

Activity 6.b

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Task 1 : Plotting a bar chart

Step 1 : uploading and creating a public gist file with the given dataset file.

The screenshot shows a GitHub Gist page with a large dataset table. The table has columns labeled A through Z. The first few rows of data are as follows:

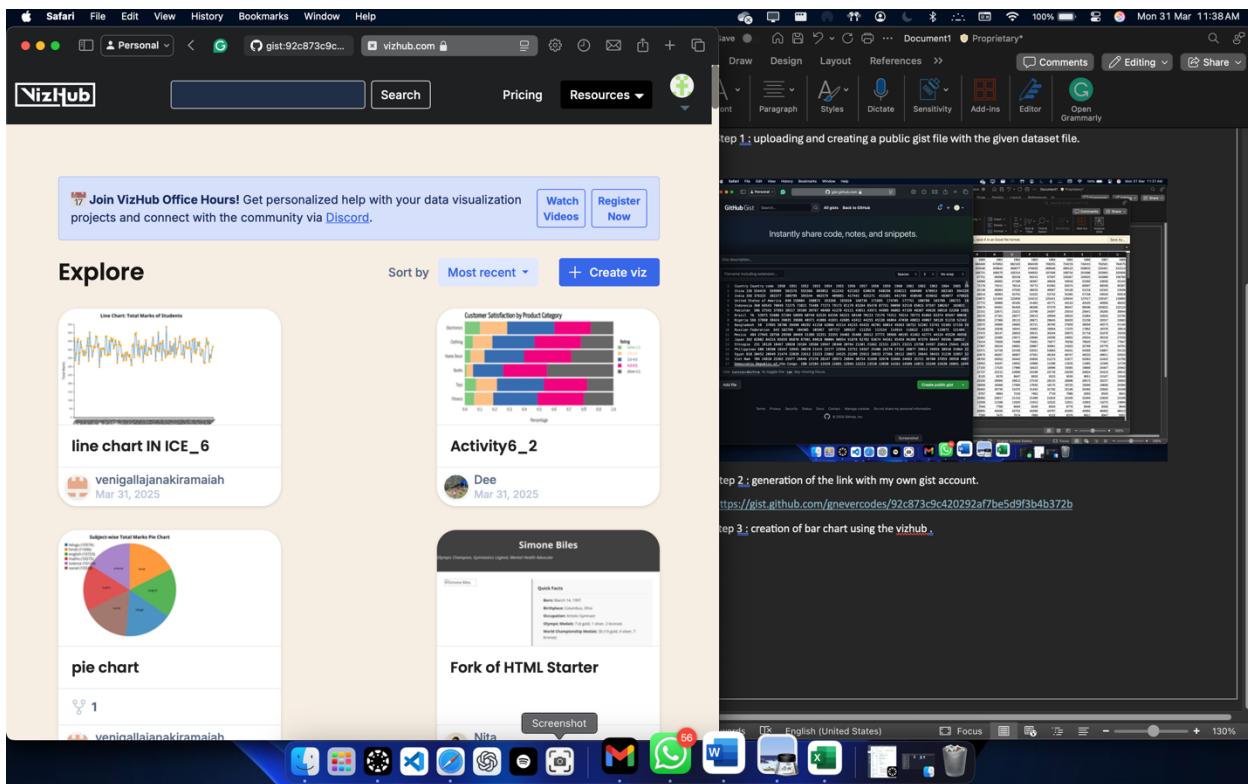
1	Country	Country code	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968																
2	China	156	554419	569909	582576	593366	603052	612242	621363	630678	640296	658213	668408	678953	682183	694339	706583	718103	720539	724219	742415	762381	784075														
3	India	556	376325	382377	388799	395444	402579	409881	417443	425271	433381	441799	458548	459642	469078	478826	490548	496042	498077	498848	499123	509632	520401	531314													
4	United States of America	841	158886	16887	17038	163289	159191	168746	174745	177778	180188	183786	186178	189121	192310	195242	198640	201052	203850	205806	207805	209805	211805														
5	Indonesia	368	695109	704849	722024	7504	77273	7913	79179	79284	79457	7751	98689	95518	95015	97836	980267	981255	982243	983231	984220	985210	986200	987205													
6	United Kingdom	105	57242	57842	58517	59189	59719	60406	61270	62111	63011	63971	44689	50024	51218	52242	54138	46964	47016	48001	50161	51218	52242	533656													
7	Brazil	76	53978	55566	57284	58099	60765	62534	64356	66221	68140	70123	72179	74311	76514	78773	81063	83374	85097	88836	89012	89218	89424														
8	Nigeria	566	37864	38424	39835	39866	40371	41086	41831	42705	43412	44255	45138	46464	47839	49833	49867	50128	51218	52342	53742	55385	57158	59034	60918												
