

EXP.NO:10

DATE:03.05.2025

USER INTERFACE DESIGN

Roll no:230701246

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 & CSS:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Inventory Management Dashboard</title>

  <!-- Google Fonts for better typography -->
  <link
href="https://fonts.googleapis.com/css2?family=Roboto:wght@400;700&display=swap"
rel="stylesheet">
```

```
<!-- Chart.js Library -->
<script src="https://cdn.jsdelivr.net/npm/chart.js"></script>

<style>
  body {
    margin: 0;
    padding: 0;
    background-color: #f0f2f5;
    font-family: 'Roboto', sans-serif;
    display: flex;
    flex-direction: column;
    align-items: center;
    min-height: 100vh;
  }

  header {
    background-color: #4CAF50;
    width: 100%;
    padding: 20px 0;
    color: white;
    text-align: center;
    font-size: 2rem;
    font-weight: bold;
    letter-spacing: 1px;
  }

  main {
    margin-top: 30px;
    display: flex;
    flex-wrap: wrap;
    justify-content: center;
    gap: 40px;
    padding: 20px;
    width: 100%;
    max-width: 1200px;
  }

  .chart-container {
    background: white;
    padding: 20px;
    border-radius: 12px;
    box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
  }
```

```

        width: 500px;
    }

    canvas {
        width: 100% !important;
        height: auto !important;
    }
    .highlight {
        color: #ff0000; /* Bright golden color */
        font-weight: bold;
        font-size: 1.2em; /* Slightly bigger */
    }
}

</style>
</head>
<body>

    <header>
        Inventory Management Dashboard By <span
class="highlight">230701246</span>
    </header>

    <main>
        <div class="chart-container">
            <canvas id="pieChart"></canvas>
        </div>
        <div class="chart-container" style="height: 500px;">
            <canvas id="barChart"></canvas>
        </div>

    </main>

<script src="ui10.js"></script>

</body>
</html>

```

Step 2: Create the JavaScript File for Charts

```

    const inventoryLabels = ['Electronics', 'Clothing', 'Home Appliances', 'Books',
'Toys'];
const inventoryValues = [200, 150, 100, 80, 50];
const inventoryColors = ['#FF6384', '#36A2EB', '#FFCE56', '#4BC0C0', '#9966FF'];

// Pie Chart - Inventory Distribution
const pieCtx = document.getElementById('pieChart').getContext('2d');
new Chart(pieCtx, {
  type: 'pie',
  data: {
    labels: inventoryLabels,
    datasets: [{
      data: inventoryValues,
      backgroundColor: inventoryColors,
      borderColor: 'ffffff',
      borderWidth: 2
    }]
  },
  options: {
    responsive: true,
    plugins: {
      title: {
        display: true,
        text: 'Inventory Category Distribution',
        font: {
          size: 22
        }
      },
      legend: {
        position: 'bottom'
      }
    }
  }
});

// Bar Chart - Items in Stock
const barCtx = document.getElementById('barChart').getContext('2d');
new Chart(barCtx, {
  type: 'bar',
  data: {
    labels: inventoryLabels,
    datasets: [{
      label: 'Items in Stock',
      data: inventoryValues,

```

```
        backgroundColor: inventoryColors,
        borderColor: '#333',
        borderWidth: 1
    }]
},
options: {
    responsive: true,
    plugins: {
        title: {
            display: true,
            text: 'Number of Items in Stock',
            font: {
                size: 22
            }
        },
        legend: {
            display: false
        }
    },
    scales: {
        y: {
            beginAtZero: true,
            ticks: {
                stepSize: 50
            }
        }
    }
}
});
```

OUTPUT:

