Important factors for prediction of future user adoption

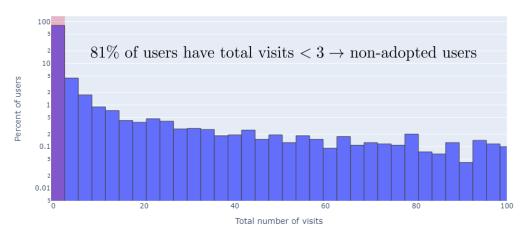
adopted user $= \log$ in on 3 separate days in 7 days period

 $Duration = last_session_creation_time - creation_time$

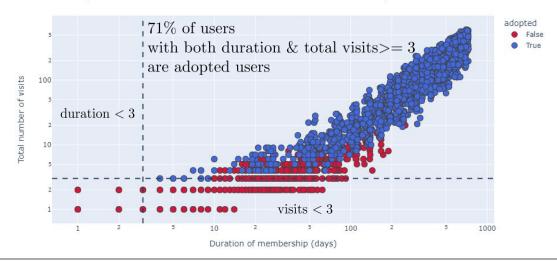
Distribution of duration of membership



Distribution of total number of visits



Relationship between total number of visits and duration of membership



These 2 factors without any models can predict 71% of the adopted users. XGBoost boost model with only duration and number of visits as features yields approximately 95% accuracy and F1 cv scores.