

# MUSCLEHUB A/B TEST

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# INTRODUCTION

MuscleHub is a gym that have the following steps to make a visitor a member.

1. Take a fitness test with a personal trainer
2. Fill out an application for the gym
3. Send in their payment for their first month's membership.

Currently the manager thinks that the fitness test intimidates some prospective members, so he wants to verify this with an A/B test.

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The manager assigned the visitors at random in two groups:

GROUP A: Will take the normal steps to become a member.

GROUP B: Will skip the fitness test and proceed directly to the application .

# INTRODUCTION (CONTINUATION)

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# OBJECTIVE OF THE STUDY

Verify if the new procedure has an impact to the visitors that want to become a member of the gym.



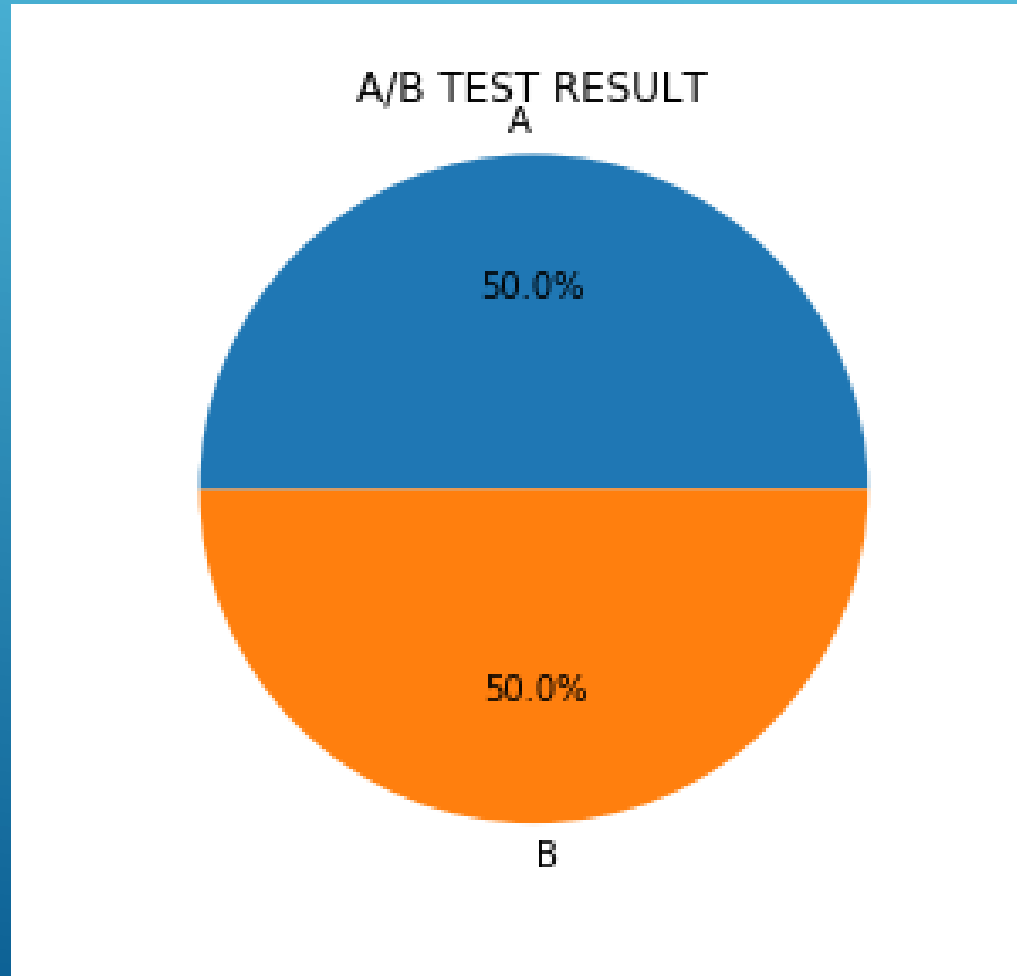
# DESCRIPTION OF THE DATA

The manager of MuscleHub provided of the follow information:

- ▶ Table “visits” that contains information about potential gym customers who have visited MuscleHub.
  - ▶ Table “fitness\_tests” that contains information about potential customers in "Group A", who were given a fitness test
  - ▶ Table “applications” that contains information about any potential customers (both "Group A" and "Group B") who filled out an application.
  - ▶ Table “purchases” that contains information about customers who purchased a membership to MuscleHub.
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- A series of white diagonal lines of varying lengths and thicknesses are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