9	Bangladesh	58	37895	38706	39494	40232	41158	42886	43114	44233	45435	46701	48014	49363	50752	52282	53742	55385	57158	59	119872	121404	122404	123404													
10	Russian Federation	643	182799	184305	185967	187727	189537	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354	111354														
11	Mexico	484	27945	28755	29598	30469	31380	3233	33355	34402	35484	36612	37772	38966	40186	41462	42773	44124	45528	46956	47472	48817	49531	50244	50973	51718	52478	53356									
12	Japan	392	82882	84316	85659	86870	87981	89918	90894	9954	91878	92782	93674	94561	95459	96389	97379	98447	99596	100822	101214	101602	102002	102393	102783	103173	103563	103953									
13	Ethiopia	231	18128	18467	18820	19184	19568	19947	20348	20764	21201	21662	22151	22671	23221	23798	24397	25014	25641	26269	26844	27429	28005	28581	29157	29733	30309	30885	31461								
14	Philippines	608	18588	19247	19495	20670	21415	22177	22956	23752	24567	25486	26278	27161	28077	29013	29959	30918	31864	32	22151	22671	23221	23798	24397	25014	25641	26269	26844								
15	Egypt	618	28452	29049	21474	22028	22612	23232	23862	24525	25209	26363	27366	28112	28871	29645	30433	31238	32057	32857	33750	34324	35024	35705	36385	37065	37745	38425	39105	39785							
16	Viet Nam	784	24810	25365	25977	26646	27378	28147	28973	29944	30754	31698	32670	33666	34683	35721	36786	37859	38958	4087	10052	10347	10685	10968	11285	11635	11988	12348	12726								
17	Democratic Republic of the Congo	180	12184	12429	12681	12944	13223	13518	13838	14161	14589	14872	15248	15638	16041	1646	17100	17525	17986	18423	1896	19385	19838	20347	20842	21337	21832	22327	22822	23317	23812	24308	24803	25264	256318	260318	267033

