

RAJALAKSHMI ENGINEERING COLLEGE

RAJALAKSHMI NAGAR, THANDALAM – 602 105



**RAJALAKSHMI
ENGINEERING COLLEGE**

**CS23A34
USER INTERFACE AND DESIGN LAB**

Laboratory Observation NoteBook

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Year/Branch/Section : II/CSE/D

Register No. : 230701357

Semester : IV

Academic Year: 2024-25

Ex. No. : 14

Date : 07.04.2025

Register No. : 230701357

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

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: Setting Up the HTML Form

Start by creating an HTML form with input fields for the email and phone number.

Html

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0"/>
```

```
<title>Inventory Management Visualization</title>
```

```
<style>
```

```
body {  
    font-family: Arial, sans-serif;  
    text-align: center;  
    margin: 50px;  
}  
  
canvas {  
    margin: 20px auto;  
}  
  
</style>  
</head>  
<body>  
    <h1>Inventory Management System-230701357-swetha</h1>  
  
    <canvas id="pieChart" width="400" height="400"></canvas>  
    <canvas id="barChart" width="400" height="400"></canvas>  
  
    <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>  
    <script src="script.js"></script>
```

```
</body>
```

```
</html>
```

Java script

```
// Data for the inventory
```

```
const inventoryData = {  
  labels: ['Electronics', 'Clothing', 'Home Appliances', 'Books',  
    'Toys'],  
  datasets: [  
    {  
      label: 'Items in Stock',  
      data: [200, 150, 100, 80, 50],  
      backgroundColor: [  
        '#FF6384',  
        '#36A2EB',  
        '#FFCE56',  
        '#4BC0C0',  
        '#9966FF'  
      ],  
    }  
  ]  
}
```

```
};
```

```
// Creating the Pie Chart
```

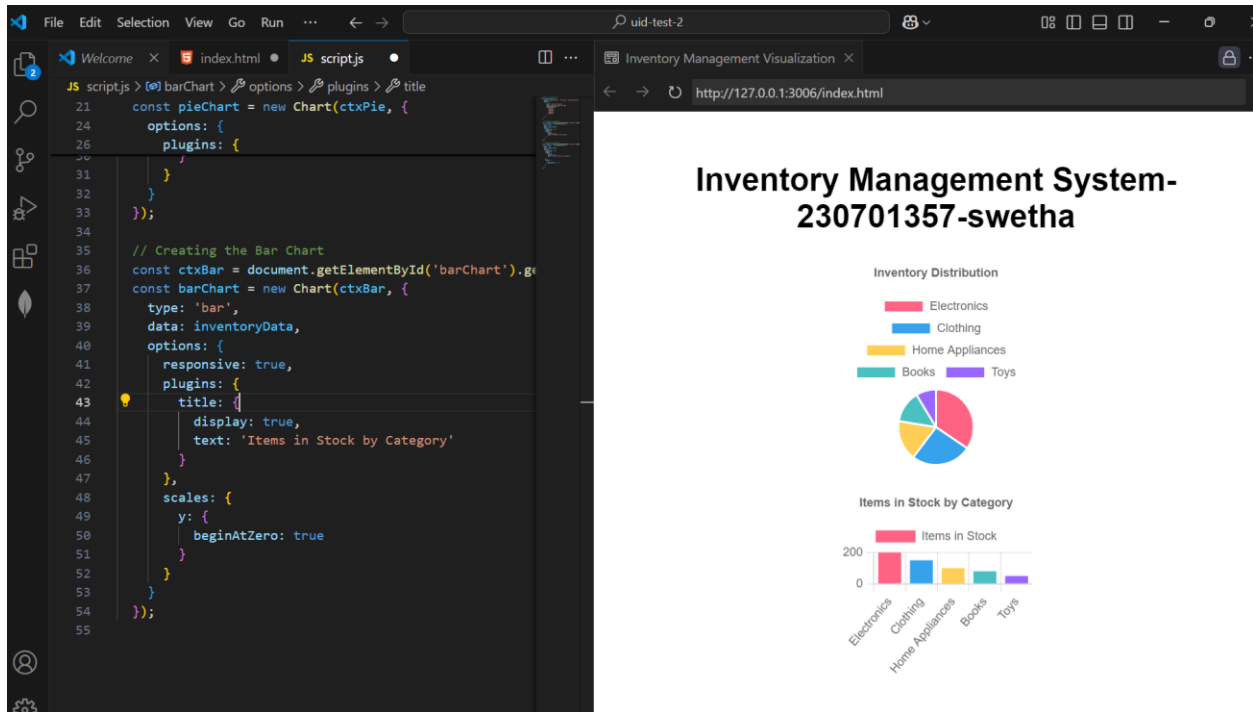
```
const ctxPie =  
document.getElementById('pieChart').getContext('2d');  
  
const pieChart = new Chart(ctxPie, {  
  type: 'pie',  
  data: inventoryData,  
  options: {  
    responsive: true,  
    plugins: {  
      title: {  
        display: true,  
        text: 'Inventory Distribution'  
      }  
    }  
  }  
});
```

```
// Creating the Bar Chart
```

```
const ctxBar =
document.getElementById('barChart').getContext('2d');

const barChart = new Chart(ctxBar, {
  type: 'bar',
  data: inventoryData,
  options: {
    responsive: true,
    plugins: {
      title: {
        display: true,
        text: 'Items in Stock by Category'
      }
    },
    scales: {
      y: {
        beginAtZero: true
      }
    }
  }
})
```

Output:



Result:

data visualizations, such as pie charts and bar graphs, for an inventory management system using JavaScript has been done.