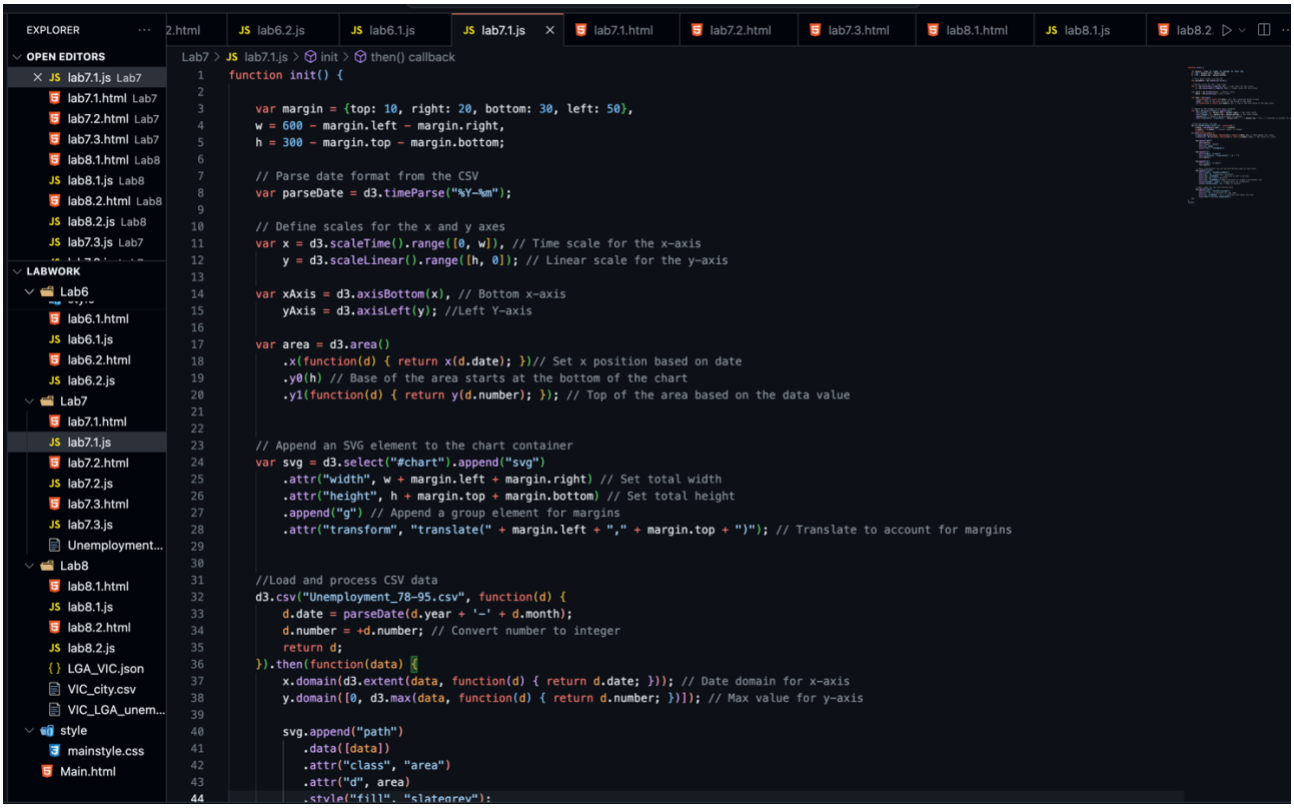
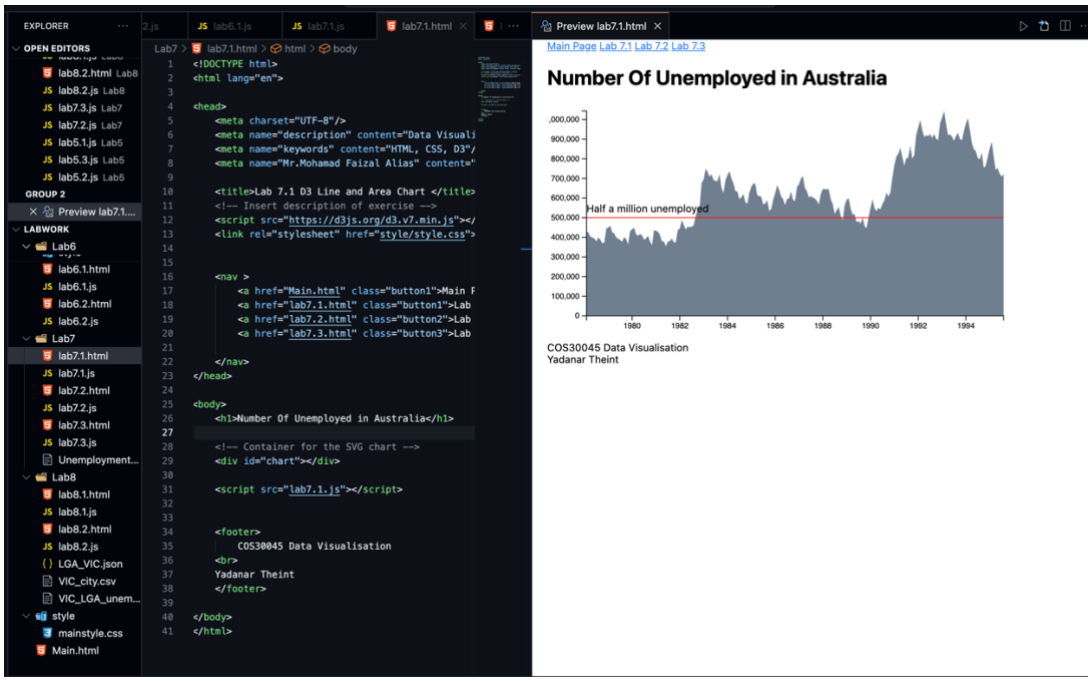
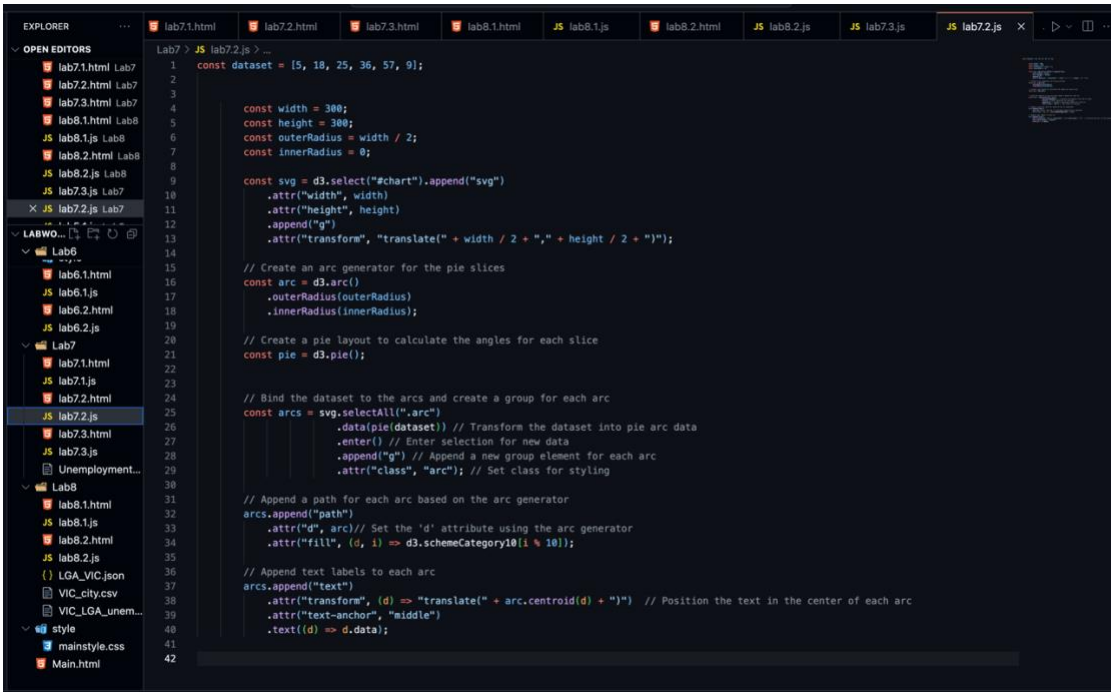
Name – Yadanar Theint
Student ID – 104992813
GitHub - https://github.com/Treasure-Mei-box/COS30045/tree/main
Hosting Website – http://yadanartheint.infinityfreeapp.com/Labwork/Lab1/Main.html

