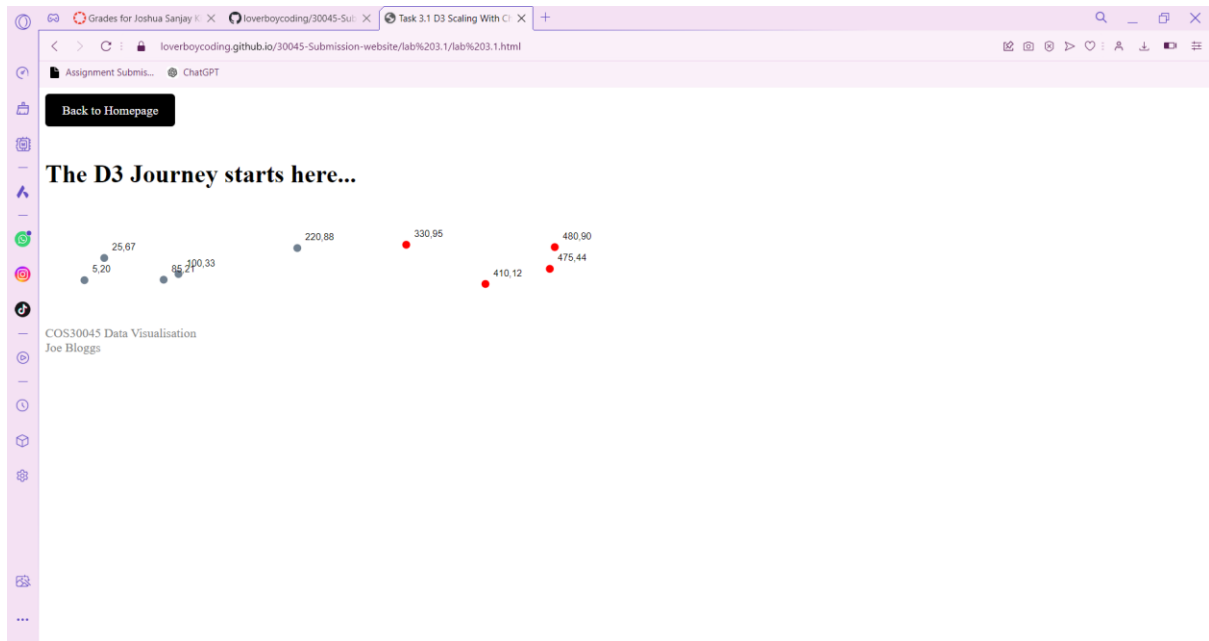


JOSHUA SANJAY KING

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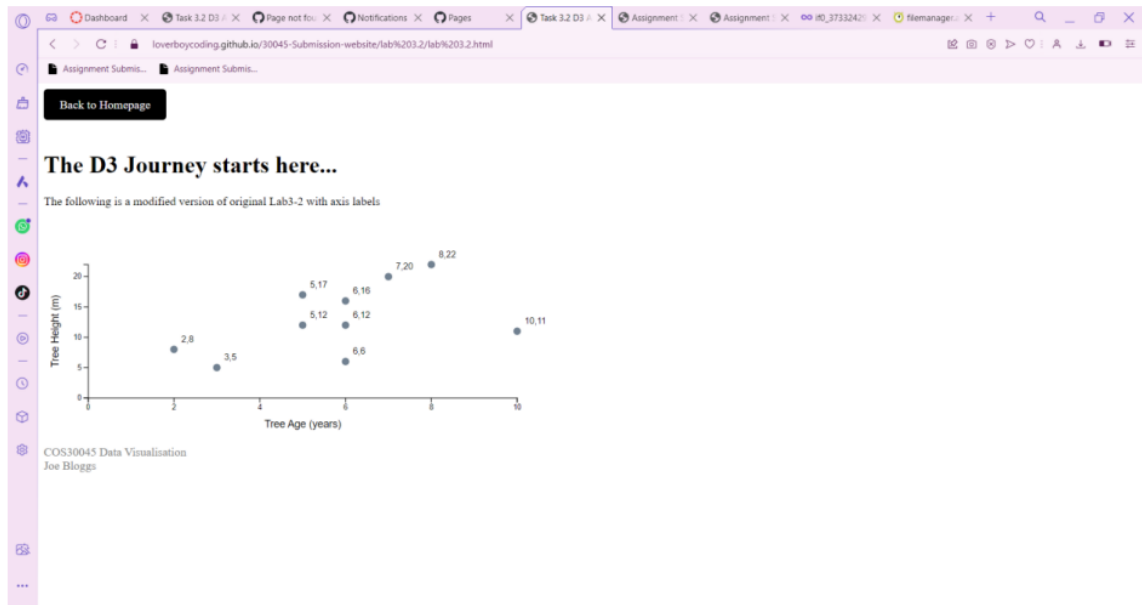
<https://loverboycoding.github.io/30045-Submission-website/index.html>

