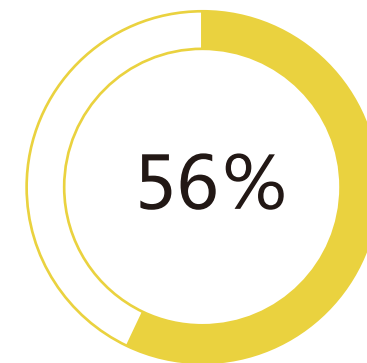
MINUTE_VIEW



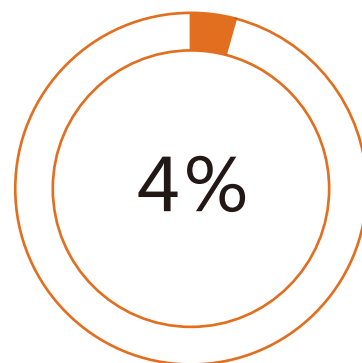
ENHANCED_VIEW



COMPARE_CHART



DUAL_CHART



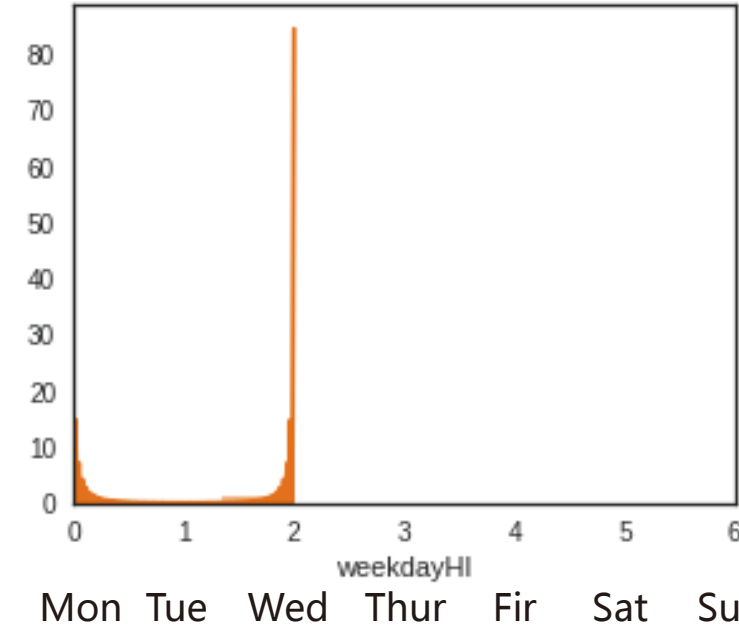
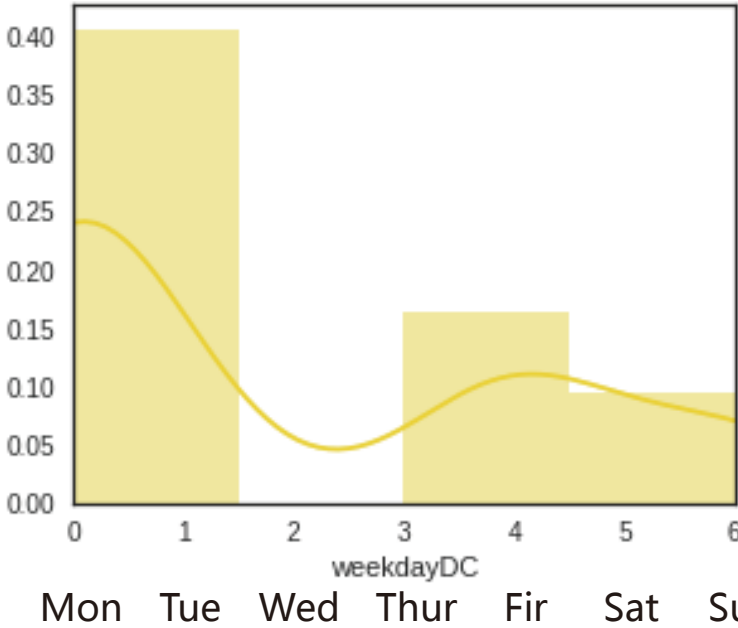
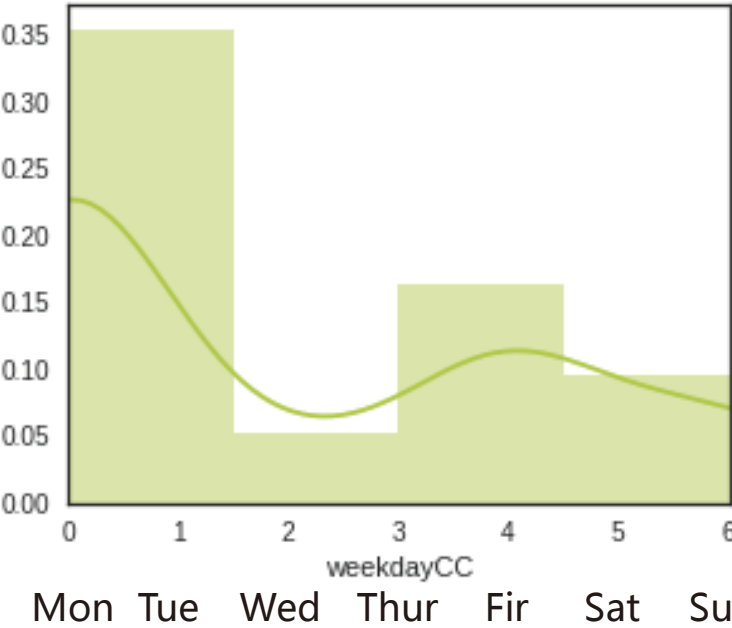
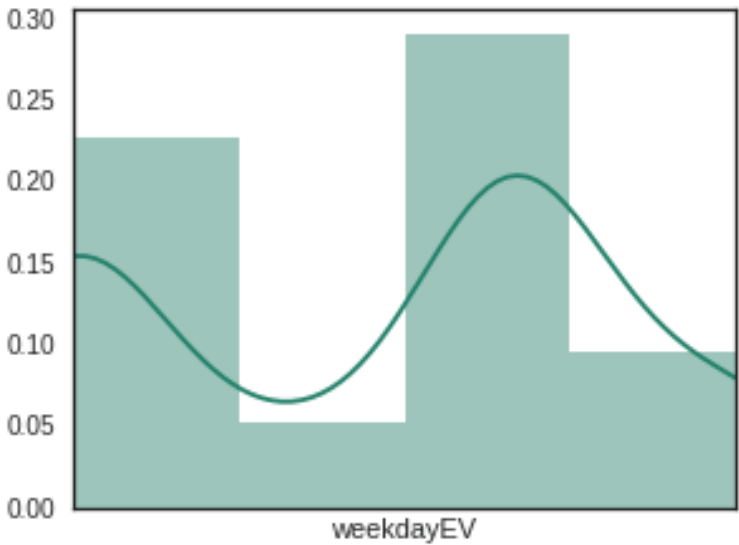
