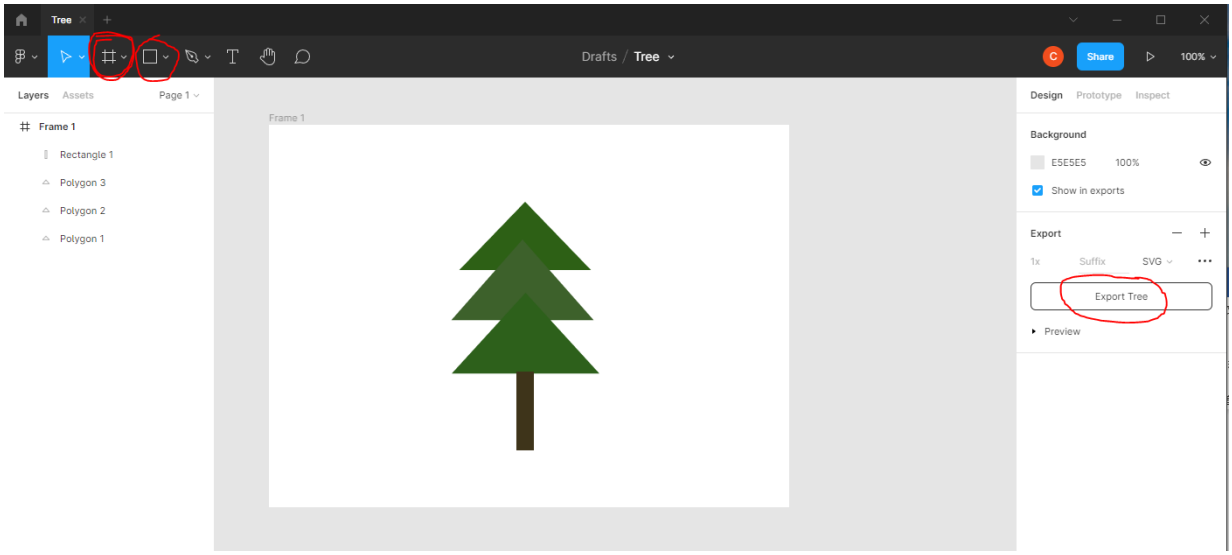
CSCE 5320 Scientific Data Visualization

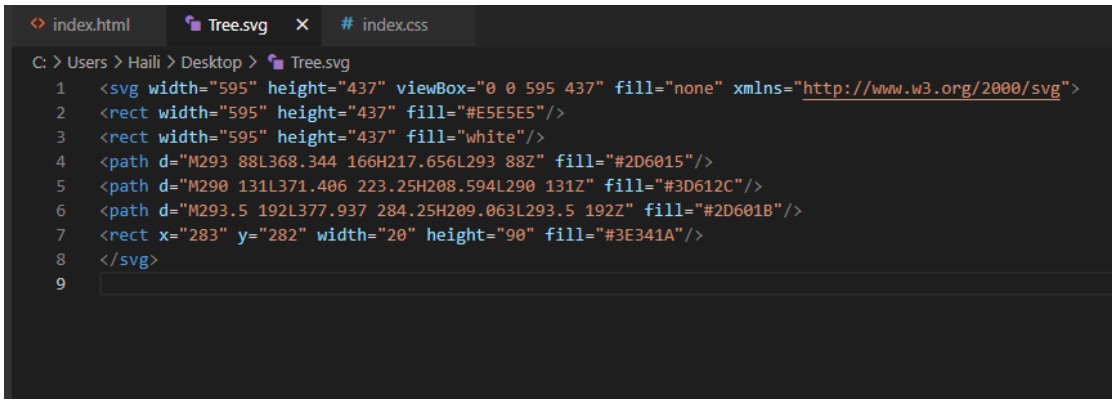
Introduction to Web Technologies

Tutorial

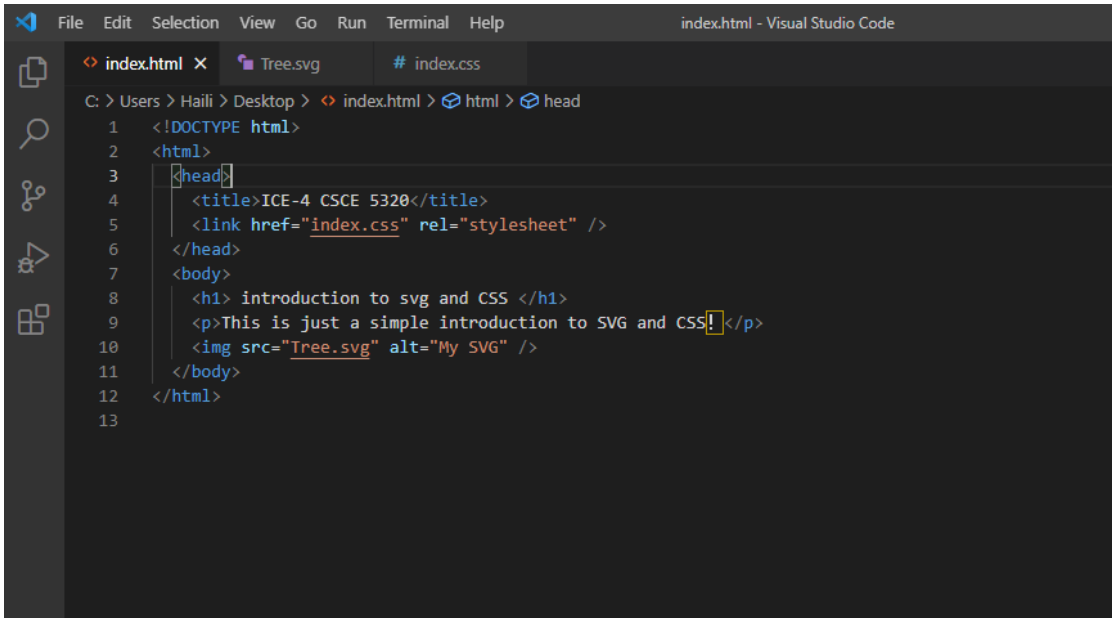