Step 2 : generation of the link with my own gist account.

<https://gist.github.com/gnevercodes/92c873c9c420292af7be5d9f3b4b372b>

step 3 : creation of bar chart using the vizhub .

step 4 : login using my own github account.



Step 5 : searching the most forked ones.

Safari File Edit View History Bookmarks Window Help

gist:92c873c9c... vizhub.com/?sort=mostFo Watch Videos Register Now

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Explore Sort by Most forked + Create viz

Hello HTML!

HTML Starter

11.3K 207

Curran Kelleher Jan 04, 2024

Hello VizHub!

Hello VizHub

7.4K 38

Curran Kelleher Mar 20, 2025

Hello HTML

D3 Starter

1.8K 36

Curran Kelleher Mar 21, 2025 Screenshot

56

Safari File Edit View History Bookmarks Window Help

Personal gist:92c873c9c... vizhub.com/curran/86a75

VizHub Search Pricing Resources

Edit with AI

Hello VizHub!

Hello VizHub

Curran Kelleher

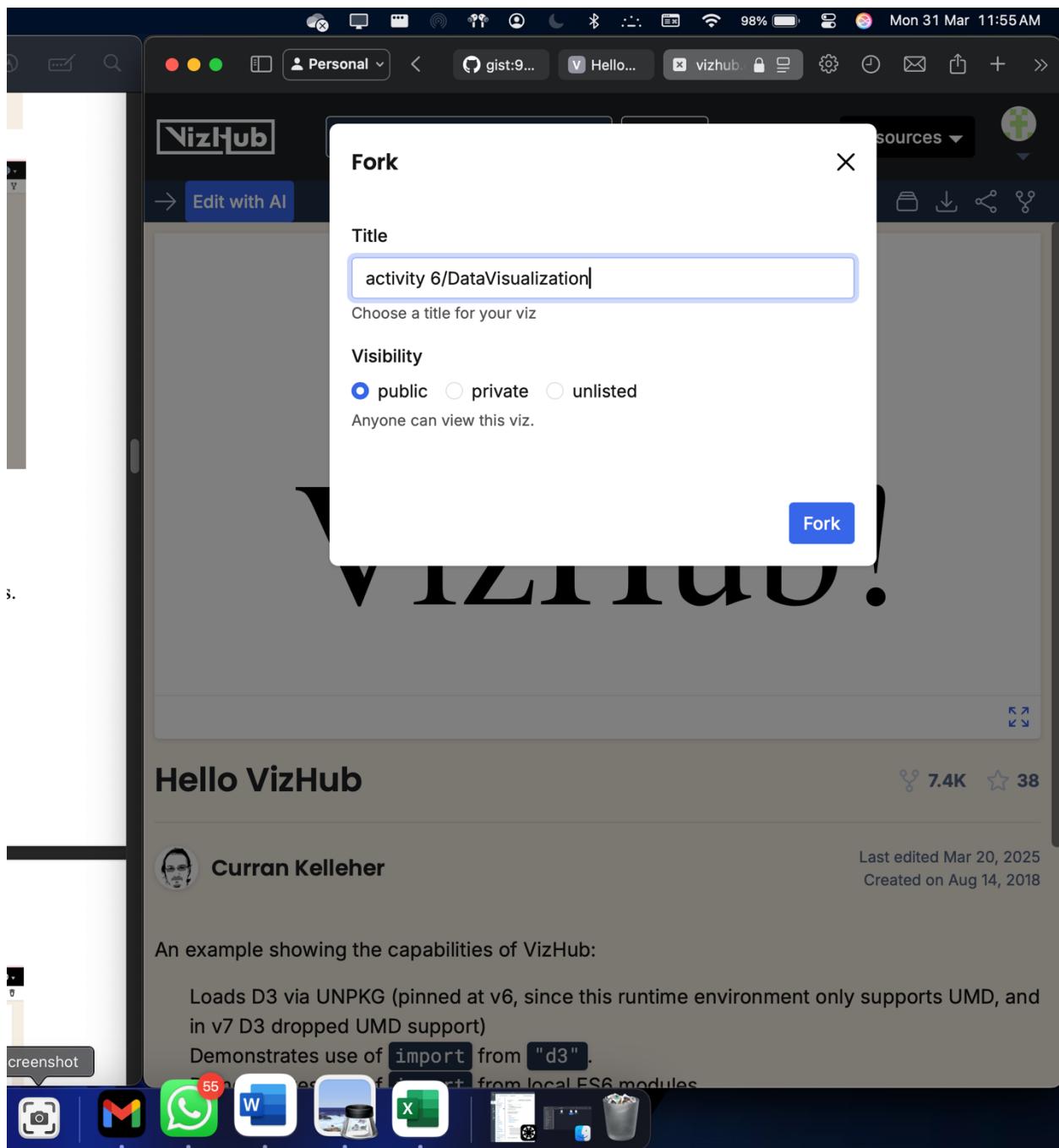
Last edited Mar 20, 2025
Created on Aug 14, 2018

An example showing the capabilities of VizHub:

Loads D3 via UNPKG (pinned at v6, since this runtime environment only supports v6 and in v7 D3)

Screenshot and in v7 D3

Step 6 : selecting the most forked ones.



