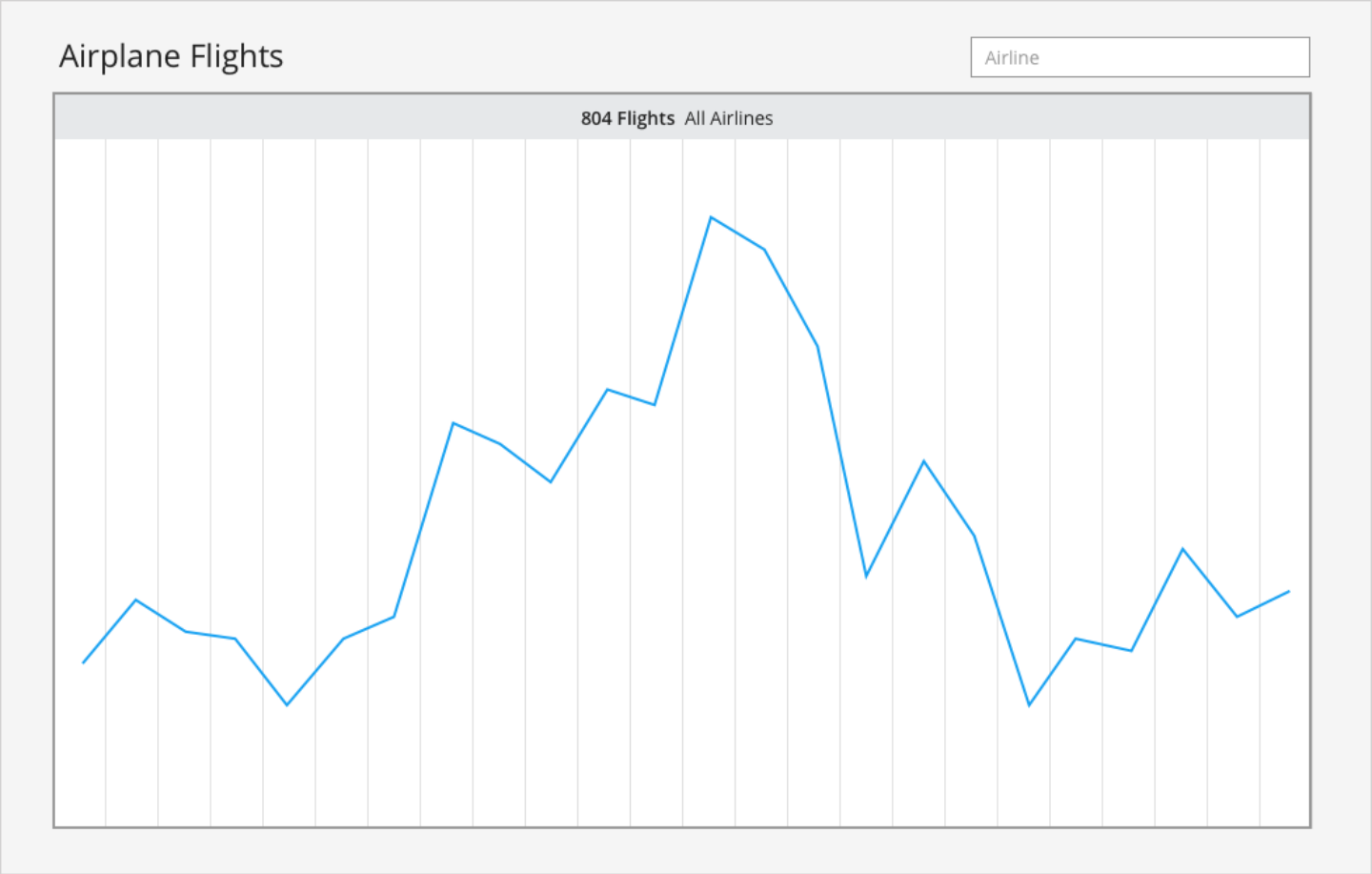
Mist UI Coding Problem

Introduction

Implement a simple line chart showing the number of airplane flights per hour over a 24 hour period. This assignment is to be implemented without the aid of any 3rd party libraries or frameworks (use plan JavaScript and CSS).



Data

The airplane flight dataset is provided in a file “airline-data.js”. It exposes 2 global variables:

1. “airlines” provides a list of airline codes and names

```
var airlines = {
    aal: 'American Airlines',
    dal: 'Delta',
    jbu: 'JetBlue Airways',
    swa: 'Southwest Airlines',
    ...
};
```

2. “flighs_jan_01_2008” provides a list of flights during Jan 1 2008, each one having an airline code an timestamp in format HH:MM:SS. There will be some invalid entries in this array that can be ignored.