Create a SVG File by using Figma:
Create your own picture and download the picture as SVG (step 1)

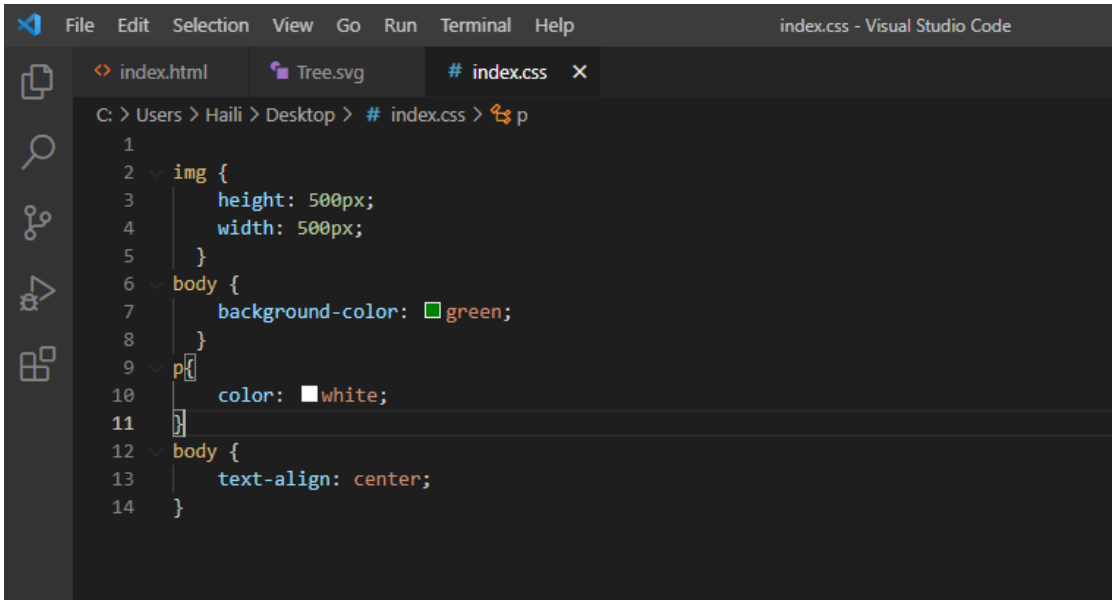


And you will get the svg file like this:

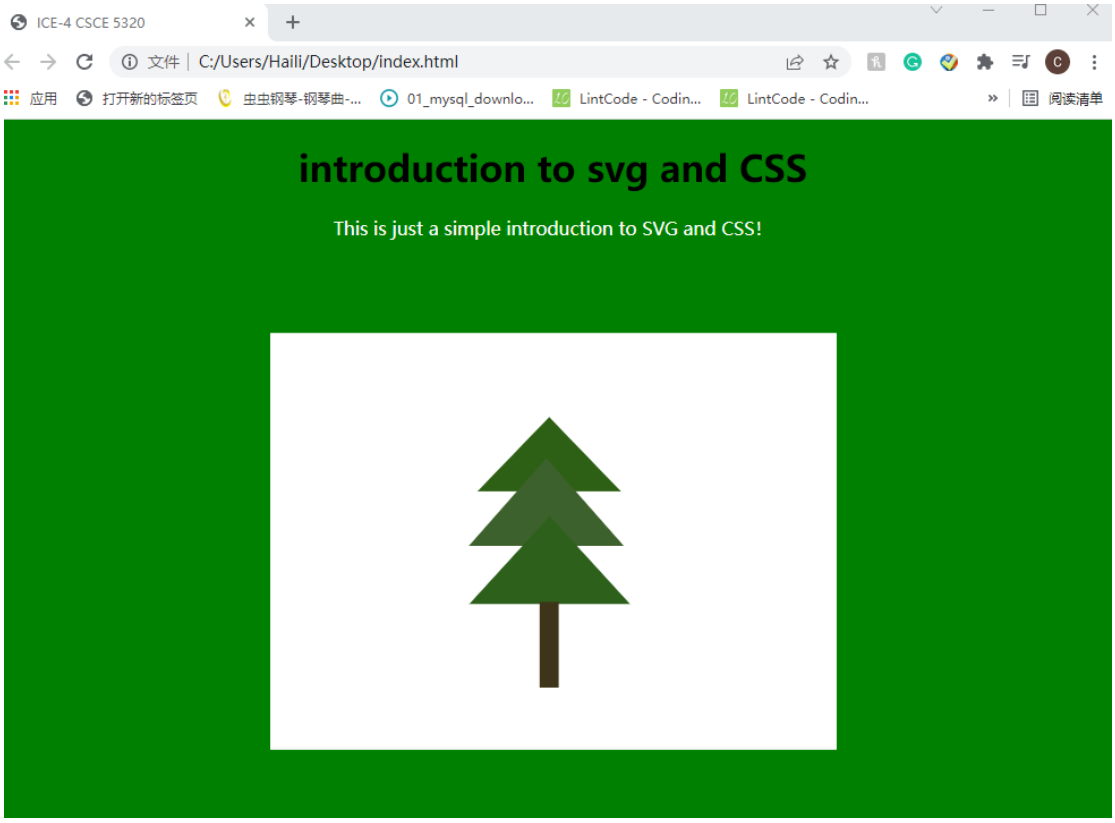


Create your own html file and css file in VS code/ any code editing app you prefer, Embed your svg file and css file into the html file. (step2)
For example:

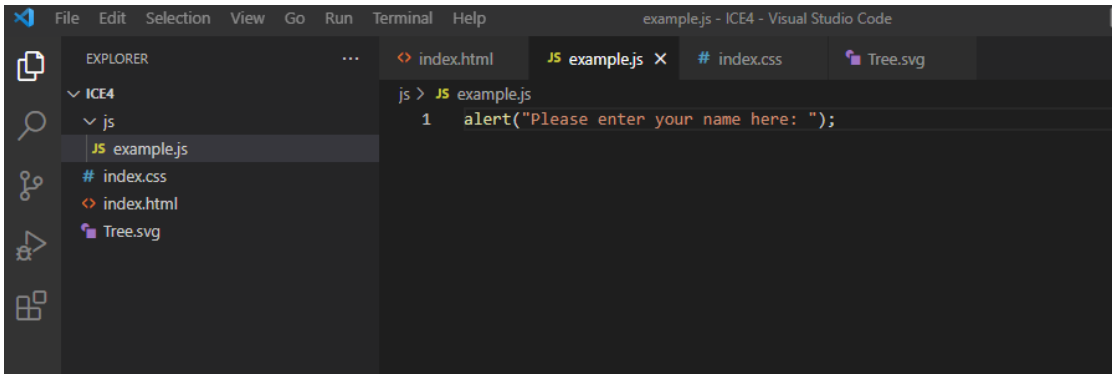




Example of Final version for the webpage:



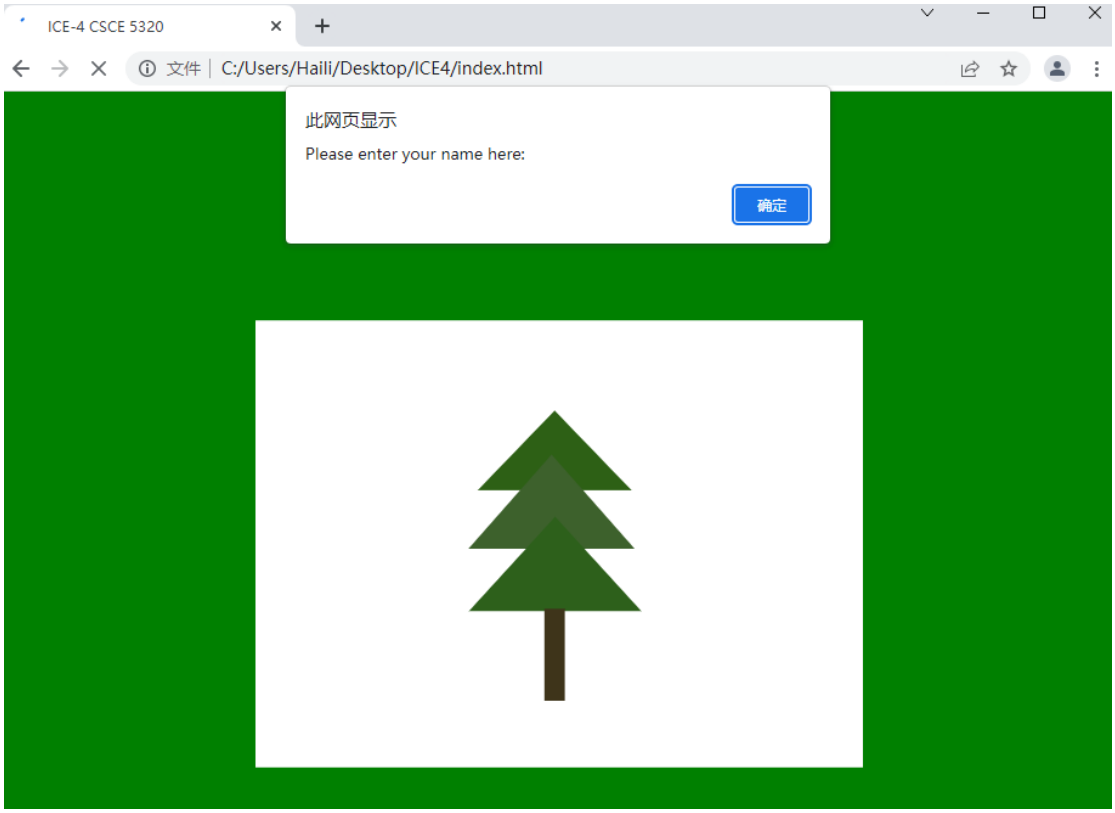
Step 3 : Introduction to JavaScript:



Add the following code into the body of html:

```
<script src = "js/example.js"></script>
```

Then when you run the code, so the alert should be there:



- **Introduction to VizHub and make a face in D3.js**

Log in to https://vizhub.com/, choose a face project from most focked/ most popular, Click open Editor and start to make your own face by editing the code.

Resource needs for D3:

https://d3js.org/

click Documentation, choose API Reference, find the Shapes package at:

https://github.com/d3/d3/blob/main/API.md#shapes-d3-shape

click Arcs to generate the mouth for a smiling face.

d3.arc() · Source

Constructs a new arc generator with the default settings.