# FIRST APPROACH TO THE DATA

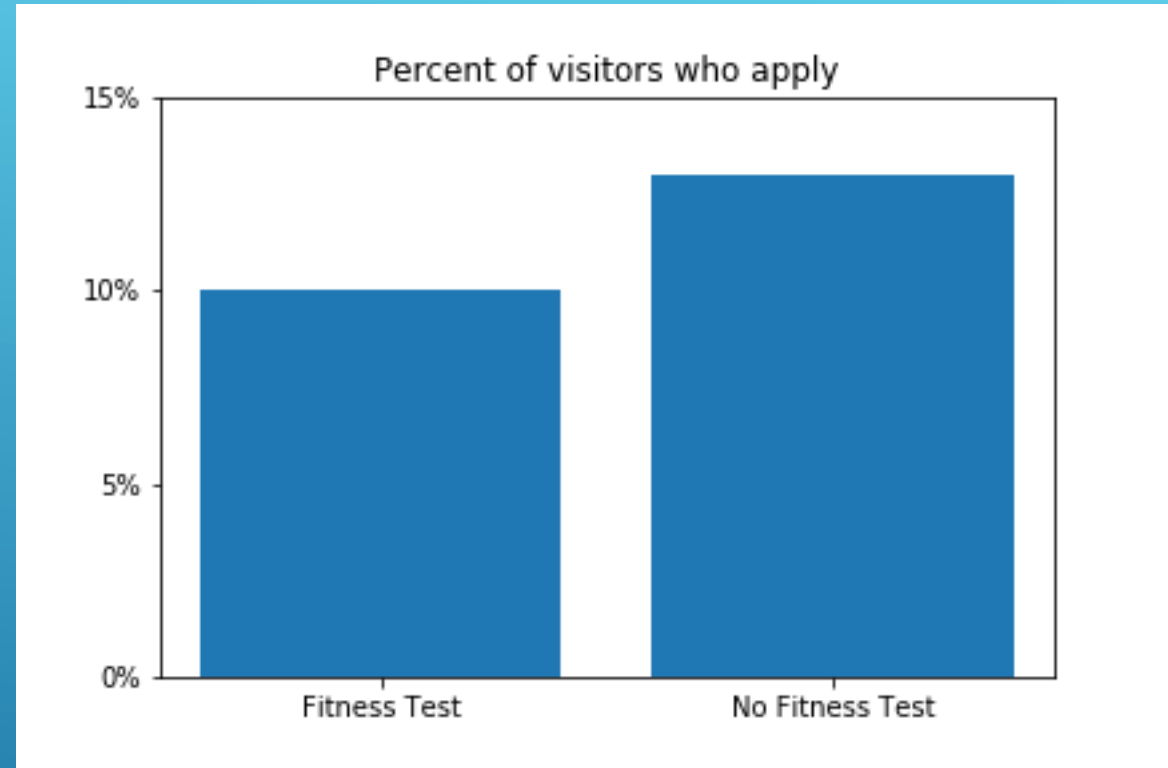
We want to know from the total number of visitor the percentage of people that bellows to each group, the result is shown in the follow graph:



# PERCENT OF VISITORS WHO APPLY

From the total of visitor who turned in an application, Group B has a mayor percentage of people.

We apply a Chi Square Test\* to see if the difference is statistically significant, and it turn that there is a significant difference.