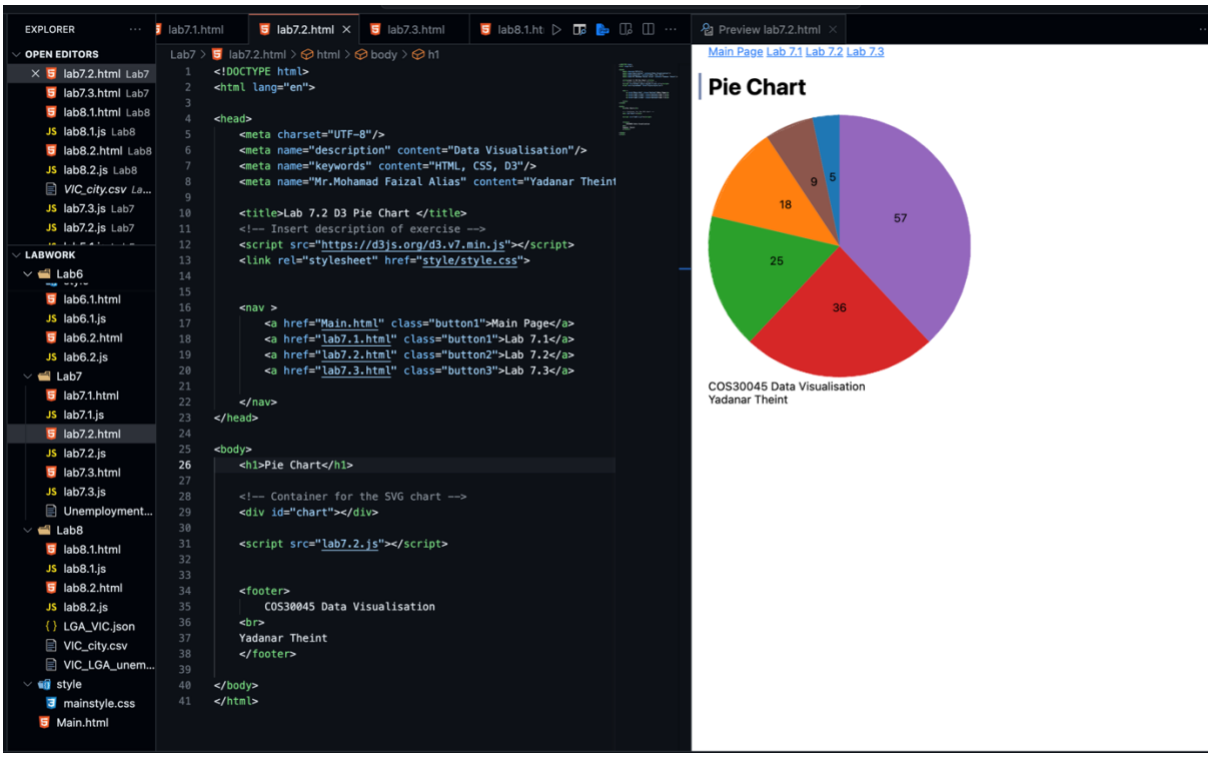
Lab 7.1




Main Page Lab 7.1 Lab 7.2 Lab 7.3
Number Of Unemployed in Australia
Half a million unemployed
COS30045 Data Visualisation
Yadanar Theint

Lab7.2




EXPLORER
OPEN EDITORS
lab7.2.html Lab7
lab7.3.html Lab7
lab8.1.html Lab8
lab8.1.js Lab8
lab8.2.html Lab8
lab8.2.js Lab8
VIC_city.csv La...
lab7.3.js Lab7
lab7.2.js Lab7
LABWORK
Lab6
lab6.1.html
lab6.1.js
lab6.2.html
lab6.2.js
Lab7
lab7.1.html
lab7.1.js
lab7.2.html
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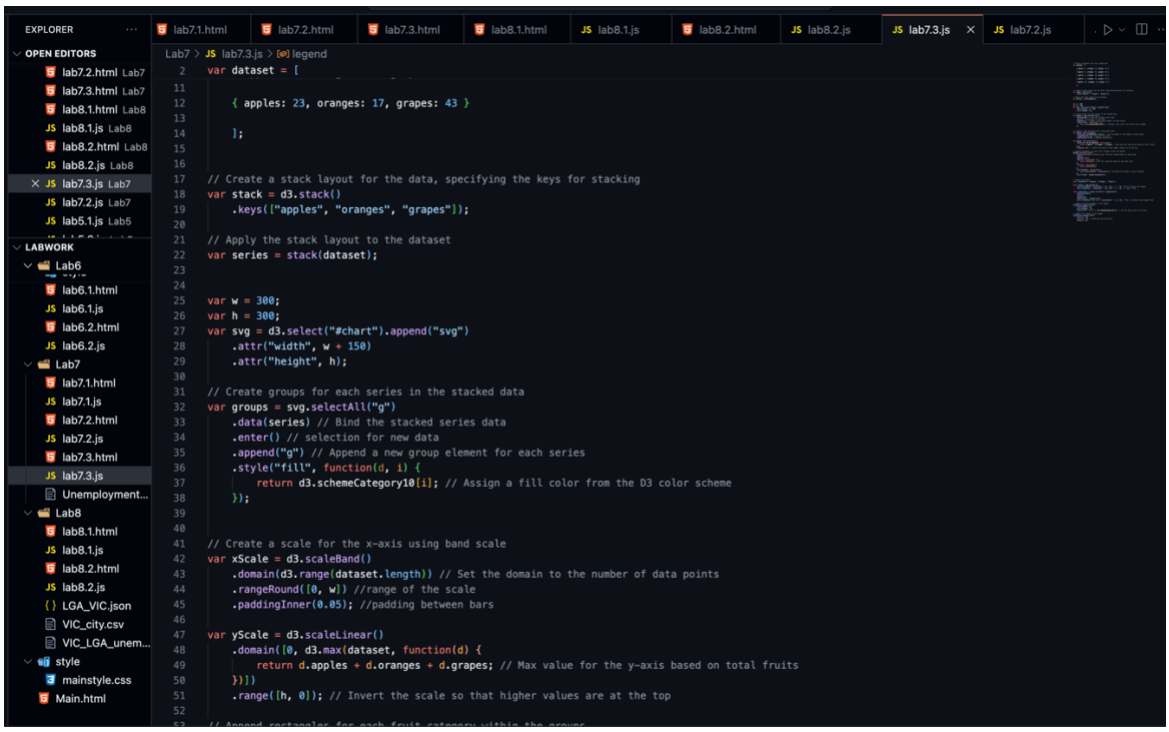
lab7.3.html
lab7.3.js
Unemployment...
Lab8
lab8.1.html
lab8.1.js
lab8.2.html
lab8.2.js
LGA_VIC.json
VIC_city.csv
VIC_LGA_unem...
style
mainstyle.css
Main.html
lab7.1.html
lab7.2.html
lab7.3.html
lab8.1.ht
Lab7 > lab7.2.html > html > body > h1
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8"/>
<meta name="description" content="Data Visualisation"/>
<meta name="keywords" content="HTML, CSS, D3"/>
<meta name="Mr.Mohamad Faizal Alias" content="Yadanar Theint
<title>Lab 7.2 D3 Pie Chart </title>
<!-- Insert description of exercise -->
<script src="https://d3js.org/d3.v7.min.js"></script>
<link rel="stylesheet" href="style/style.css">
<nav >
Main Page
Lab 7.1
Lab 7.2
Lab 7.3
</nav>
</head>
<body>
<h1>Pie Chart</h1>
<!-- Container for the SVG chart -->

