## D3 Lab - Week 1

### Instructions

# Watch the D3-PART1 - INTRODUCTION playlist on the Media Gallery

# Airlines Routes

Through this course we will develop a full linked view visualization that will allow our users to explore where in the world the top 20 airlines with most routes operate. In each assignment we will build a step towards this final solution. Therefore it is important that you keep your solutions for each step, as the solution for the current week will be the starter point to the next week.

## Dataset

Our dataset is a CSV file containing 23041 lines, where each line represents one airplane route. Each route contains information from the airport of origin, destination and airline. Bellow we have an example of a route.

| Field | Value |
|---|---|
| **ID** | 1 |
| **AirlineID** | 24 |
| **AirlineName** | American Airlines |
| **SourceAirportID** | 4355 |
| **SourceAirport** | Lehigh Valley International Airport |
| **SourceLatitude** | 40.65209961 |
| **SourceLongitude** | -75.44080353 |
| **DestAirportID** | 3876 |
| **DestAirport** | Charlotte Douglas International Airport |
| **DestLatitude** | 35.2140007 |
| **DestLongitude** | -80.94309998 |

The dataset file can be download here, although it is not required for this assignment.

## Questions

Our goal is to use this dataset to answer questions like:

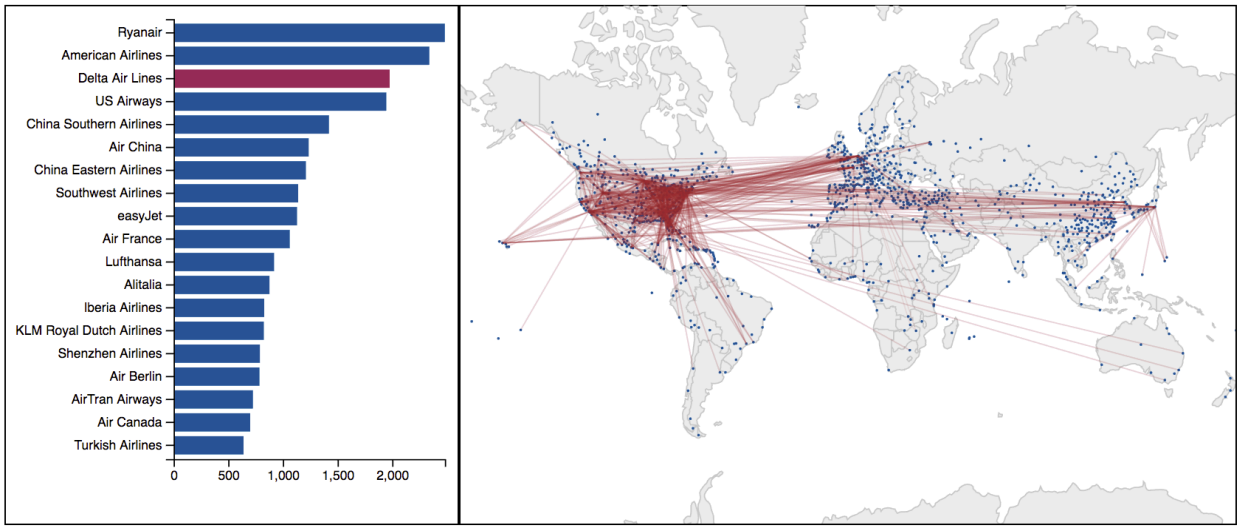
1. What are the airlines with more routes, and how the distribution looks like. Are there airlines with many more routes that others?
2. In which regions of the world are most of the airport these airlines operate?
3. Does a given airline operates in a regional or intercontinental scale?

## Final Solution

To answer these and other questions, we will build an interactive system that allow users to explore this dataset, bellow is an screenshot of how the system should look by the last assignment of this course.

## Airlines Routes

**Airlines** **Airports**




# This Assigment's Goal

Watch the videos on the D3 Week 1 playlist, they will provide the base you need to complete this assignment.

In this assignment, we will create the basis for this system using HTML and CSS. The final result for this submission should look like the image below.

## Airlines Routes

**Airlines** **Airports**

| | |
|---|---|
| | |

Note that what we are doing is to create the regions where we will later add our visualizations.

## Assignment

Download the file below named index.html (you may have to right click it and select "save link as"), and complete the code, such that the result looks like the image above. The file already contains part of the code, and your goal is to edit only the places where there are comments that start with the keyword "*TODO*".

Download the file: *index.html*

***Please KEEP THE OTHER PARTS OF THE CODE UNCHANGED, and do not change names of functions, CSS classes or element IDs, that will simplify the grading as well as answering doubts and providing feedback.***

For this assignment you will change the CSS section of the code, to update the look and feel of the page.

For example, this is the TODO 1, that starts in line 9 of the file:

```
h1 {
      background-color: #2a5599;
      /* TODO 1
      change the text to white and add a padding of 5px
      2 lines of code
      */
  }
```

For this TODO, Your goal is to add 2 lines of code, one should change the color of the text of all H1 tags to white, and the second one should add a padding, i.e. a margin between the text and the border of the H1, of 5 pixels.

*The *routes.csv* file provided above is just for reference, this file won't be needed to complete this week's assignment

## Submission

Once you are ready to submit, submit your updated version of the index.html file. Also, save the file to be used in future weeks' assignments. You don't have to submit any other file. Make sure that you only modify this file, and that all your code is contained in it.