MuscleHub

"To test or not to test, that is the question”

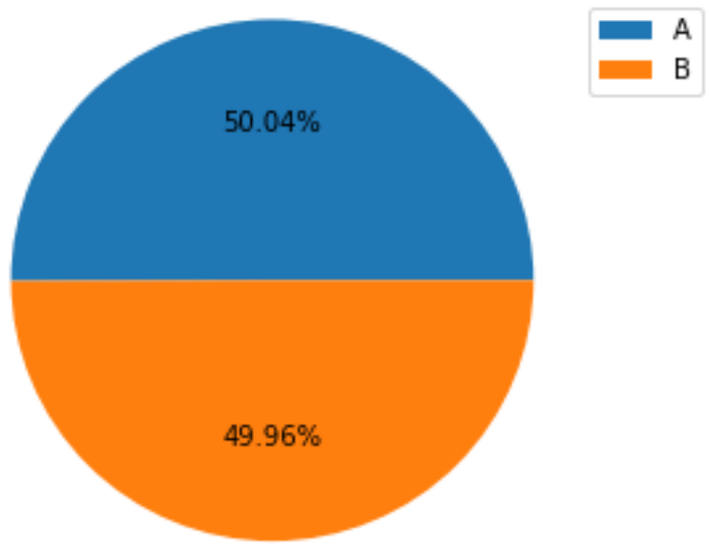
A/B Test

- MuscleHub wants to see if the fitness test has any effect on visitors eventually purchasing a membership