LAB 3.1



```
25 <body>
26
27 <!-- Back to Homepage Button -->
28 <a href="../../../homepage.html" class="back-button">Back to Homepage</a>
29 <h1>The D3 Journey starts here...</h1>
30
31 <script>
32   var w = 700; // Increased width of the SVG
33   var h = 150; // Increased height of the SVG
34   var padding = 50; // Increased padding to prevent cropping
35
36   var dataset = [
37     [5, 20],
38     [480, 90],
39     [100, 33],
40     [330, 95],
41     [410, 12],
42     [475, 44],
43     [25, 67],
44     [85, 21],
45     [220, 88]
46   ];
47
48   var xScale = d3.scaleLinear()
49     .domain([d3.min(dataset, function (d) {
50       return d[0];
51     }), d3.max(dataset, function (d) {
52       return d[0];
53     })])
54     .range([padding, w - padding]);
55
56   var yScale = d3.scaleLinear()
57     .domain([d3.min(dataset, function (d) {
58       return d[1];
59     }), d3.max(dataset, function (d) {
60       return d[1];
61     })])
62     .range([h - padding, padding]); // Reversed range to flip y-axis
63
64   var svg = d3.select("body")
65     .append("svg")
66     .attr("width", w);
```

Lab 3.2 modified



```
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search Solution
lab 3.2.html lab 3.1.html
37 var dataset = [
38   [2, 8],
39   [3, 5],
40   [5, 17],
41   [6, 6],
42   [6, 12],
43   [7, 20],
44   [8, 22],
45   [10, 11],
46   [5, 12],
47   [6, 16]
48 ];
49
50 // Define xScale (for Tree Age)
51 var xScale = d3.scaleLinear()
52   .domain([0, d3.max(dataset, function (d) { return d[0]; })]) // X-axis starts at 0
53   .range([padding, w - padding]); // Maps data to the width of the SVG
54
55 // Define yScale (for Tree Height)
56 var yScale = d3.scaleLinear()
57   .domain([0, d3.max(dataset, function (d) { return d[1]; })]) // Y-axis starts at 0
58   .range([h - padding, padding]); // Reversed range to flip the Y-axis (so 0 is at the bottom)
59
60 // Create the SVG container
61 var svg = d3.select("body")
62   .append("svg")
63   .attr("width", w)
64   .attr("height", h);
65
66 // Append circles to the SVG based on data points
67 svg.selectAll("circle")
68   .data(dataset)
69   .enter()
70   .append("circle")
71   .attr("cx", function (d) {
72     return xScale(d[0]); // X position based on Tree Age
73   })
74   .attr("cy", function (d) {
75     return yScale(d[1]); // Y position based on Tree Height
76   })
77   .attr("r", 5) // Circle radius
78   .style("fill", "#1f77b4");
79
96 % No issues found L1: 1 Ch: 1 SPC CRLF
Ready Select Repository
```

Lab 4.1

Grades for Joshua Sanjay

loverboycoding/30045-Sub...

Task 3.2 D3 Adding Axis to

loverboycoding.github.io/30045-Submission-website/lab%204.1/lab%204.1.html

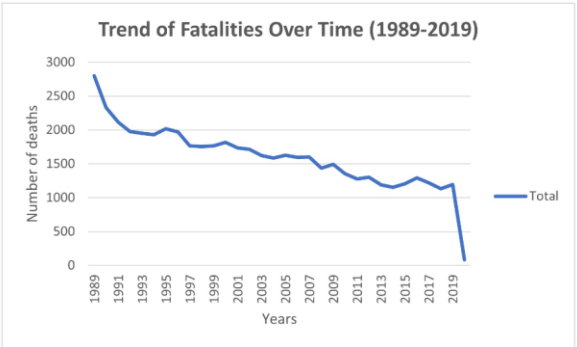
Assignment Submis... ChatGPT

Lab 4.1 Design Studio Activity

Overview

In this lab, you will be given a sample data set and asked to identify the different data and attribute types. You will also think about some questions about this data set that might be answered by a visualisation. Make a sketch of how you think your visualisation might look and add to this document.

Question 1 - What is the trend in fatalities over the years?



Year	Number of deaths
1989	2800
1991	2400
1993	2000
1995	2000
1997	1800
1999	1800
2001	1800
2003	1600
2005	1600
2007	1500
2009	1400
2011	1300
2013	1200
2015	1300
2017	1200
2019	100

Data used: Number of fatality column, Year column. The trend of car fatalities over the years.

```
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search Solution1
lab 4.1.html lab 3.2.html lab 3.1.html
37 <img {
38   max-width: 50%;
39   height: auto;
40 }
41 </style>
42 </head>
43 <body>
44 <!-- Back to Homepage Button -->
45 <a href="../../homepage.html" class="back-button">Back to Homepage</a>
46
47 <h1>Lab 4.1 Design Studio Activity</h1>
48
49 <h2>Overview</h2>
50 <p>In this lab, you will be given a sample data set and asked to identify the different data and attribute types. You will also think about some questions about this data set that might be
51
52 <p>Make a sketch of how you think your visualisation might look and add to this document.</p>
53
54 <h1>Question 1 - What is the trend in fatalities over the years?</h1>
55 <figure>
56 
57 <figcaption>Data used: Number of fatality column, Year column. The trend of car fatalities over the years.</figcaption>
58 </figure>
59
60 <h1>Question 2 - Which state has the highest percentage of accidents?</h1>
61 <figure>
62 
63 <figcaption>Data used: Crash ID column, State column. NSW has the highest percentage of Australia's state accidents.</figcaption>
64 </figure>
65
66 <h1>Question 3 - Which day of the week has the most number of accidents?</h1>
67 <figure>
68 
69 <figcaption>Data used: Crash ID column, Day of the week column. Saturday has the highest number of accidents.</figcaption>
70 </figure>
71
72 </body>
73 </html>
74
```