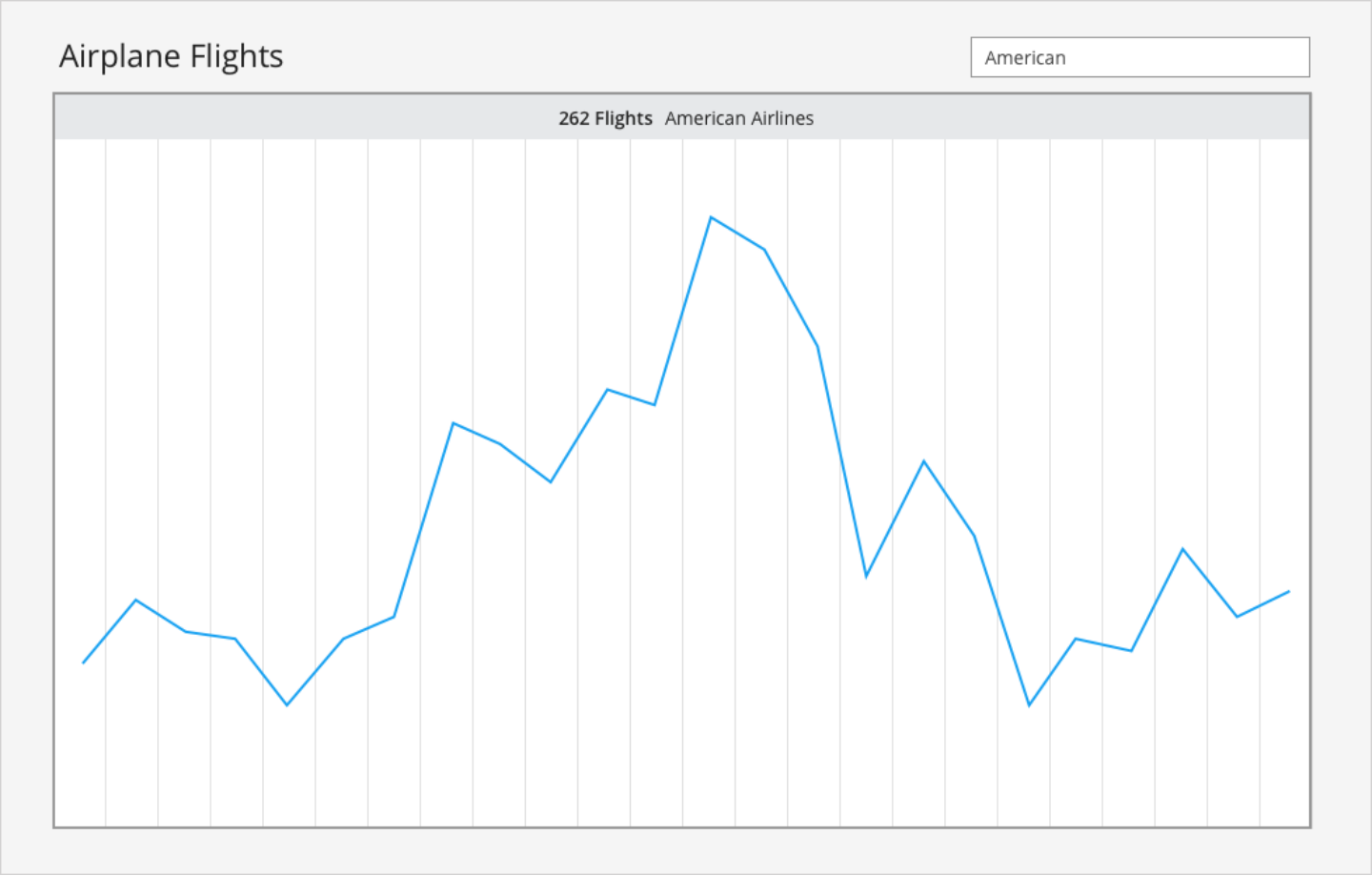
```
var flights_jan_01_2008 = [
    { airline: 'aal', time: '00:26:30' },
    { airline: 'swa', time: '08:05:52' },
    { airline: 'swa', time: '17:02:13' },
    { airline: 'jbu', time: '23:54:16' },
    ...
];
```

Chart Rendering

The line chart should be implemented using SVG, with one data point per hour of the day. For example, the first data point will represent the number of flights with timestamp between 00:00:00 – 00:59:59. The line chart should resize as the browser window resizes, so it fills the available space.

Airline Filtering

The user may type in a portion of an airline name. When the enter key is pressed or focus leaves the text input, update the chart to show data for the specified airline. Use the first airline with name that partially matches (case-insensitive) the user supplied text.



Extra Credit

When the airline filter is changed, animate the changes to the line chart, using a sinusoidal in/out easing function.

Submission

Please send a link to a Github repository containing your submission. Feel free to research online as necessary, but do not directly copy code from other sources. Take as much time as you need, we would like to receive your submission within a week if possible.