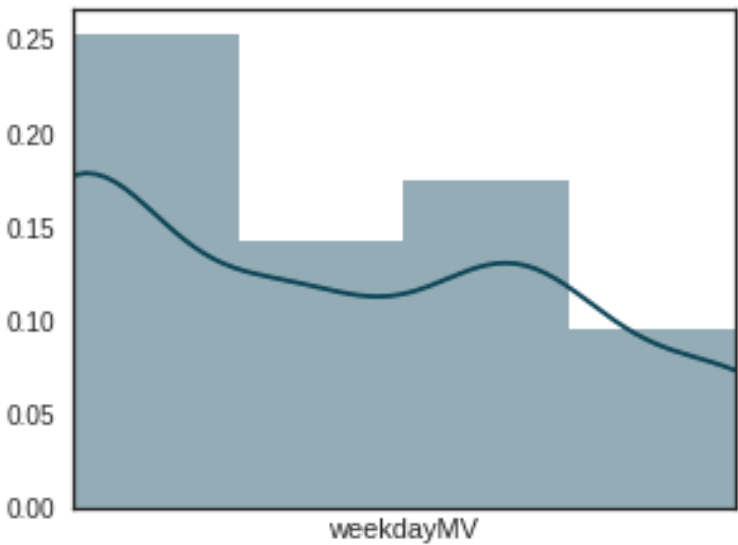
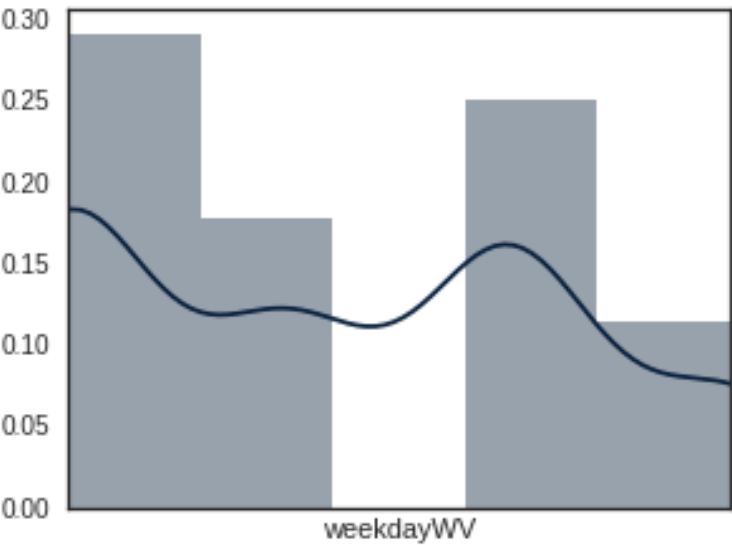
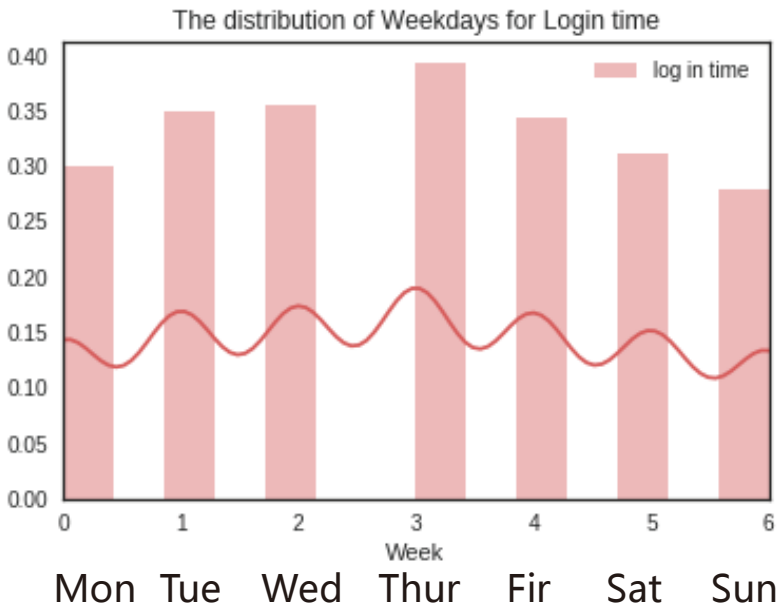
HEATING_INTERVENTION

