Product Analyst - Test Task

Background

Users of the Peloton product have a profile in the system. There are various social features that allow you to see and engage with other users. Additionally, Peloton has a follow / follower system (similar to instagram) enabling users to form connections in Peloton. These relationships are one directional in that you can follow someone without them following you back.

Experiment

Peloton ran an A/B test where a subset of users received a push notification to the iOS app notifying them of any new followers. The hypothesis was that users that received the push notification would be more likely to form a mutual connection and that it would take less time for mutual connections to form.

The experiment ran from December 12th 2017 to Jan 8th 2018. Experiment buckets were assigned based on the first character of a users user id. Users with an id that starts with one of “b”, “c”, “e”, “f”, “5” received the push notification. Everyone else did not receive a notification and had no other change in their experience.

Task

We’ve provided some example data for this experiment. We are looking for you analyze this data and present us with your findings.

Deliverables

We are looking for a document or presentation detailing the results of your analysis. The audience for this deliverable is the rest of the product team and our executive stakeholders.

Separately, we also ask that you show your work. We are looking to see how you analyzed the data. Let us know what tools you used and provide any code or spreadsheets you created as a result.

Structure of the provided data provided

User Id A	User Id B	Followed At
123	ABC	Jan 1st, 2018
123	DEF	Jan 2nd, 2018
DEF	123	Jan 4th, 2018

What this data means

- User 123 follows ABC
- User 123 and User DEF follow each other and thus have a mutual relationship.
- It took 2 days for DEF to follow 123 back.