

# **RAJALAKSHMI ENGINEERING COLLEGE**

**RAJALAKSHMI NAGAR, THANDALAM – 602 105**



**RAJALAKSHMI  
ENGINEERING COLLEGE**

**CS23A34**

**USER INTERFACE AND DESIGN LAB**

**Laboratory Observation NoteBook**

**Name : VERONICA REGINA PAUL**

**Year/Branch/Section : II/CSE/D**

**Register No. : 230701377**

**Semester : IV**

**Academic Year: 2024-25**

**Ex. No. : 10**

**Register No. : 230701377**

**Name : VERONICA REGINA PAUL**

---

## **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: Set Up Your HTML File

First, create an HTML file to hold your canvas for the chart and include Chart.js.

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</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>

```

## □ Step 2: Create the JavaScript File for Charts

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

javascript

□// script.js

// 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,
        title: {
            display: true,
            text: 'Inventory Distribution'
        }
    }
});
```

// Creating the Bar Chart

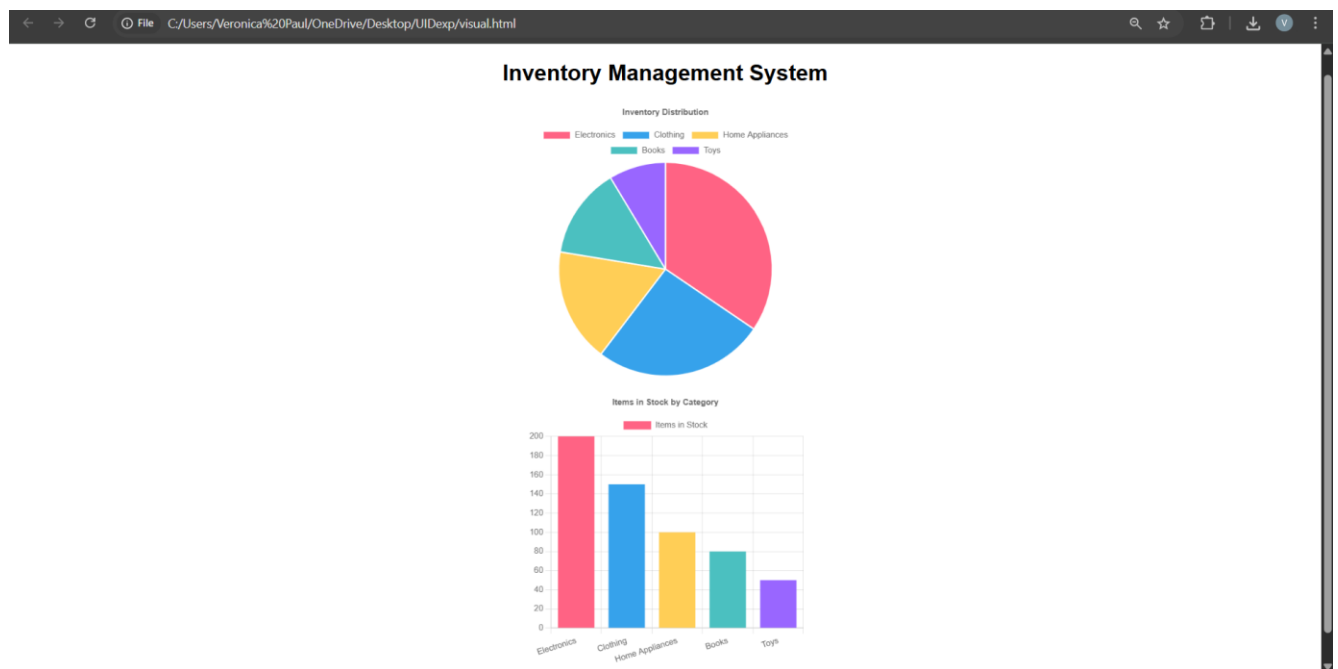
```
const ctxBar = document.getElementById('barChart').getContext('2d');
const barChart = new Chart(ctxBar, {
    type: 'bar',
    data: inventoryData,
```

```

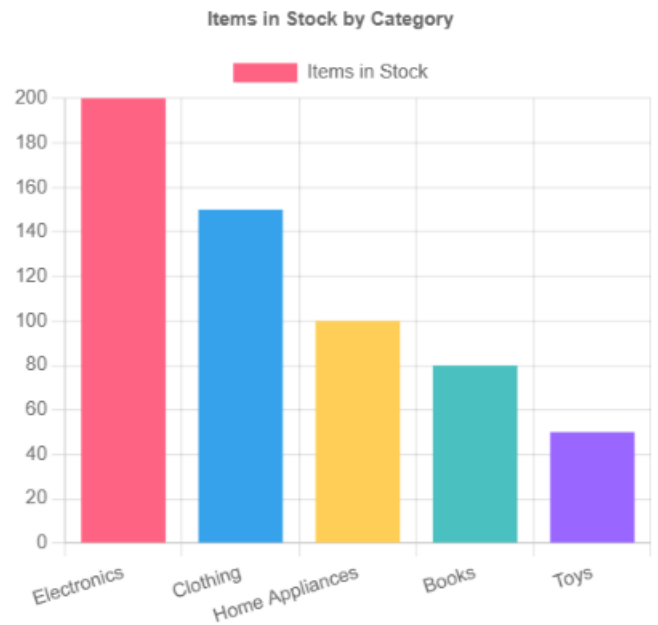
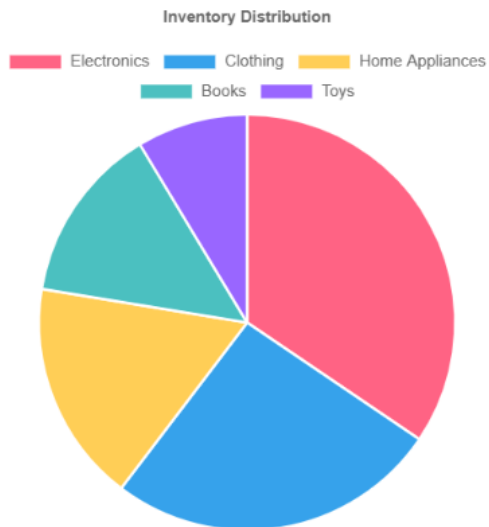
options: {
  responsive: true,
  title: {
    display: true,
    text: 'Items in Stock by Category'
  },
  scales: {
    yAxes: [{
      ticks: {
        beginAtZero: true
      }
    }]
  }
}
});

```

## OUTPUT:



# Inventory Management System



## RESULT:

Hence we have created data visualizations, such as pie charts and bar graphs, for an inventory management system using JavaScript.