

USER INTERFACE DESIGN

EXP.NO:10

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

exp10.html

```
<? exp10.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
```

script.js

```
JS script.js > barChart
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         '#9966FF'
13       ]
14     }
15   ]
16 };
17 // Creating the Pie Chart
18 const ctxPie = document.getElementById('pieChart').getContext('2d');
19 const pieChart = new Chart(ctxPie, {
20   type: 'pie',
21   data: inventoryData,
22   options: {
23     responsive: true,
24     plugins: {
25       title: {
26         display: true,
27         text: 'Inventory Distribution'
28       }
29     }
30   }
31 });
```

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

OUTPUT:

Inventory Management System



RESULT:

Successfully created data visualizations (Pie and Bar charts) using Chart.js to represent the stock levels in different inventory categories for an inventory management system.