Thinkful Data Science Exercise.

1. Given the current information we have for the website the following aspects would be interesting to test overall; the conversion rate from the advertisement along with the rate at which advertisements lead to “whales”, users who spend a lot of money on the website. A few other interesting statistics to study is to see how the page views correlates to purchases as a percentage and if activity has a correlation but not causation on purchases such as multiple page viewers are more likely to purchase.
2. In order to see why signups have slowed let’s look initially at the marketing spent per week and discover if a trend exists between marketing and sign up rate, also look at overall trend of signups as there is only a finite amount of clients possible so saturation could have occurred. Finally looking at the progression of each step to see if there is a significant drop off from each step causes something that could be fixed to ease the consumer’s experience.
3. In order to make a better ranking system the algorithm should take into account the availability of the hotel in comparison to the price with a secondary factors coming from the session information such as ones with more web views and its activity on the webpage.
4. In order to find out if churn is atypical there are a few factors to look at, to start look into new users for the first six months and look into the length of session and see if there is a drop in average usage as times passes, then look at current users who have been subscriber over six months, for six months to see if current users have a drop off rate once you have been on the website for a length of time. This should give you a rate of churn.