<script src="lab7.2.js"></script>
<footer>
COS30045 Data Visualisation

Yadanar Theint
</footer>
</body>
</html>
Preview lab7.2.html
Main Page Lab 7.1 Lab 7.2 Lab 7.3
Pie Chart
57
36
25
18
9
5
COS30045 Data Visualisation
Yadanar Theint

Lab7.3


EXPLORER
OPEN EDITORS
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lab7.3.html Lab7
lab8.1.html Lab8
lab8.1.js Lab8
lab8.2.html Lab8
lab8.2.js Lab8
lab7.3.js Lab7
lab7.2.js Lab7
lab5.1.js Lab5
LABWORK
Lab6
lab6.1.html
lab6.1.js
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lab6.2.js
Lab7
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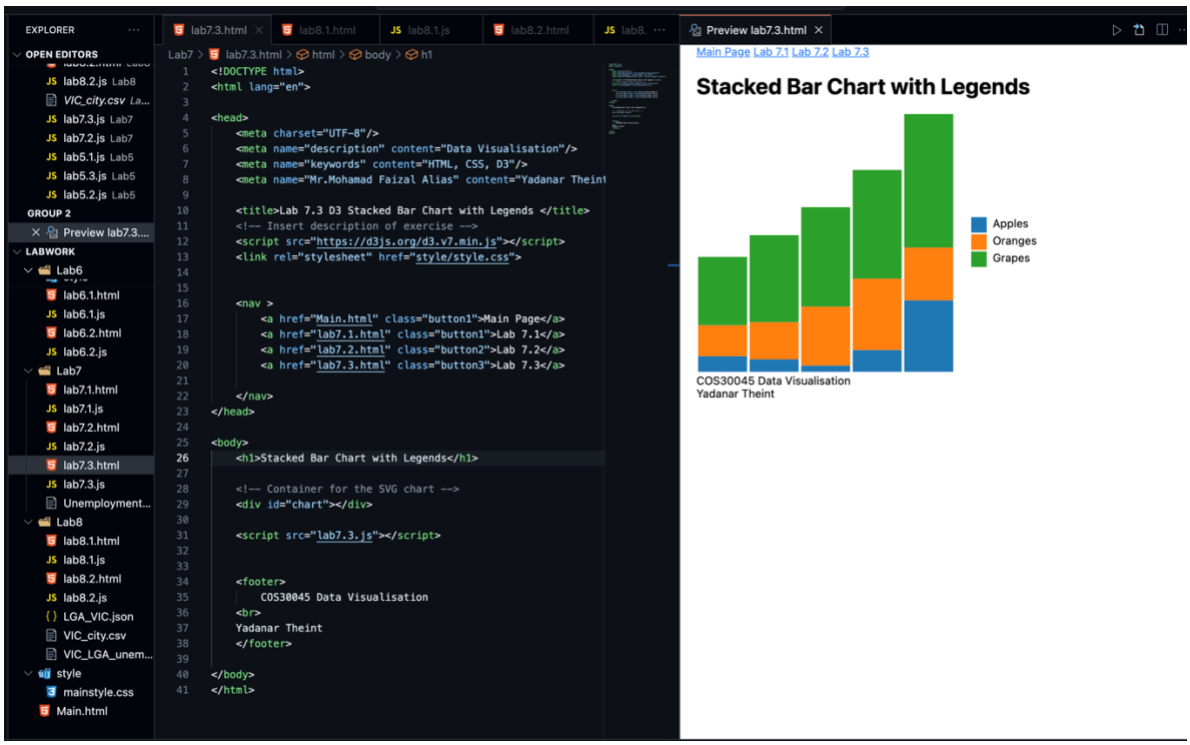
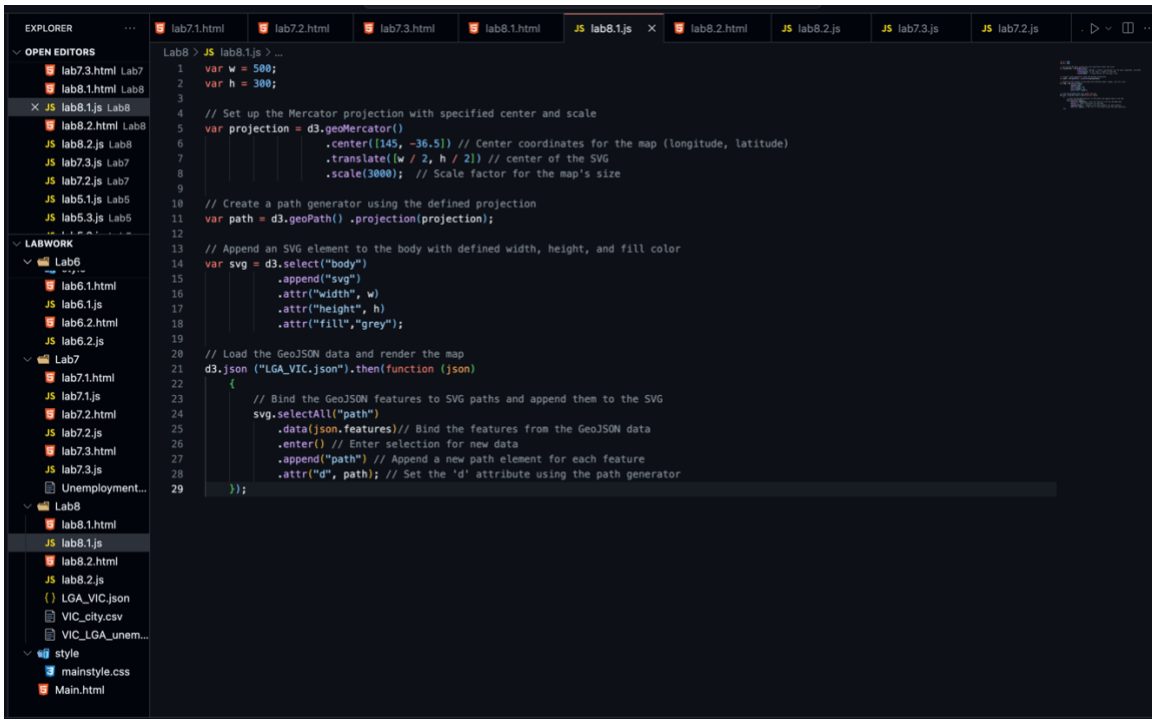
lab7.3.js
Unemployment...
Lab8
lab8.1.html
lab8.1.js
lab8.2.html
lab8.2.js
LGA_VIC.json
VIC_city.csv
VIC_LGA_unem...
style
mainstyle.css
Main.html
lab7.1.html
lab7.2.html
lab7.3.html
lab8.1.html
lab8.1.js
lab8.2.html
lab8.2.js
lab7.3.js
lab7.2.js
Lab7 > lab7.3.js > legend
var dataset = [
{ apples: 23, oranges: 17, grapes: 43 }
];
// Create a stack layout for the data, specifying the keys for stacking
var stack = d3.stack()
.keys(["apples", "oranges", "grapes"]);
// Apply the stack layout to the dataset
var series = stack(dataset);
var w = 300;
var h = 300;
var svg = d3.select("#chart").append("svg")
.attr("width", w + 150)
.attr("height", h);
// Create groups for each series in the stacked data
var groups = svg.selectAll("g")
.data(series) // Bind the stacked series data
.enter() // selection for new data
.append("g") // Append a new group element for each series
.style("fill", function(d, i) {
return d3.schemeCategory10[i]; // Assign a fill color from the D3 color scheme
});
// Create a scale for the x-axis using band scale
var xScale = d3.scaleBand()
.domain(d3.range(dataset.length)) // Set the domain to the number of data points
.rangeRound([0, w]) //range of the scale
.paddingInner(0.05); //padding between bars
var yScale = d3.scaleLinear()
.domain([0, d3.max(dataset, function(d) {
return d.apples + d.oranges + d.grapes; // Max value for the y-axis based on total fruits
})])
.range([h, 0]); // Invert the scale so that higher values are at the top

