What can we learn from drug reviews?
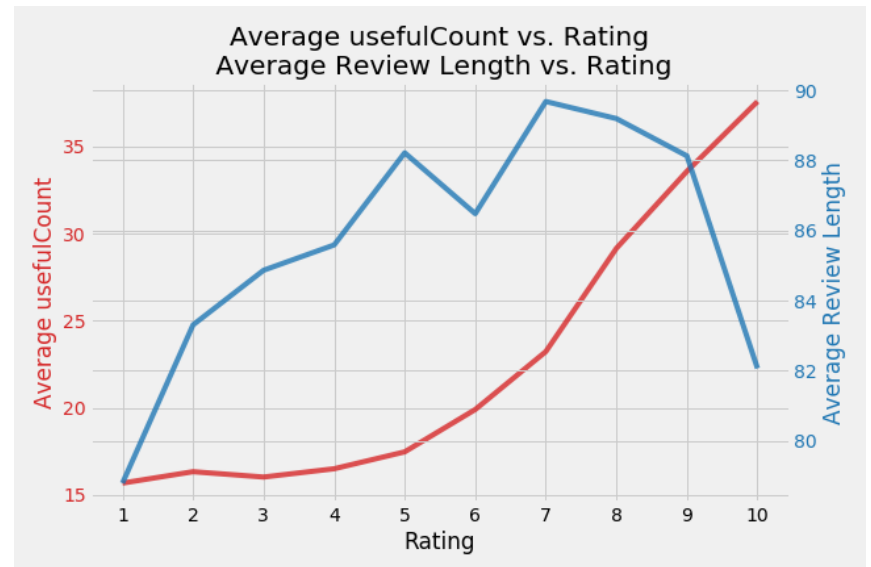
Wei Xu   8/14/2019

A. Information about dataset
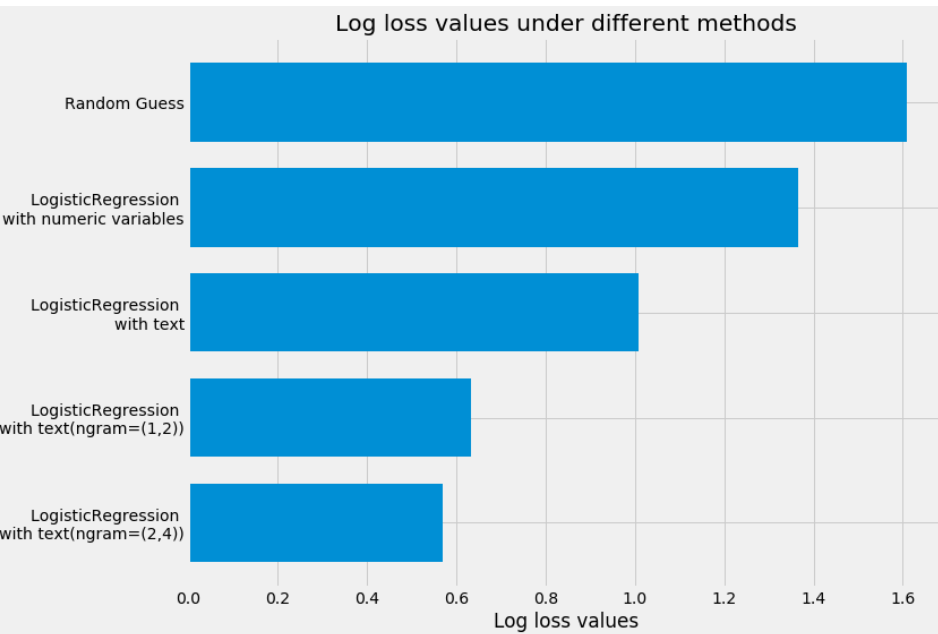
Data Source: UCI Machine Learning Repository

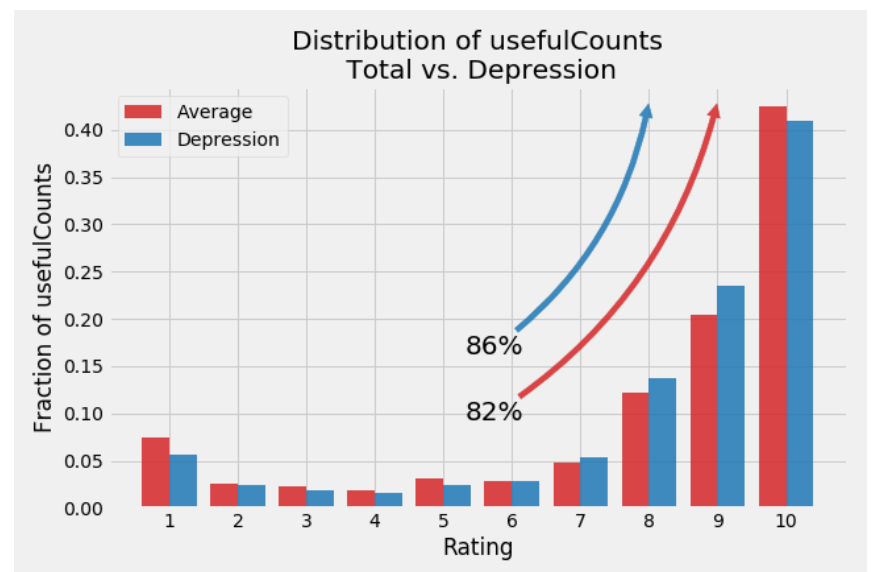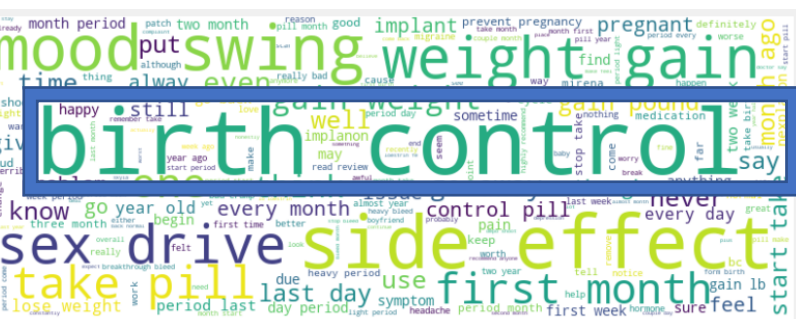| Variable	Info.
ID	ID of each review
drugName	Name of drug, e.g., Valsartan, Lybrel
condition	Name of condition. E.g., Birth Control, Depression
review	Patient review
rating	10 star patient rating
date	Date of review entry
usefulCount	Number of users who found review useful

B1. Fun Fact 1

Average usefulCount vs. Rating
Average Review Length vs. Rating

C. Predicting Rating

Log loss values under different methods

B2. Fun Fact 2

Distribution of usefulCounts
Total vs. Depression

D1. Word Cloud – Birth Control Drugs

E1. Topic Modeling– Birth Control Drugs

Topic	Words
1	period control birth bleed cramp spot last heavy stop every
2	weight gain control birth side effect mood period swing switch
3	anxiety depression could make remove side stop effect life think

D2. Word Cloud – Depression Drugs

E2. Topic Modeling– Depression Drugs

Topic	Words
1	weight depression gain medication also help good anxiety eat lose
2	effect side depression medication anxiety life help make much give
3	depression anxiety life drug felt make effect help medication could