Question 1 :

Creation of a bar chart using dataset given

The screenshot shows a code editor interface with multiple tabs open. The active tab is 'index.html' which contains the following code:

```

1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Activity 7 - Population Bar Chart</title>
5     <link href="https://fonts.googleapis.com/css?family=Poppins&display=swap" rel="stylesheet">
6   </head>
7   <style>
8     body {
9       margin: 0;
10      font-family: 'Poppins', serif;
11      padding: 20px;
12    }
13    .tick_line {
14      stroke: #8c8bbb;
15      stroke-opacity: 0.3;
16    }
17    .tick_text {
18      fill: #635f5d;
19    }
20    .mark {
21      fill: #90ee90;
22    }
23    .axis-label {
24      font-size: 1.5em;
25      fill: #635f5d;
26    }
27    .container {
28      max-width: 960px;
29      margin: 0 auto;
30    }
31    #chart {
32      overflow: visible;
33    }
34  </style>
35  </head>
36  <body>
37    <div>
38      <h3>Population by Country (2020)</h3>
39      <div>
40        <img alt="Horizontal bar chart showing population by country for 20 countries. China has the highest population, followed by India, United States of America, Indonesia, and Brazil." data-bbox="560 160 850 270"/>
41        <table border="1">
42          <thead>
43            <tr>
44              <th>Country</th>
45              <th>Population (2020)</th>
46            </tr>
47          </thead>
48          <tbody>
49            <tr><td>China</td><td>1.41 billion</td></tr>
50            <tr><td>India</td><td>1.37 billion</td></tr>
51            <tr><td>United States of America</td><td>330 million</td></tr>
52            <tr><td>Indonesia</td><td>270 million</td></tr>
53            <tr><td>Brazil</td><td>220 million</td></tr>
54            <tr><td>Nigeria</td><td>210 million</td></tr>
55            <tr><td>Bangladesh</td><td>160 million</td></tr>
56            <tr><td>Russia</td><td>145 million</td></tr>
57            <tr><td>Mexico</td><td>130 million</td></tr>
58            <tr><td>Pakistan</td><td>120 million</td></tr>
59            <tr><td>Philippines</td><td>110 million</td></tr>
60            <tr><td>Egypt</td><td>100 million</td></tr>
61            <tr><td>Viet Nam</td><td>95 million</td></tr>
62            <tr><td>Democratic Republic of the Congo</td><td>80 million</td></tr>
63            <tr><td>Iran (Islamic Republic of)</td><td>80 million</td></tr>
64            <tr><td>Germany</td><td>80 million</td></tr>
65            <tr><td>Thailand</td><td>70 million</td></tr>
66            <tr><td>United Kingdom</td><td>70 million</td></tr>
67            <tr><td>France</td><td>70 million</td></tr>
68          </tbody>
69        </table>
70      </div>
71    </div>
72  </body>
73</html>

```

The right side of the screen shows a visualization titled 'Population by Country (2020)' with a bar chart and a corresponding table below it. The chart shows the top 20 countries by population. The table provides the exact population numbers for each country.

Created it using the forking of hello vizhub one.

Vizhub link for Task 1 : question 1 for 20 countries.

<https://vizhub.com/gnevercodes/613ce4c32e0c4949bd93d17a24363675?edit=files&file=index.html&tabs=AxisBottom.js%7EAxisLeft.js%7EMarks.js%7EuseData.js%7Eindex.html>

question : for creating 10 countries

this is the bar chart I had done

<https://vizhub.com/gnevercodes/ded0788d5a92462da8a2d76295a51c31?edit=files&file=index.js&tabs=AxisBottom.js%7EAxisLeft.js%7EMarks.js%7EuseData.js%7Eindex.js>

The screenshot shows a VizHub interface with a code editor on the left and a visualization on the right.

