

A/B Testing Analysis: Fitness Club

Download: [Jupyter Notebook file](#), data source files: ["observations.csv"](#), ["species_info.csv"](#), [ReadMe](#)

Abstract: 5,004 dataset that includes 9 features.

Data Set Characteristics:	Multivariate	Number of Instances:	5004	Area:	A/B Testing
Attribute Characteristics:	Categorical	Number of Attributes:	9	Missing Values:	0

Source:

<https://content.codecademy.com/programs/intro-data-analysis/musclehub.zip>

Data Set Information:

A/B testing data set represents acquisition funnel for fitness club.

Data variables include:

Species Data Set

Label	Data Type	Description
First_name	String	First name of the club visitor
Last_name	String	Last name of the club visitor
Gender	String	Gender of the club visitor
Email	String	Email address of the club visitor
Visit_date	String	Date of the visitor to the club

Fitness_test_date	String	Date the visitor to the club took a fitness test
Application_date	String	Date the visitor to the club filled out an application for gym membership
Purchase_date	String	Date the club visitor purchased a gym membership

Data Summaries Calculated:

- Frequency
- Percentage

Units for Data Summaries and Variables:

- The status of a group member
- A single paper application

Data Transformations:

- Data was downloaded from <https://content.codecademy.com/programs/intro-data-analysis/biodiversity.zip>
- Files “codecademySQL.py” and “codecademySQL.pyc” were imported into Jupyter Notebook for SQL query creation.
- Combined 4 csv files (“visits.csv”, “fitness_tests.csv”, “applications.csv”, “purchases.csv”) into a single data frame.
- Re-code fitness_test_date into categories “A” and “B” for ease of readability and analysis.
- Create new column ab_test_group for frequency count for ab_test_group.
- Recode values into categories "application" and "no application" for ease of readability and analysis.
- Recode values into categories "member" and "not member" for ease of readability and analysis.
- Create new column with application frequency count.
- Create new column “Percent With Application” for percentage visitors who submitted applications.
- Create new column “Percent Membership” for percentage visitors who submitted applications and purchased club membership.

- Create new column “Percent Purchase” for percentage visitors who purchased club membership regardless of application status.