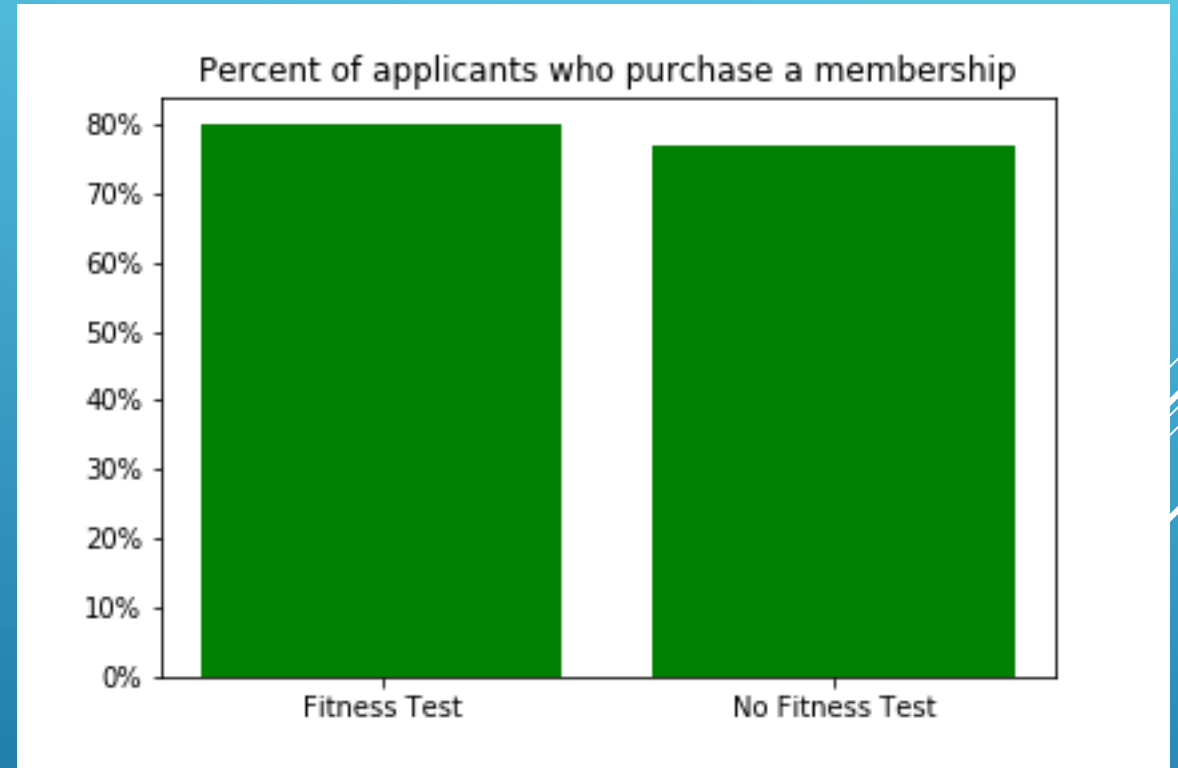


\*The Chi Square Test was use because the data is from two categorical datasets that we want to compare.

# PERCENT OF APPLICANTS WHO PURCHASE A MEMBERSHIP

From the total of applicants who purchase a membership, Group A has a mayor percentage of people.

We apply a Chi Square Test\* to see if the difference is statistically significant, and it turn that there is not a significant difference.



\*The Chi Square Test was use because the data is from two categorical datasets that we want to compare.

