

# MuscleHub A/B Test

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# Description

An A/B test was done to evaluate the probability of visitors to Musclhub's gym purchasing a membership.

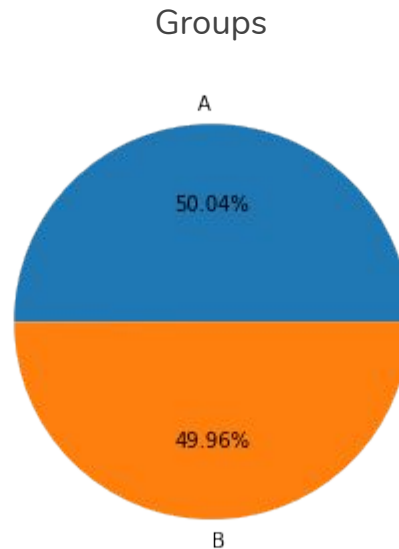
Visitors will randomly be assigned to one of two groups:

- Group A will still be asked to take a fitness test with a personal trainer
- Group B will skip the fitness test and proceed directly to the application



# Summary of dataset

We collected data from MuscleHub sqllite database and picked information from 7-1-2017 that divided randomly the new visitors in two groups, A and B, evaluating 5004 visitors, evenly divided.

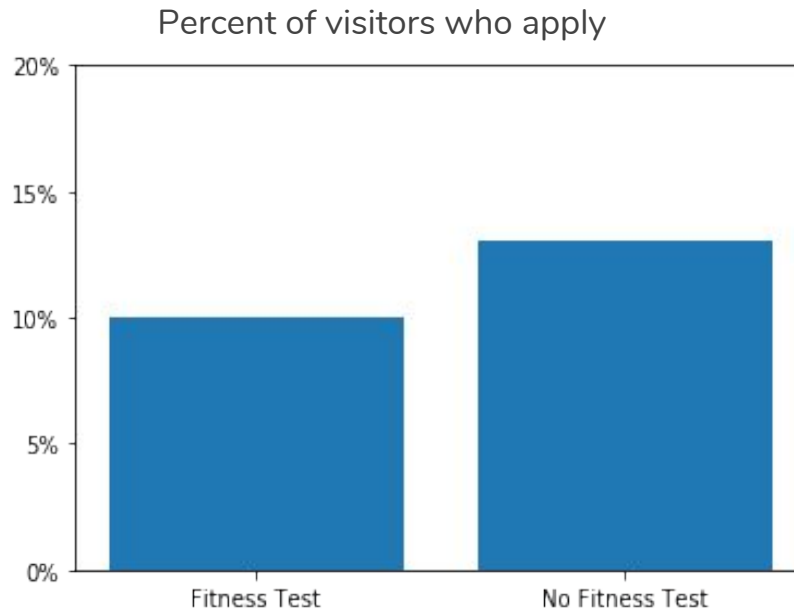




# Hypothesis tests

We calculated the percentage of application for each group and checked if the difference between them is significative.

We run a Chi Square test and we got a pvalue of 0.0009, meaning that there are more chances to a person without fitness test fill the application.





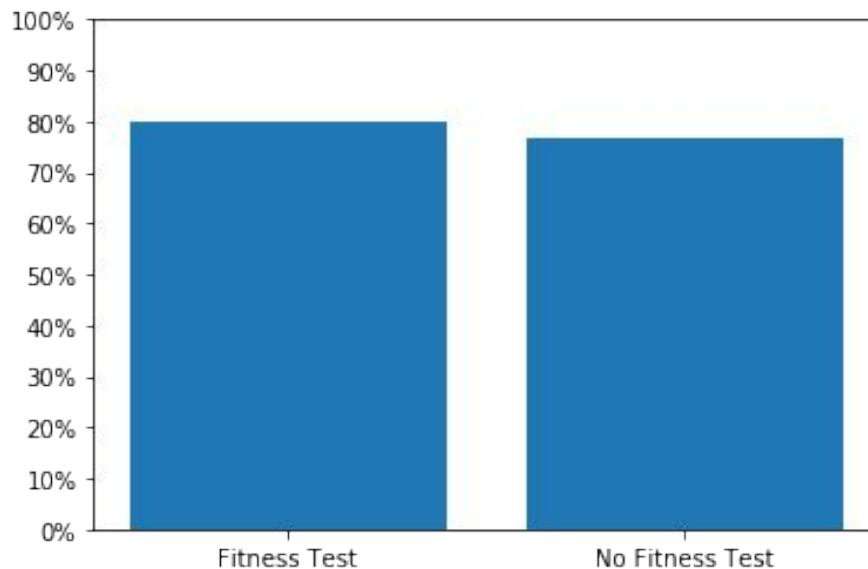
# Hypothesis tests

Of those who picked up an application, how many purchased a membership?

We run a Chi Square test and we got a pvalue of 0.43, meaning we don't have a real difference between the groups.

They basically have the same chances then the ones who didn't.

Percent of applicants who purchase a membership



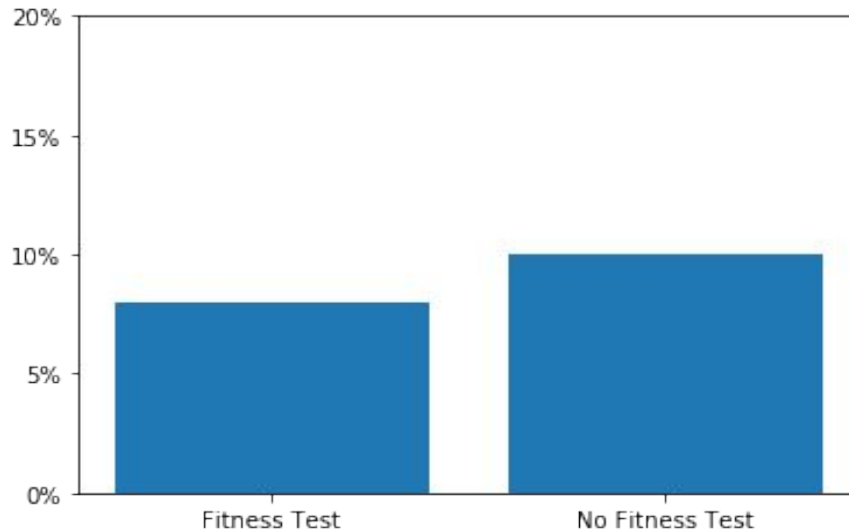


# Hypothesis tests

Considering all visitors, which is the best strategy to convert them to members?

The strategy of group A convert less than group B. We run a Chi Square test and had a pvalue of 0.14, meaning the difference has significance.

Percent of visitors who purchase a membership





# Recommendation

After performing the A/B test the results show that people from group B (people who did skip the fitness test and proceed directly to the application) are more likely to purchase a membership to MuscleHub's gym. So i strongly recommend MuscleHub not to include a compolsonary fitness test at the start of the signing process based o the data and the results we got.

The costumer interviews tells us that the fitness test isn't that nice. It generally isn't appreciated by the visitor.