Code Editor:

```

1 import React from 'react';
2 import ReactDOM from 'react-dom';
3 import {
4   csv,
5   scaleBand,
6   scaleLinear,
7   max,
8   format,
9 } from 'd3';
10 import { useData } from './useData';
11 import { AxisBottom } from './AxisBottom';
12 import { AxisLeft } from './AxisLeft';
13 import { Marks } from './Marks';
14
15 const width = 1000; // Increased width
16 const height = 500;
17 const margin = {
18   top: 20,
19   right: 20,
20   bottom: 65,
21   left: 220,
22 };
23 const xAxiLabelOffset = 50;
24
25 const App = () => {
26   const data = useData();
27
28   if (!data) {
29     return <pre>Loading...</pre>;
30   }
31
32   const top10Countries2000 = data
33     .map(d => ({
34       ...d,
35       Population: +d['2000'],
36     }));
37
38   return (
39     <div>
40       <h3>Top 10 Countries by Population in 2000</h3>
41       <div>
42         <AxisBottom data={top10Countries2000} />
43         <AxisLeft data={top10Countries2000} />
44         <Marks data={top10Countries2000} />
45       </div>
46     </div>
47   );
48 }

```

Visualization:

A horizontal bar chart titled "Top 10 Countries by Population in 2000". The chart lists the top 10 countries by population in 2000, ordered by population from highest to lowest. The bars are black.

Country	Population (2000)
China	150
India	92
United States of America	84
Indonesia	36
Pakistan	58
Brazil	76
Nigeria	56
Iran (Islamic Republic of)	50
Russian Federation	64
Mexico	48
Japan	32
Ethiopia	23
Philippines	60
Egypt	81
Vietnam	70
Democratic Republic of Congo	18
Turkey	72
Iran (Islamic Republic of)	36
Germany	27
Thailand	76
United Kingdom	60
France	59
Italy	29
United Republic of Tanzania	83
South Africa	71
Myanmar	104
Kenya	40
Republic of Korea	41
Colombia	17
Saudi Arabia	73
Liberia	80
Argentina	32
Algeria	12
Sudan	72
Ukraine	80
Iran (Islamic Republic of)	36

Task 1 question 1

0 Forks 0 Stars

Last edited Apr 05, 2025
Created on Apr 05, 2025
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Understanding :

I here learnt several important things

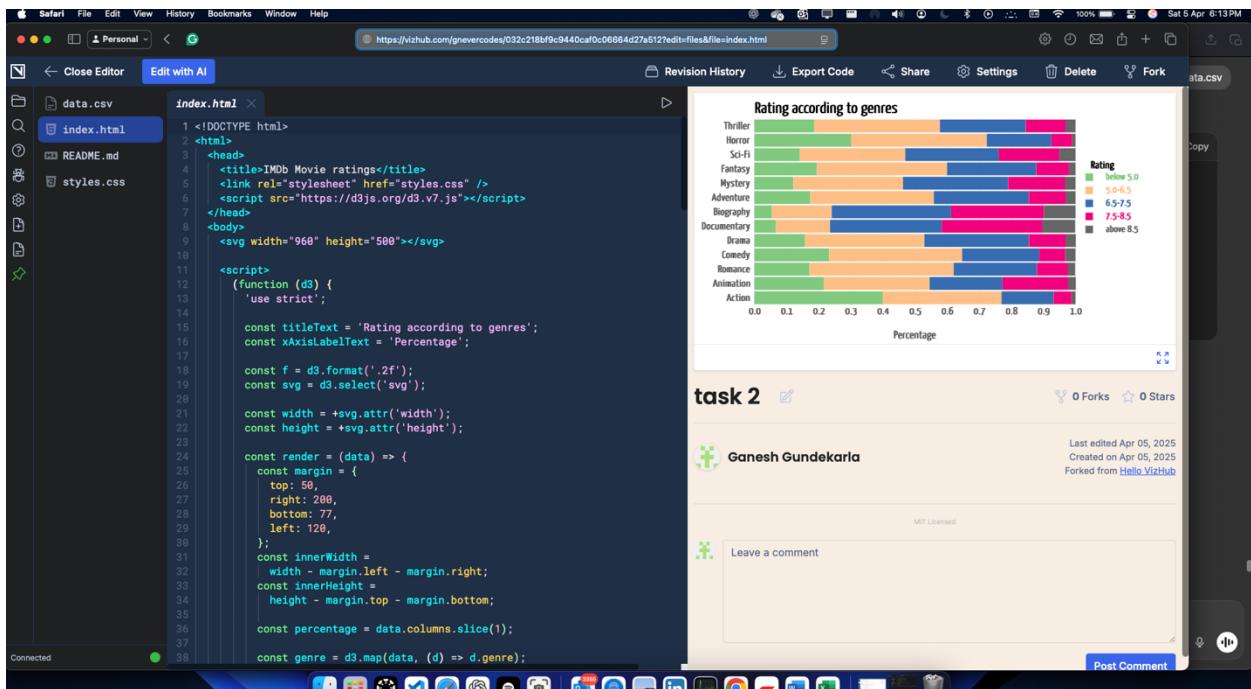
- How to use vizhub online because the local vs code can be bit complex.
- Also understood the creation of bar chart and how to effectively use the raw dataset from the github file.
- Understood how js html and css interact within each other to create the bar graph .
- How to create a gist file and get a raw link for that.