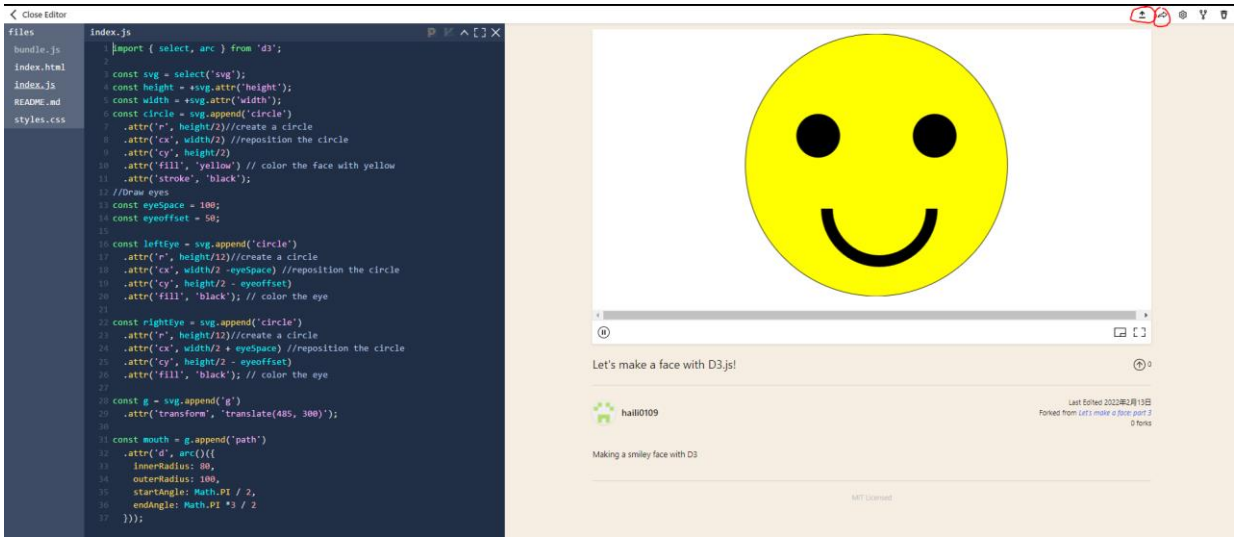
arc(*arguments*...) · Source

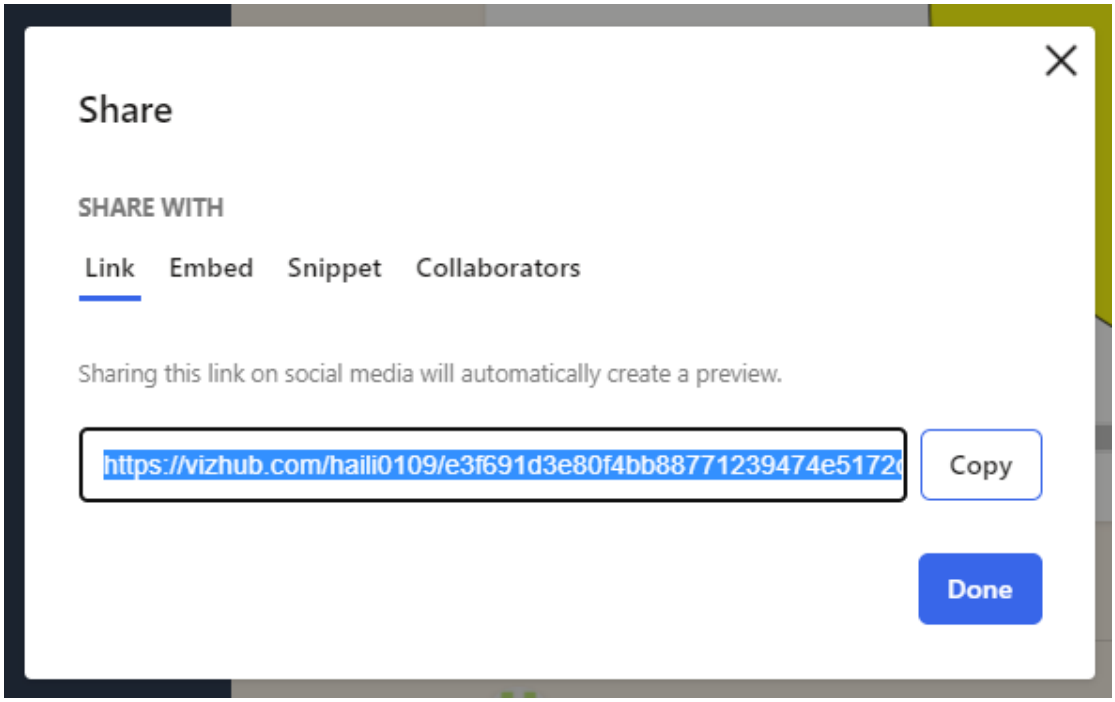
Generates an arc for the given *arguments*. The *arguments* are arbitrary; they are simply propagated to the arc generator's accessor functions along with the `this` object. For example, with the default settings, an object with radii and angles is expected:

```
const arc = d3.arc();

arc({
  innerRadius: 0,
  outerRadius: 100,
  startAngle: 0,
  endAngle: Math.PI / 2
}); // "M0,-100A100,100,0,0,1,100,0L0,0Z"
```

Example of a smiley face:





Copy the link and paste it on your word document.