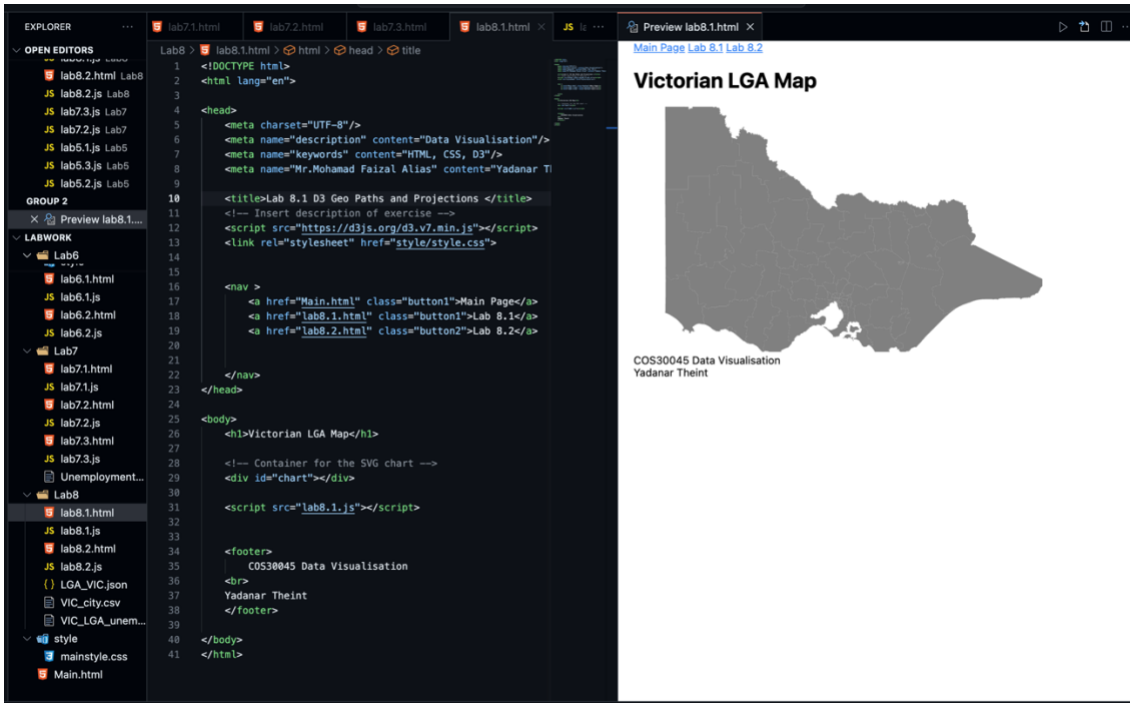

EXPLORER
OPEN EDITORS
lab7.3.html
lab8.1.html
lab8.1.js
lab8.2.html
Preview lab7.3.html
Lab7 > lab7.3.html > html > body > h1
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8"/>
<meta name="description" content="Data Visualisation"/>
<meta name="keywords" content="HTML, CSS, D3"/>
<meta name="Mr.Mohamad Faizal Alias" content="Yadanar Theint
<title>Lab 7.3 D3 Stacked Bar Chart with Legends </title>
<!-- Insert description of exercise -->
<script src="https://d3js.org/d3.v7.min.js"></script>
<link rel="stylesheet" href="style/style.css">
<nav >
Main Page
Lab 7.1
Lab 7.2
Lab 7.3
</nav>
</head>
<body>
<h1>Stacked Bar Chart with Legends</h1>
<!-- Container for the SVG chart -->

<script src="lab7.3.js"></script>
<footer>
COS30045 Data Visualisation

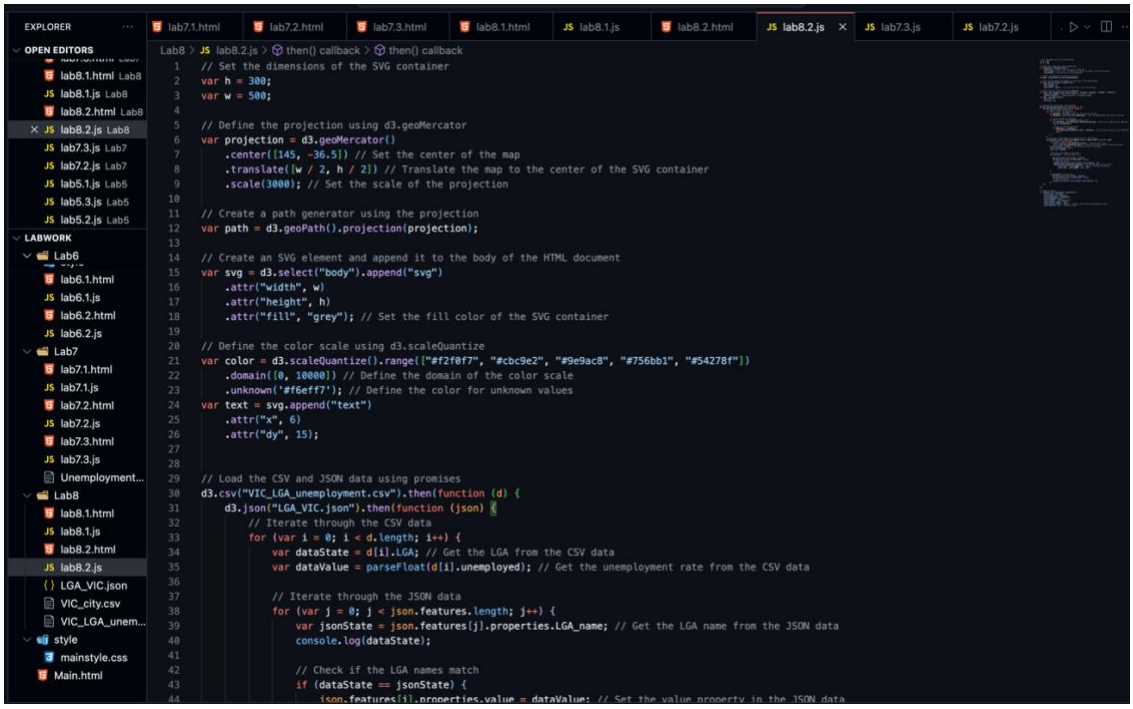
Yadanar Theint
</footer>
</body>
</html>
Main Page Lab 7.1 Lab 7.2 Lab 7.3
Stacked Bar Chart with Legends
Apples
Oranges
Grapes
COS30045 Data Visualisation
Yadanar Theint