Task 2 :

Stacked bar chart with different colors.

Here is my link to task 2 of vizhub .

<https://vizhub.com/gnevercodes/032c218bf9c9440caf0c06664d27a512?edit=files&file=index.html>



Dataset :

Here , this dataset I have used to show how movies of very different genres are being distributed across imdb ratings. There are so many genres I have found and it has it's proportions of the movies that are falling into most five rating categories like from 5 to 8.5 which offers insights on people basically rate the movies.

Chart Analysis :

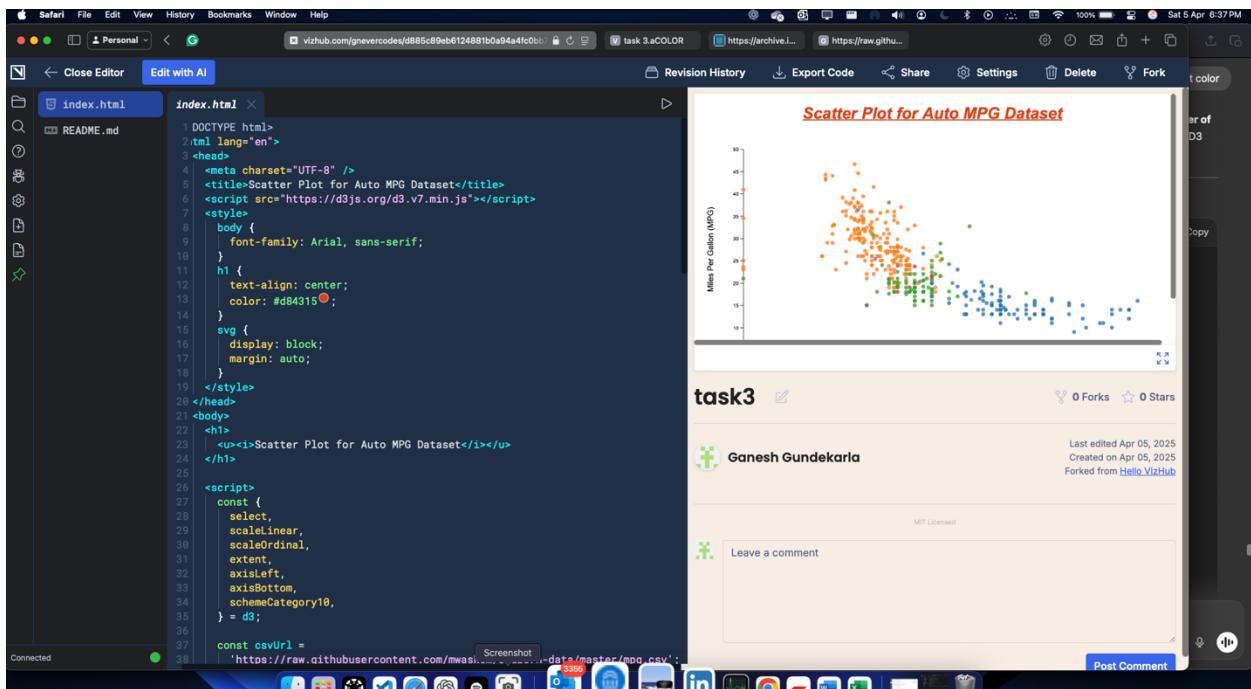
The stacked bar chart will be able to visualize the data clearly which is done through stacking of each rating that is being done for each genre . we can see that the biography and the documentary movies are the most highly rated ones where as horror and action are lower ones which we can clearly say that people are not a huge fan of horror movies . this data provies us with how some certain genres are most consistent in getting received by the audiences in a better way .

