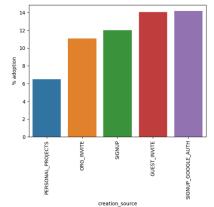
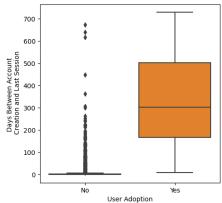
Relax Inc. Take Home Challenge (Springboard Data Science Bootcamp)

The goal of this challenge was to use the information provided to analyze which factors contribute the most to whether or not a user will "adopt" a program. In this case, adoption of a program is defined as spending more than three days within a seven day period on the program. First, I curated a list of all users who fulfilled this criteria and marked them. The features that were available to examine for their relation to this target were as follows: the creation date, five options for how their account was created (personal project, guest invite, organization invite, signup via the website, and signup via google authentication), their last session time and date, whether they have opted in for marketing, and whether they have enabled the marketing drip.

First, I looked into creation source. I calculated the percent of users from each source that adopted the program, and did not find a significant difference between the categories (for each category, percent adoption was somewhere between 6-14%). Next, I looked into users who opted into the mailing lists/marketing drip. I found that the percent of users in each category who adoped the program was roughly the same, showing that this did not have much effect.





Finally, I looked into days between account creation and the last session created (a proxy for the amount of time the user has been actively using the program, and found that this has a significant association with adoption of the program. I trained a RandomForestClassifier (accuracy=0.95) on this data, and it also marked the days between session creation and last session created as the most import feature.