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

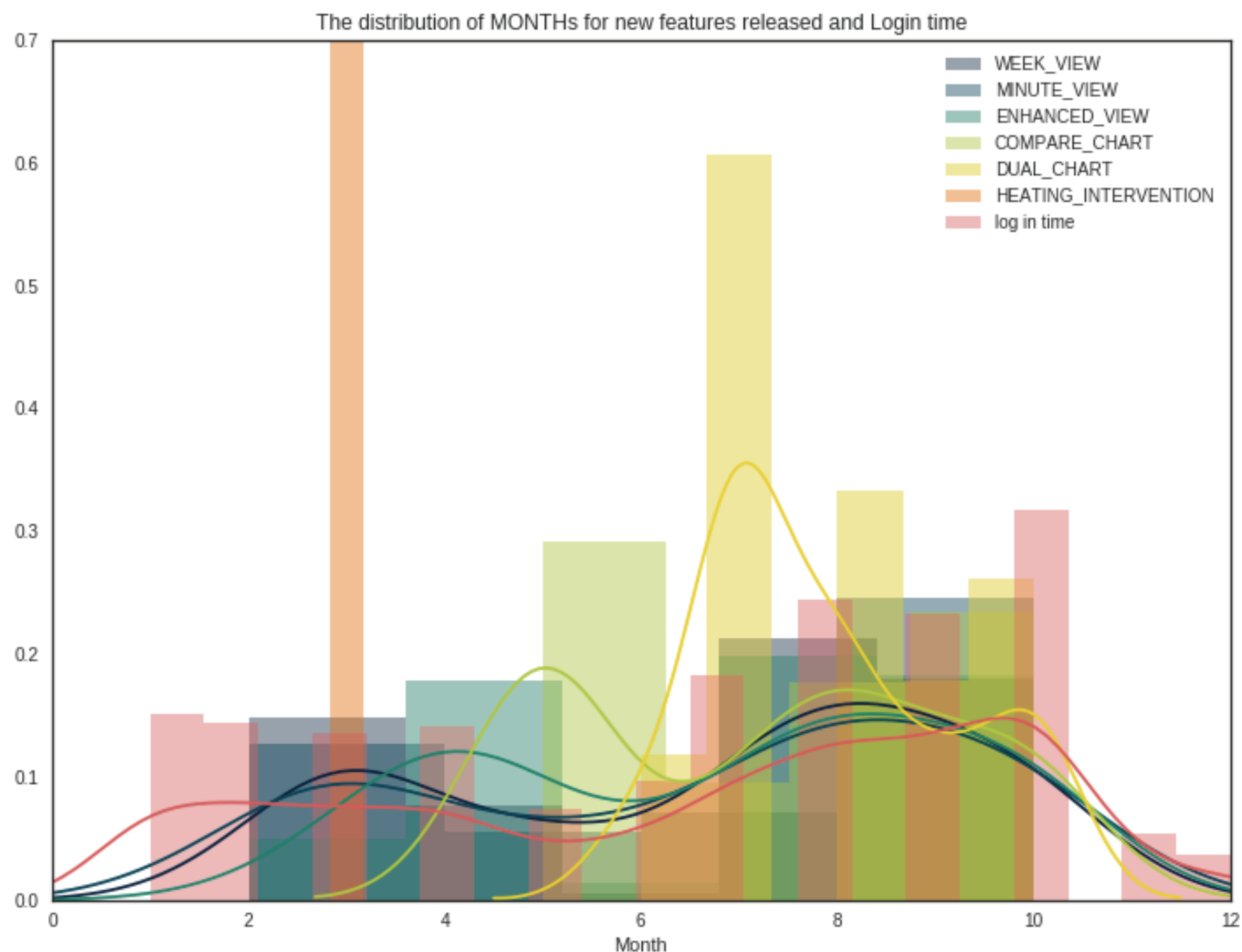
WEEK_VIEW, MINUTE_VIEW, COMPARE_CHART and DAUL_CHART were released the most on Monday while ENHANCED_VIEW released the most on Friday.

HEATING_INTERVENTION was released the most on Wednesday.

Comparing to the plot of log in time, we found that the log in times of weekday are not related to the new feature released time because the distributions of each weekday for log in time are quite similar.