- Group A: took a fitness test with a personal trainer

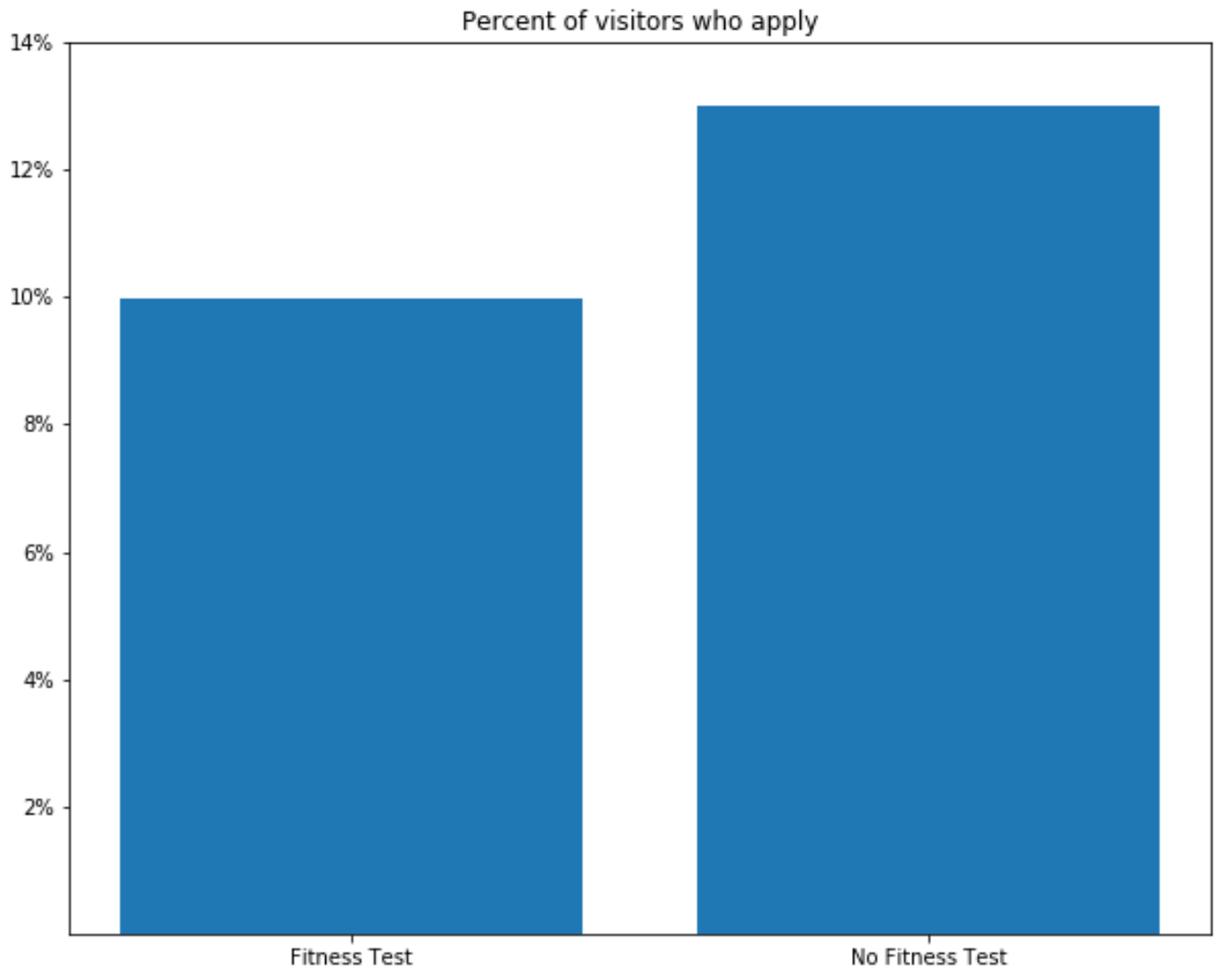
- Group B: did not take a fitness test

- Visitors were split about evenly into the two test groups

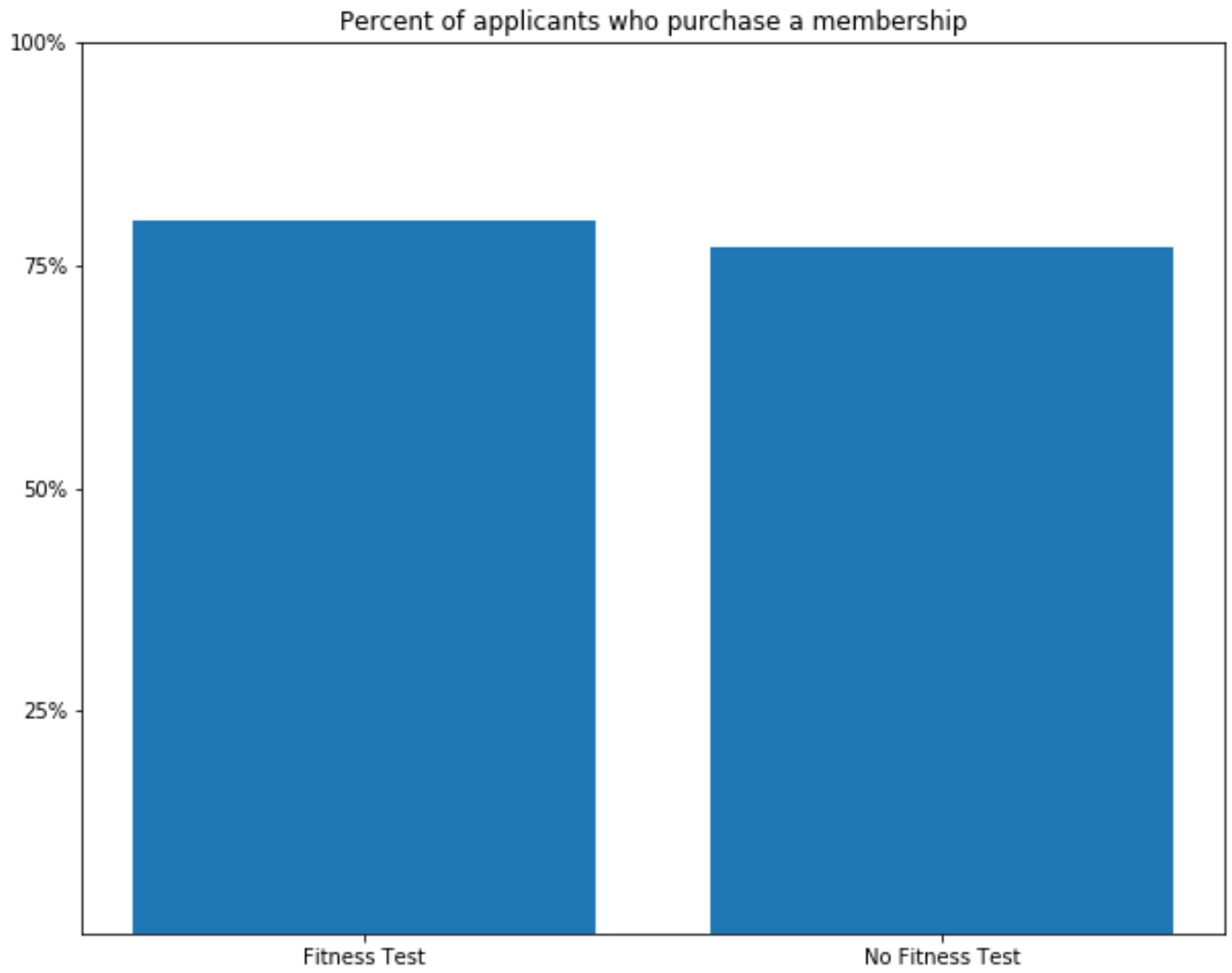


Dataset Summary

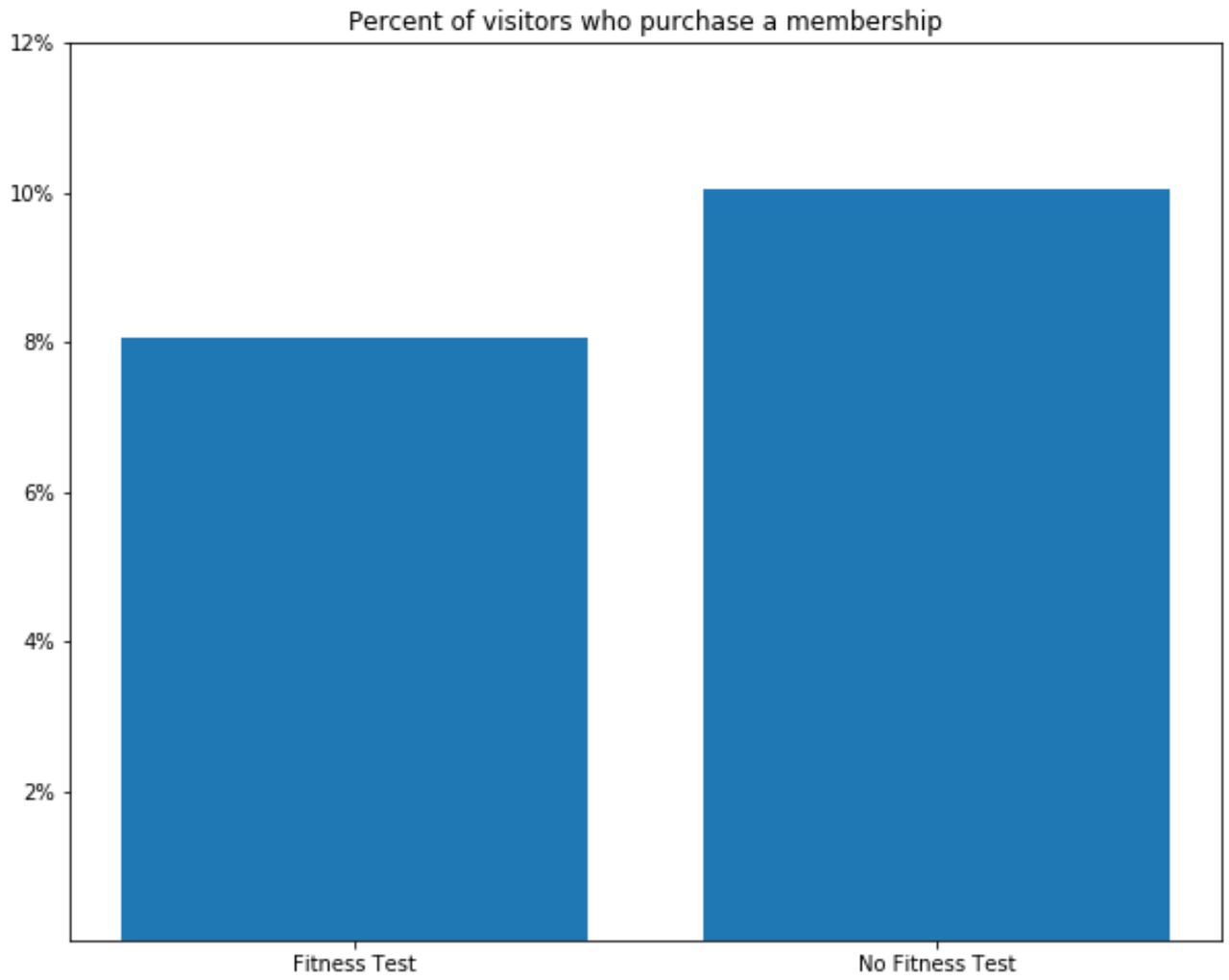
- ~3% more visitors filled out an application when there wasn't a fitness test



- From those applications, more people from Group A who took the fitness test bought a gym membership



- Factoring in all the visitors to MuscleHub, a greater percentage of those who didn't take a fitness test bought a gym membership



Hypothesis Test

- chi2_contingency from scipy.stats was used for all three datasets because:

    1. we have two categories (fitness test vs no fitness test)

    2. we want to compare the two groups and determine if the difference is significant ($p < 0.05$)

- H_0 = the fitness test has no effect

Test Results

- Percent of visitors who apply:

  P-value = 0.00096 (**Significant difference!**)

- Percent of applicants who purchased a membership:

  P-value = 0.43259 (No significant difference)

- Percent of visitors who purchased a membership:

  P-value = 0.01719 (**Significant difference!**)

Interviews Summary

- One interviewee enjoyed how MuscleHub made them feel welcome

- LiftCity by comparison is more intense

Recommendation

- Based on the hypothesis testing it is better to get rid of the fitness test

- More visitors end up filling out an application or purchasing a membership when there weren’t any tests

- With the removal of the fitness test, shift focus to making visitors feel welcome at the gym