Task 3.a :

Scatter plot with color :

Using this datalink I found in the github :

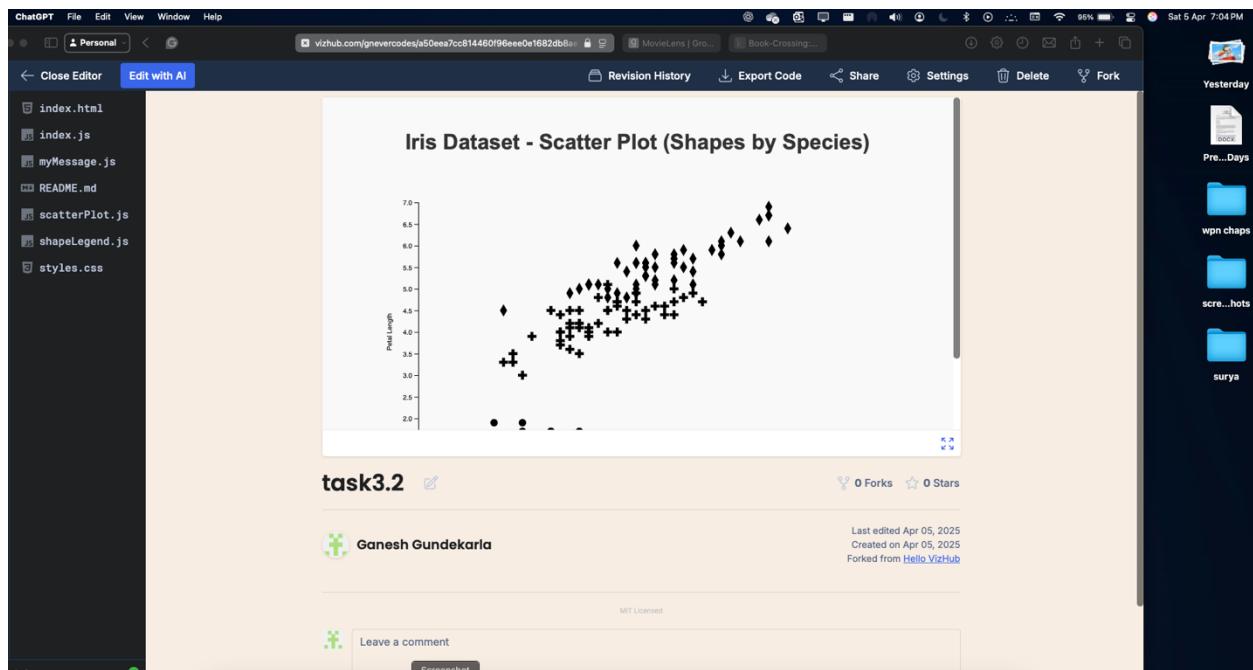
<https://raw.githubusercontent.com/mwaskom/seaborn-data/master/mpg.csv>



Here is the vizhub link :

<https://vizhub.com/gnevercodes/d885c89eb6124881b0a94a4fc0bb729c?edit=files&file=index.html>

task 3.2 scatter plot with shape .