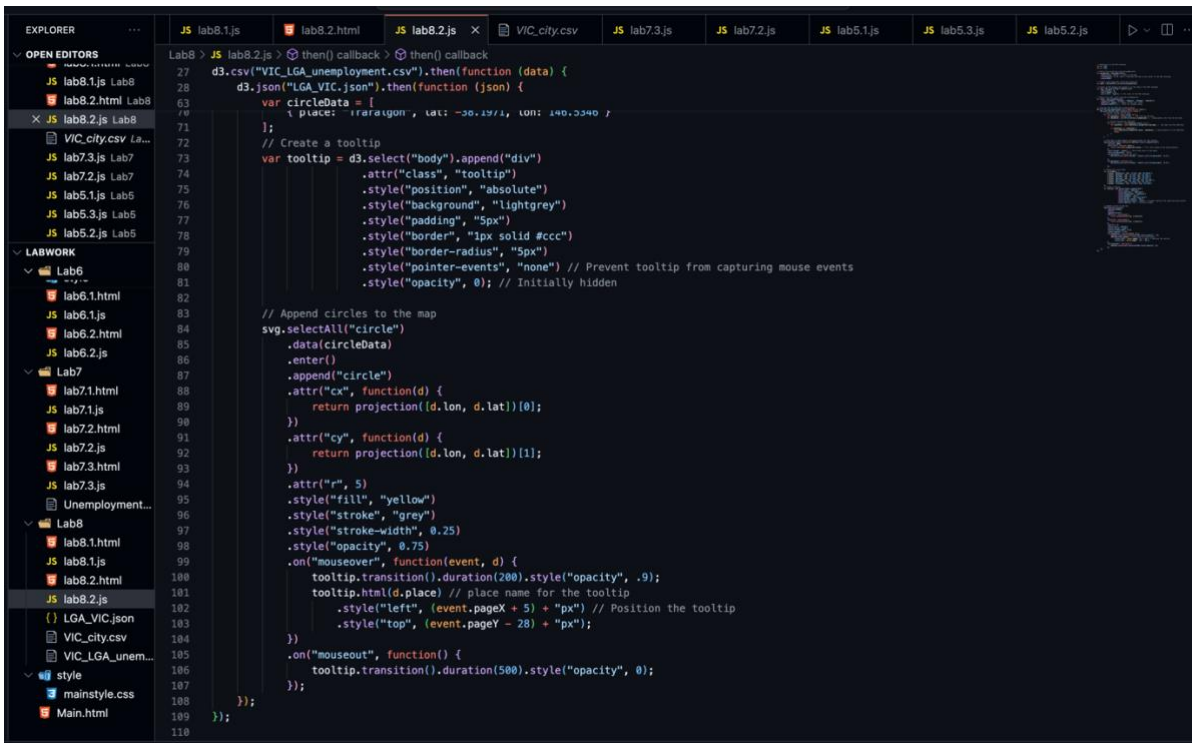
Lab 8.1


EXPLORER
OPEN EDITORS
lab7.1.html
lab7.2.html
lab7.3.html
lab8.1.html
lab8.1.js
lab8.2.html
lab8.2.js
lab7.3.js
lab7.2.js
Lab8 > lab8.1.js > ...
var w = 500;
var h = 300;
// Set up the Mercator projection with specified center and scale
var projection = d3.geoMercator()
.center([145, -36.5]) // Center coordinates for the map (longitude, latitude)
.translate([w / 2, h / 2]) // center of the SVG
.scale(3000); // Scale factor for the map's size
// Create a path generator using the defined projection
var path = d3.geoPath() .projection(projection);
// Append an SVG element to the body with defined width, height, and fill color
var svg = d3.select("body")
.append("svg")
.attr("width", w)
.attr("height", h)
.attr("fill","grey");
// Load the GeoJSON data and render the map
d3.json ("LGA_VIC.json").then(function (json)
{
// Bind the GeoJSON features to SVG paths and append them to the SVG
svg.selectAll("path")
.data(json.features)// Bind the features from the GeoJSON data
.enter() // Enter selection for new data
.append("path") // Append a new path element for each feature
.attr("d", path); // Set the 'd' attribute using the path generator
});


Preview lab8.1.html
Main Page Lab 8.1 Lab 8.2
Victorian LGA Map
COS30045 Data Visualisation
Yadanar Theint

