Exercise 10

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

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

The following codes were run in vscode . and right after executing the graph shows an animation which will be interactive for the user.

Html code:

```
<!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>
```

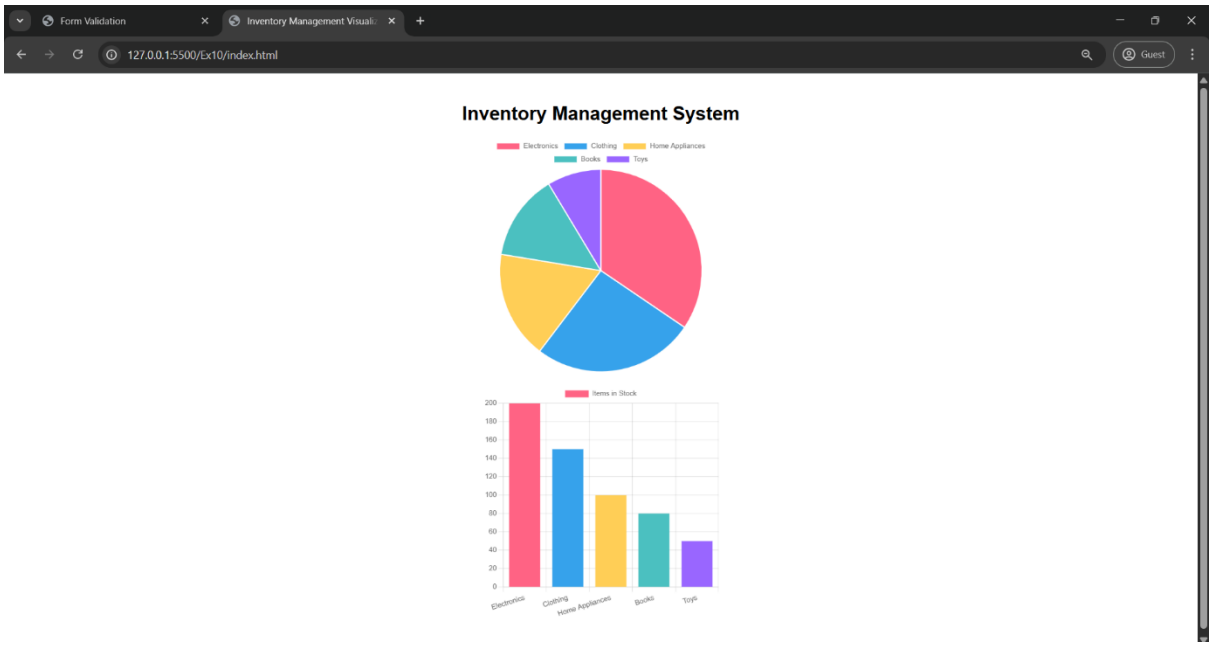
JavaScript:

```
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:



Hence data visualaisation chart is successfully constructed using html and javaScript.