

EXP.NO:10

USER INTERFACE DESIGN

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AIM: Create a data visualization (e.g., pie charts, bar graphs) for an inventory management system using javascript

PROCEDURE:

Step 1: Setting HTML with Styles form

Step 2: Create the JavaScript File for Charts

Step 1: Setting HTML form

HTML and CSS:

```
EXPLORER
  DUMMY
    ram.html
    JS script.js
  Welcome
  ram.html
  JS script.js

1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Inventory Management Visualization</title>
8   <style>
9     body {
10       font-family: Arial, sans-serif;
11       text-align: center;
12       margin: 50px;
13     }
14
15     canvas {
16       margin: 20px auto;
17     }
18   </style>
19 </head>
20
21 <body>
22   <h1>Inventory Management System</h1>
23   <canvas id="pieChart" width="400" height="400"></canvas>
24   <canvas id="barChart" width="400" height="400"></canvas>
25   <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
26   <script src="script.js"></script>
27 </body>
28
29 </html>
```

Step 2: Create the JavaScript File for Charts

```
JS script.js > ...
1 const inventoryData = {
2   labels: ['Electronics', 'Clothing', 'Home Appliances', 'Books', 'Toys'],
3   datasets: [
4     {
5       label: 'Items in Stock',
6       data: [200, 150, 100, 80, 50],
7       backgroundColor: [
8         '#FF6384',
9         '#36A2EB',
10        '#FFCE56',
11        '#4BC0C0',
12        //
13        '#9966FF'
14      ],
15     }
16   ]
17 };
18
19
20 // Creating the Pie Chart
21 const ctxPie = document.getElementById('pieChart').getContext('2d');
22 const pieChart = new Chart(ctxPie, {
23   type: 'pie',
24   data: inventoryData,
25   options: {
26     responsive: true,
27     title: {
28       display: true,
29       text: 'Inventory Distribution'
30     }
31   }
32 });
33
34
35 // Creating the Bar Chart
36 const ctxBar = document.getElementById('barChart').getContext('2d');
37 const barChart = new Chart(ctxBar, {
```

```

35 // Creating the Bar Chart
36 const ctxBar = document.getElementById('barChart').getContext('2d');
37 const barChart = new Chart(ctxBar, {
38   type: 'bar',
39   data: inventoryData,
40   options: {
41     responsive: true,
42     title: {
43       display: true,
44       text: 'Items in Stock by Category'
45     },
46     scales: {
47       yAxes: [{
48         ticks: {
49           beginAtZero: true
50         }
51       }]
52     }
53   }
54 });

```

OUTPUT:

Inventory Management System



