# Lab-8: Event Handling, Objects, Arrays in JavaScript

**QUESTION:-**

Events and Event Handling

JS Objects, JS Arrays, and methods

# CODE:-

<!DOCTYPE html>

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<html>

<head>

<title>City Weather Data</title>

<style> body { background-color: #ffe0b2; /\* Soft peach background \*/ font-family: Arial, sans-serif; padding: 30px;

}

.container { display: flex; justify-content: center; align-items: flex-start; gap: 50px; flex-wrap: wrap;

} form { background-color: white; padding: 20px; border-radius: 10px; box-shadow: 0 0 10px gray; width: 300px; text-align: center;

} input, button { width: 90%; padding: 10px; margin: 8px 0; border: 1px solid #ccc; border-radius: 5px;

} button { background-color: #ff7043; color: white; border: none; cursor: pointer; font-weight: bold;

}

button:hover { background-color: #e64a19;

}

#cityList { width: 400px; text-align: center;

}

.cityCard { background-color: white; padding: 15px; border-radius: 8px; box-shadow: 0 0 8px gray; margin-bottom: 15px;

} h2 { text-align: center; color: #bf360c; margin-bottom: 30px;

} h3 { color: #d84315; margin-bottom: 20px;

}

</style>

</head>

<body>

<h2>City Weather Tracker</h2>

<div class="container">

<form id="cityForm">

<h3>Add City Weather</h3> <!-- Heading inside form box -->

<label>City Name:</label><br>

<input type="text" id="cityName" required><br>

<label>Temperature (°C):</label><br>

<input type="number" id="temperature" required><br>

<label>Wind Speed (km/h):</label><br>

<input type="number" id="windSpeed" required><br>

<button type="submit">Add City</button>

</form>

<div id="cityList">

<h3>City Weather List</h3> <!-- Heading inside output box -->

</div>

</div> <script> var cityWeatherData = []; document.getElementById('cityForm').addEventListener('submit', function(event) { event.preventDefault(); var name = document.getElementById('cityName').value; var temperature = parseFloat(document.getElementById('temperature').value); var windSpeed = parseFloat(document.getElementById('windSpeed').value);

var city = { name: name, temperature: temperature, windSpeed: windSpeed,

alerts: []

};

checkForAlerts(city); cityWeatherData.push(city); displayCities(); document.getElementById('cityForm').reset();

});

function checkForAlerts(city) { if (city.temperature > 35) { city.alerts.push("Heatwave");

}

if (city.windSpeed > 80) { city.alerts.push("High Wind");

}

} function displayCities() { var cityListDiv = document.getElementById('cityList'); cityListDiv.innerHTML = "<h3>City Weather List</h3>"; // reset list with heading cityWeatherData.forEach(function(city) {

var cityInfo = "<div class='cityCard'><strong>" + city.name + "</strong><br>Temp: " + city.temperature + "°C<br>Wind: "

+ city.windSpeed + " km/h";

if (city.alerts.length > 0) { cityInfo += "<br><strong>Alerts:</strong> " + city.alerts.join(", ");

}

cityInfo += "</div>"; cityListDiv.innerHTML += cityInfo;

});

}

</script>

</body>

</html>

**OUTPUT:-**

