EX NO 1

GEOGRAPHIC INFORMATION SYSTEM USING HTML IMAGE MAP

Objective:

To create an interactive web page that displays a country map with clickable regions. When a user clicks on a region, it redirects them to a page displaying demographic and economic data for that region.

Tools Required:

Software:

- Web Browser (Chrome, Firefox, Edge, etc.)
- o Text Editor (Notepad, VS Code, Sublime Text)

• Technologies:

o HTML

Resources:

- Country map image (JPEG/PNG)
- o Image mapping tool (e.g., image-map.net)

Procedure:

1. Select a Country Map:

o Use a clear image of the country with visible state or region boundaries.

2. Create an HTML Page:

- Use the tag to display the country map.
- o Define an <map> element with clickable regions.

3. **Define Clickable Regions:**

- o Use an image mapping tool to determine the coordinates of each region.
- Use the <area> tag to link each region to its respective webpage containing demographic and economic data.

4. Save and Run the File:

o Save the HTML file and open it in a browser to test the clickable regions.

Code:

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Geographic Information System</title>
  <style>
     h1 {
      text-align: center;
    }
    .image-container {
      text-align: center;
    }
  </style>
</head>
<body>
<h1>Geographic Information System</h1>
Click on a state to view its demographic and economic
data.
<div class="image-container">
  <img src="indiamap.jpg" usemap="#image-map">
</div>
<map name="image-map">
  <area target="_blank" alt="maharastra" title="Maharastra" href="maharastra.html"
coords="151,419,301,430,140,549,118,459" shape="poly">
  <area target="_blank" alt="rajasthan" title="Rajasthan" href="rajasthan.html"</pre>
coords="48,277,155,210,225,291,145,361" shape="poly">
  <area target="_blank" alt="uttar pradesh" title="Uttar Pradesh" href="uttar pradesh.html"</pre>
coords="230,211,375,286,358,335,273,310" shape="poly">
  <area target="_blank" alt="tamil nadu" title="Tamil nadu" href="tamil nadu.html"
coords="286,625,210,672,226,745,277,692" shape="poly">
```

```
<area target="_blank" alt="gujarat" title="Gujarat" href="gujarat.html"
coords="17,352,147,375,117,421,44,418" shape="poly">
</map>
</body>
</html>
maharastra.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Maharastra</title>
</head>
<body>
  <h1>Maharastra</h1>
  <img src="img5.jfif" alt="maharastra">
  >
    <h3>Demographic Profile:</h3>
    Population: 112.37 million
    <h3>Economic Profile:</h3>
    GSDP: US$339.85 billion in 2019-2020
  /body>
</html>
rajasthan.html
<!DOCTYPE html>
<html lang="en">
<head>
```

```
<meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Rajasthan</title>
</head>
<body>
  <h1>Rajasthan</h1>
  <img src="img4.png" alt="rajasthan">
  >
    <h3>Demographic Profile:</h3>
    Population: 68.5 million (2011 census).
    <h3>Economic Profile:</h3>
    GDP: ₹10.20 lakh crore (US$120 billion).
  </body>
</html>
uttar pradesh.html
<!DOCTYPE html>
<html lang="en">
```

```
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Uttar Pradesh</title>
</head>
<body>
  <h1>Uttar Pradesh</h1>
  <img src="img3.png" alt="utter pradesh">
  >
    <h3>Demographic Profile:</h3>
    Population: 240 million
    <h3>Economic Profile:</h3>
```

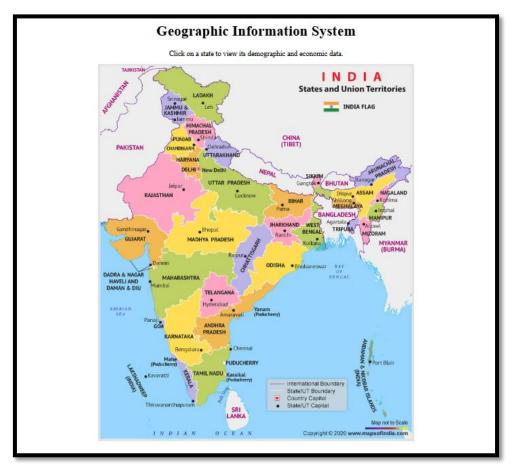
```
GSDP: 25.48 lakh crore (US$310 billion) in 2023-2024
  </body>
</html>
tamil nadu.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Tamil Nadu </title>
</head>
<body>
  <h1>Tamil Nadu</h1>
  <img src="img2.png" alt="tamil nadu">
  >
    <h3>Demographic Profile:</h3>
    Population: 72 million
    <h3>Economic Profile:</h3>
    GSDP: ₹27.22 trillion (US$310 billion)
  </body>
</html>
gujarat.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
```

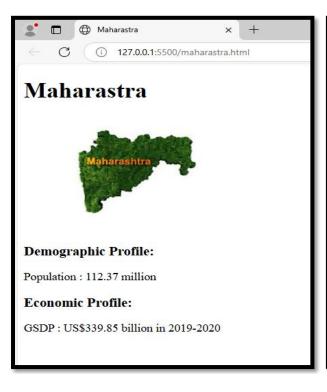
```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Gujarat</title>
</head>
<body>
    <h1>Gujarat</h1>
    <img src="img1.png" alt="gujarat">

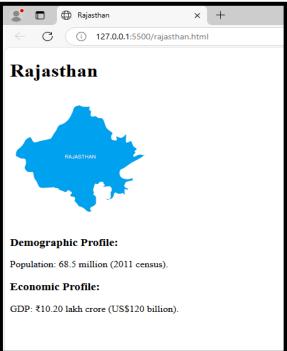
        <h3>Demographic Profile:</h3>
        Population: 60.4 million
        <h3>Economic Profile:</h3>
        GSDP: ₹19 trillion (US$210 billion) in 2023

        </body>
        <html>
```

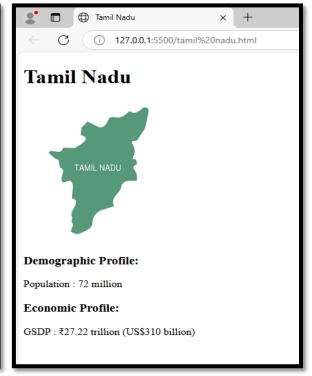
Output:

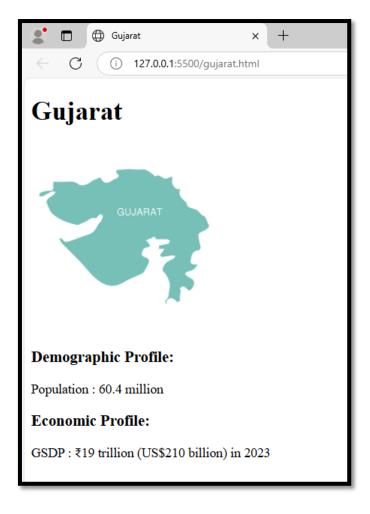












Learning Outcome:

- Understand how to use HTML image maps to create interactive regions.
- Learn how to link web pages to specific geographic locations.
- Gain experience in integrating visual content with data representation.
- Enhance user interaction through clickable map features.