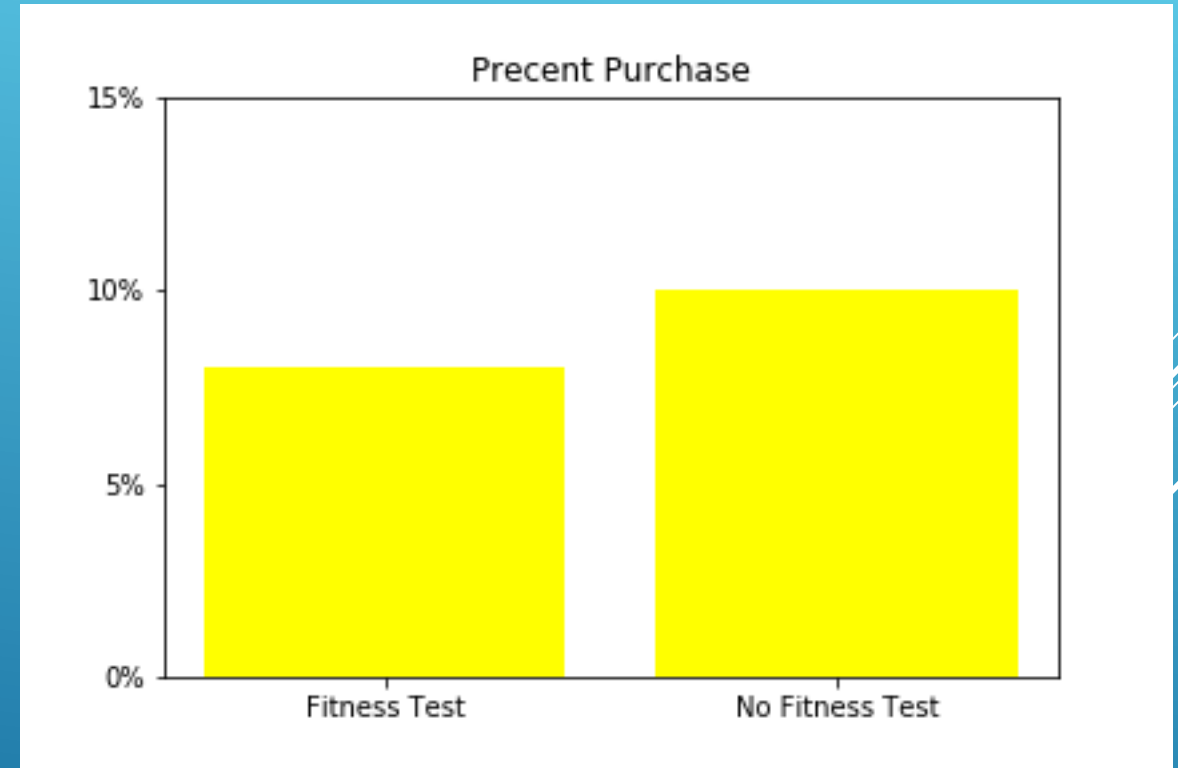


# PERCENT OF VISITORS WHO PURCHASE A MEMBERSHIP

From the total of visitors who purchase a membership, Group B has a mayor percentage of people who purchase the membership.

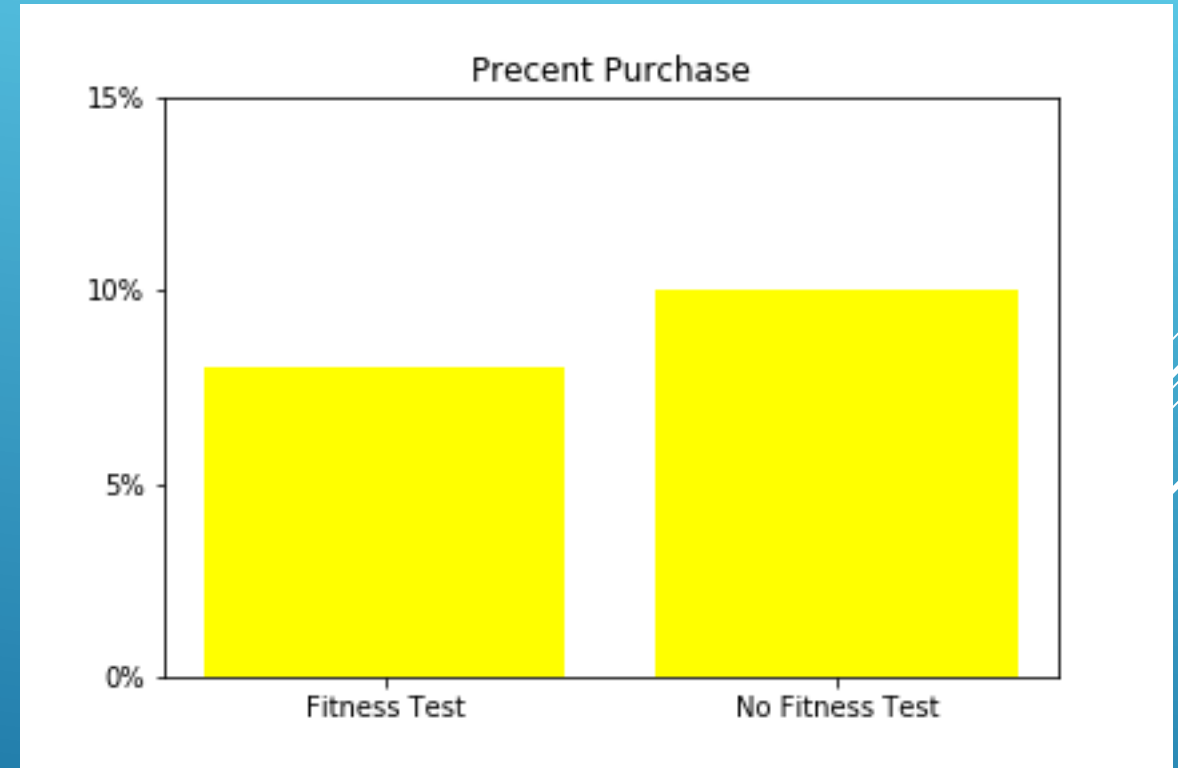
We apply a Chi Square Test\* to see if the difference is statistically significant, and it turn that there is a significant difference between both datasets.

\*The Chi Square Test was use because the data is from two categorical datasets that we want to compare.



# RECOMMENDATION

From the previous analysis, it is better that MuscleHub gym change the process to become a member, making optional the fitness test to apply, because it is true that some people are intimate for the fitness test and prefer to become a member without doing it.



TANK YOU FOR YOUR ATTENTION

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