

UID EX 10

Rama Thulasi G
230701259

AIM:

The aim is to create data visualizations, such as pie charts and bar graphs, for an inventory management system using JavaScript.

PROCEDURE:

Step 1:

Set Up Your HTML File

```
<> index.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  <meta charset="UTF-8">
5  <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  <title>Inventory Management Visualization</title>
7  <style>
8  body {
9  font-family: Arial, sans-serif;
10 text-align: center;
11 margin: 50px;
12 }
13 canvas {
14 margin: 20px auto;
15 }
16 </style>
17 </head>
18 <body>
19 <h1>Inventory Management System</h1>
20 <canvas id="pieChart" width="400" height="400"></canvas>
21 <canvas id="barChart" width="400" height="400"></canvas>
22 <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
23 <script src="script.js"></script>
24 </body>
25 </html>
26
```

Step 2:

Create the JavaScript File for Charts Next, create a JavaScript file (script.js) to handle the data visualization logic.

```
JS script.js > ...
1  // Data for inventory
2  const inventoryData = {
3      labels: ['Electronics', 'Clothing', 'Home Appliances', 'Books', 'Toys'],
4      datasets: [{
5          label: 'Items in Stock',
6          data: [200, 150, 100, 80, 50],
7          backgroundColor: [
8              '#FF6384', '#36A2EB', '#FFCE56', '#4BC0C0', '#9966FF'
9          ]
10     }]
11 };
12
13 // PIE Chart
14 const ctxPie = document.getElementById('pieChart').getContext('2d');
15 new Chart(ctxPie, {
16     type: 'pie',
17     data: inventoryData,
18     options: {
19         responsive: true,
20         plugins: {
21             title: {
22                 display: true,
23                 text: 'Inventory Distribution'
24             }
25         }
26     }
27 });
28
29 // BAR Chart
30 const ctxBar = document.getElementById('barChart').getContext('2d');
31 new Chart(ctxBar, {
32     type: 'bar',
33     data: inventoryData,
34     options: {
35         responsive: true,
36         plugins: {
37             title: {
38                 display: true,
39                 text: 'Items in Stock by Category'
40             }
41         },
42         scales: {
43             y: {
44                 beginAtZero: true
45             }
46         }
47     }
48 });
```

OUTPUT:

Inventory Management System