Dataset explanation :

This dataset is a iris dataset which is basically used in data science and machine learning . this contains a hundred and fifty attributes which has sepal length and width , petal length and width and kind of species . this is chosen because of it's ideal choice for data visualization and classification with its clear structure.

Chart analysis :

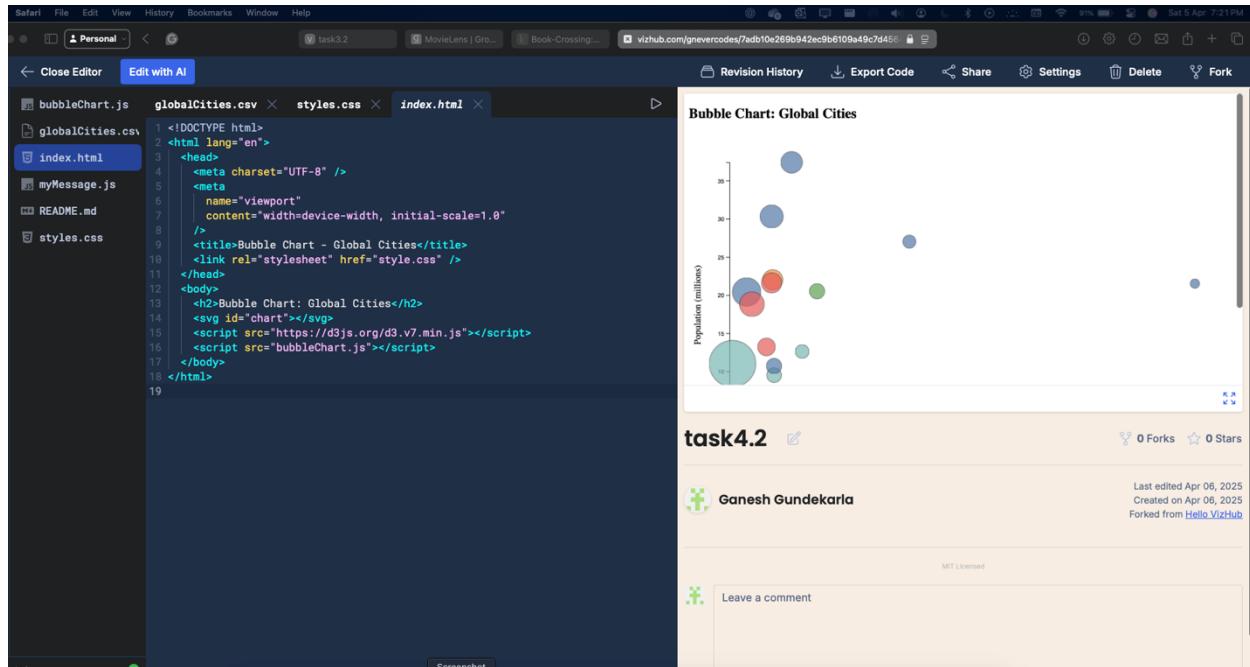
Here , the setosa species will be able to form a clear cluster which can be easily distinguishable from other species . here , the versicolor and the virginica has some overlap but the shape differentiation we did here is used to interpret the data more easily .

As sepal length increases , the the trend also increases , the petal length as well which indicates relationship .

Use of different shapes than color is helpful for accessibility .

Task 4 :

Using some example data I had done :



Vizhub code :

<https://vizhub.com/gnevercodes/7adb10e269b942ec9b6109a49c7d4564?edit=files&file=index.html&tabs=globalCities.csv%7Estyles.css%7Eindex.html>

dataset :

this one I had used is a sample dataset that is being created and titled as global cities which basically contains some information about major cities around the world. This dataset includes some valuable information like the city , population , area and region and where density has been calculated from the dataset which is population/area. This will help us to compare cities on size and density .

insights :

Asian cities like Tokyo delhi are highly populated and reflected in larger bubbles .

North American cities have more land than per person which showed in small bubbles.

Paris and Mumbai have very small areas but higher in population make high density resulting in bubble size. This visualization gives us a clear and comparative look in different cities .