# \* Reichman University

#### **Introduction to Data Science**

## Homework Assignment 2 - K-Means

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#### BACKGROUND

This data set contains information on air traffic passenger statistics by the airline. It includes information on the airlines, airports, and regions that the flights departed from and arrived at . It also includes information on the type of activity, price category, terminal, boarding area, and number of passengers.

#### ATTRIBUTE INFORMATION

- is\_more\_than\_100\_passengers? → 1 = More than 100, 0 = Less than or equal to 100.
- is\_after\_2010? → 1 = flight year was after the 2010, 0 = flight year was before 2010
- is\_winter? → 1 = flight season was winter, 0 = flight season wasn't winter
- is\_summer? → 1 = flight season was summer, 0 = flight season wasn't summer.
- is\_autumn? → 1 = flight season was autumn, 0 = flight season wasn't autumn.
- is spring?  $\rightarrow$  1 = flight season was spring, 0 = flight season wasn't spring.
- alaska\_airlines? → 1 = flight carrier is Alaska Airlines, 0 = flight carrier isn't Alaska Airlines.
- delta\_air\_lines? → 1 = flight carrier is Delta Airlines, 0 = flight carrier isn't Delta Airlines.
- **skywest\_airlines?** → 1 = flight carrier is SkyWest Airlines, 0 = flight carrier isn't SkyWest Airlines.
- united\_airlines? → 1 = flight carrier is United Airlines, 0 = flight carrier isn't United Airlines.
- virgin\_america? → 1 = flight carrier is Virgin America, 0 = flight carrier isn't Virgin America.
- other\_airline? → 1 = flight carrier is Other airline, 0 = flight carrier isn't Other airline.
- is\_from\_america? → 1 = flight region is America, 0 = flight region isn't America.



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- is\_international\_airline? → 1 = flight carrier is International, 0 = flight carrier isn't International.
- is\_lowcost?  $\rightarrow$  1 = flight type is low cost, 0 = flight type isn't low cost.
- is\_departing? > 1 = departing flight; 0 = arriving flight

# **Good Luck!**