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



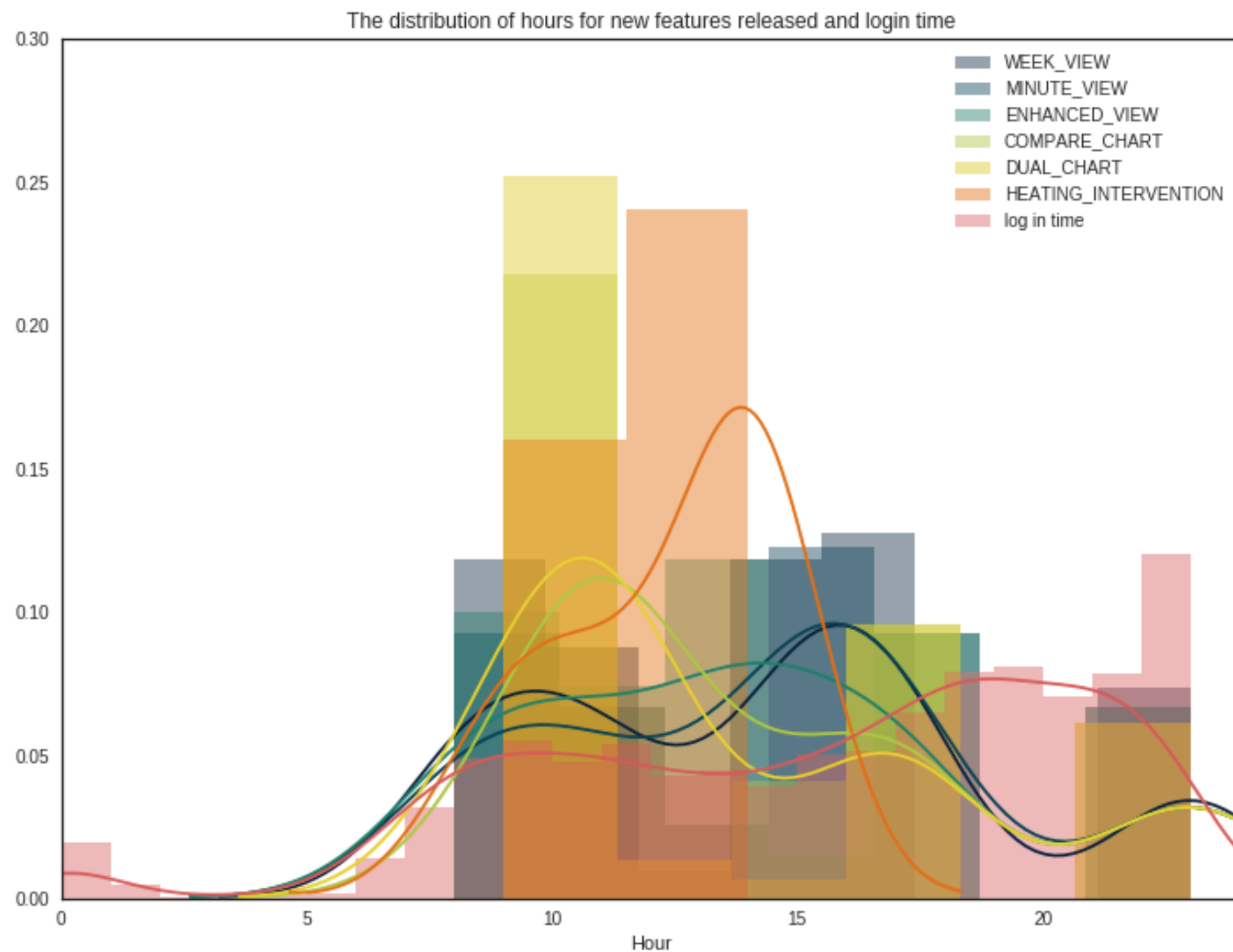
The plot demonstrates that most features has two peaks of release time in a year except HEATING_INTERVENTION.

WEEK_VIEW and MINUTE_VIEW have very similar trend which peaked on March and August. Although ENHANCED_VIEW and COMPARE_CHART also reached their second peak in August, the first peak of ENHANCED_VIEW is in April and the that of COMPARE_CHART is in May.

HEATING_INTERVENTION is a very special one, it is only released in March.

All features are released between February and October. There is no function released on January, November and December.

There are also two peaks of participants logging in time, one is in January which before the first peak of most new features released time; another one is in October which after the second peak of most new features released time.



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.

Brochure Design

Yi Shen

Data Analysis

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Hsin Chieh Tsai