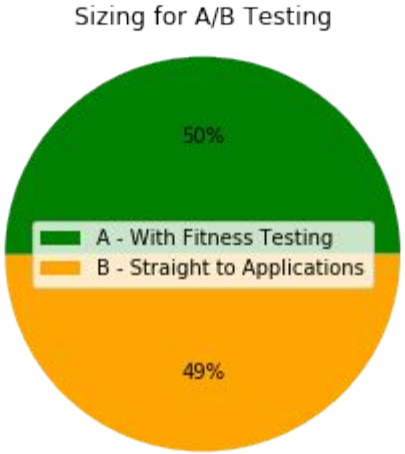
A/B test for gym “MuscleHub”

What visitors will be more likely to buy membership?

Parameters of A/B test

Visitors is randomly assigned to one of two groups:

- **Group A** is asked to take a fitness test with a personal trainer
- **Group B** skip the fitness test and proceed directly to the application



Hypothesis: visitors assigned to Group B will be more likely to eventually purchase a membership to MuscleHub

What data do we have?

We have information about **5004 visitors** (2504 in A Group and 2500 in B Group)

This test ran between **7 January 2017 and 10 October 2017** (more than 9 months)

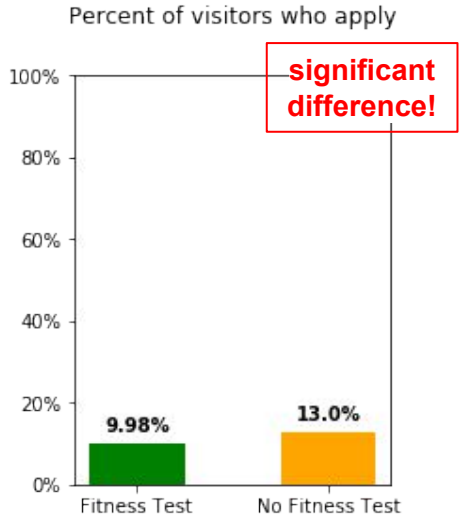
Beside the personal info (i.e. Name, Surname, Email and Gender) we have the following dates:

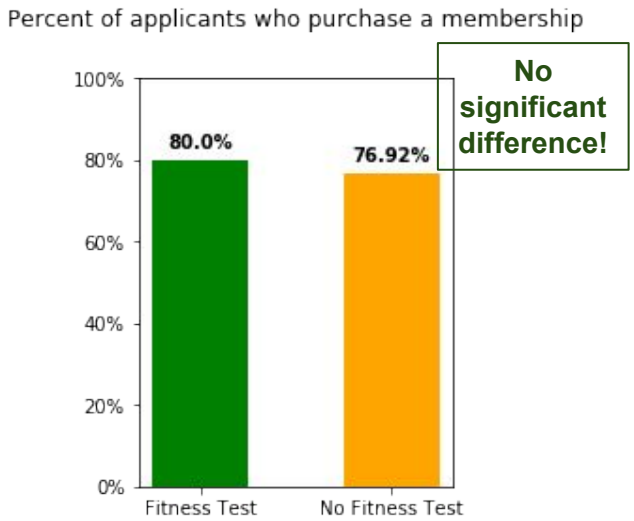
1. Date of visit
2. Fitness test date
3. Application date
4. Purchase date

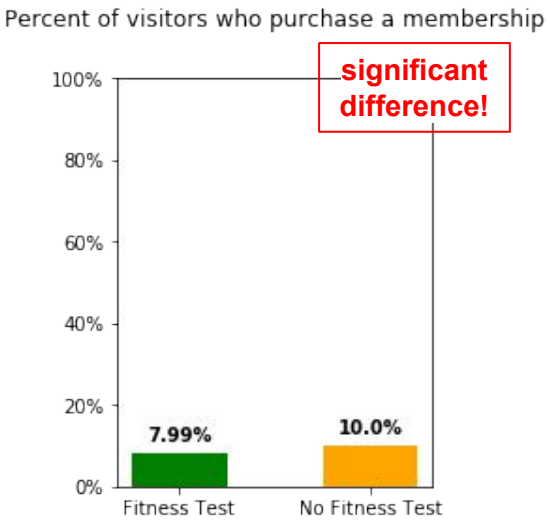
To check the hypothesis we choose Chi Square Test

We research two groups and put them in two categories: **Fitness Test** and **No Fitness Test**. In this case we need to use Chi Square Test.

Null Hypothesis: there is no significant difference between datasets







Summary of the qualitative data

We can make several statements based on Chi Square tests' results:

1. **People who skip the fitness test were more likely to apply.** This might be because a visitor doesn't need to spend so much time to just fill the application.
2. **There is no significant difference between people in two groups who had already picked up an application and bought the membership.**
3. **People who skip the fitness test were more likely to buy membership** considering all visitors who come to MuscleHub.

Recommendation for MuscleHub

People who skip the fitness test
will be more likely to eventually purchase
a membership to MuscleHub