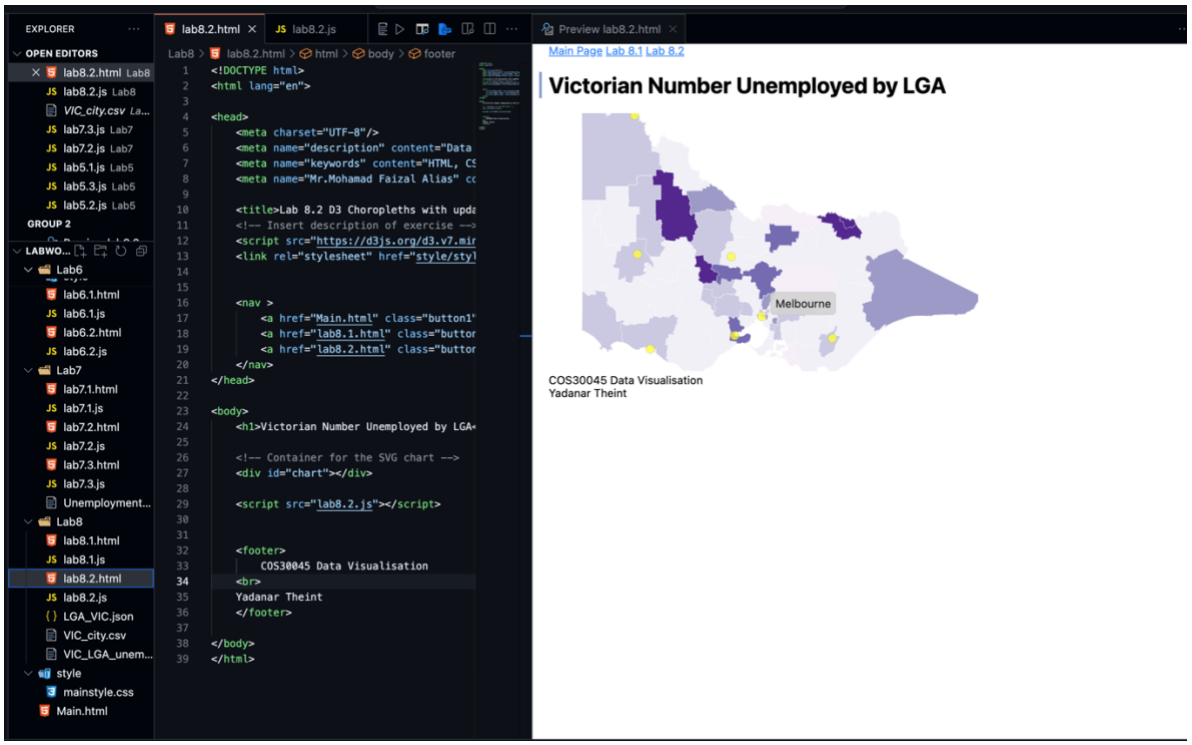
Lab8.2





```
d3.csv("VIC_LGA_unemployment.csv").then(function (data) {
    d3.json("LGA_VIC.json").then(function (json) {
        var circleData = [
            { place: "Traralgon", lat: -38.1971, lon: 146.5346 }
        ];
        // Create a tooltip
        var tooltip = d3.select("body").append("div")
                        .attr("class", "tooltip")
                        .style("position", "absolute")
                        .style("background", "lightgrey")
                        .style("padding", "5px")
                        .style("border", "1px solid #ccc")
                        .style("border-radius", "5px")
                        .style("pointer-events", "none") // Prevent tooltip from capturing mouse events
                        .style("opacity", 0); // Initially hidden

        // Append circles to the map
        svg.selectAll("circle")
            .data(circleData)
            .enter()
            .append("circle")
            .attr("cx", function(d) {
                return projection([d.lon, d.lat])[0];
            })
            .attr("cy", function(d) {
                return projection([d.lon, d.lat])[1];
            })
            .attr("r", 5)
            .style("fill", "yellow")
            .style("stroke", "grey")
            .style("stroke-width", 0.25)
            .style("opacity", 0.75)
            .on("mouseover", function(event, d) {
                tooltip.transition().duration(200).style("opacity", .9);
                tooltip.html(d.place) // place name for the tooltip
                    .style("left", (event.pageX + 5) + "px") // Position the tooltip
                    .style("top", (event.pageY - 28) + "px");
            })
            .on("mouseout", function() {
                tooltip.transition().duration(500).style("opacity", 0);
            });
    });
});
```



```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8"/>
    <meta name="description" content="Data
    <meta name="keywords" content="HTML, CS
    <meta name="Mr.Mohamad Faizal Alias" cc

    <title>Lab 8.2 D3 Choropleths with upda
    <!-- Insert description of exercise -->
    <script src="https://d3js.org/d3.v7.mir
    <link rel="stylesheet" href="style/styl


    <nav >
        <a href="Main.html" class="button1"
        <a href="lab8.1.html" class="buttor
        <a href="lab8.2.html" class="buttor
    </nav>
</head>

<body>
    <h1>Victorian Number Unemployed by LGA<

    <!-- Container for the SVG chart -->
    <div id="chart"></div>

    <script src="lab8.2.js"></script>


    <footer>
        COS30045 Data Visualisation
    <br>
    Yadanar Theint
    </footer>

</body>
</html>
```

Main Page Lab 8.1 Lab 8.2

Victorian Number Unemployed by LGA

COS30045 Data Visualisation
Yadanar Theint