Practical 6

Aim: Build an image gallery with hover effects and transitions using JavaScript.

Objective: To create an interactive image gallery where users can view images, experience hover effects, and smooth transitions for a better visual experience.

Prerequisites:

- Basic understanding of HTML, CSS, and JavaScript.
- A code editor (VS Code, Sublime Text, or Notepad++).
- A web browser for testing. Project Overview: The image gallery will include:
- A grid layout of images.
- Hover effects such as zoom-in.
- Smooth transitions using CSS and JavaScript.
- Image click feature to enlarge the image.
- Responsive design for different screen sizes.

Steps to Follow:

Step 1: Create the HTML Structure

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Image Gallery</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <h1>Image Gallery</h1>
  <div class="gallery">
    <img src="./images 1.jpg" alt="Image 1" class="gallery-item" height="300" width="280">
    <img src="./images 2.jpg" alt="Image 2" class="gallery-item" height="300" width="280">
    <img src="./images 3.jpg" alt="Image 3" class="gallery-item" height="300" width="280">
    <img src="./images 4.jpg" alt="Image 4" class="gallery-item" height="300" width="280">
    <img src="./images 5.jpg" alt="Image 5" class="gallery-item" height="300" width="280">
    <img src="./images 6.jpg" alt="Image 6" class="gallery-item" height="300" width="280">
    <img src="./images 7.jpg" alt="Image 7" class="gallery-item" height="300" width="280">
    <img src="./images 8.jpg" alt="Image 8" class="gallery-item" height="300" width="280">
  </div>

  <div id="lightbox" class="lightbox">
    <span class="close" onclick="closeLightbox()">&times;</span>
    <img id="lightbox-img" src="" alt="Expanded Image">
    <div class="zoom-controls">
      <button onclick="zoomIn()">&#43;</button>
      <button onclick="zoomOut()">&minus;</button>
    </div>
  </div>
```

```
    <script src="script.js"></script>
</body>
</html>
```

Step 2: Create the CSS File

```
body {
    font-family: Arial, sans-serif;
    padding: 0;
    background-color: #10d6abe8;
    text-align: center;
}

h1 {
    margin: 20px 0;
}

.gallery {
    display: grid;
    grid-template-columns: repeat(auto-fit, minmax(280px, 1fr));
    gap: 20px;
    padding: 30px;
    justify-content: center;
}

.gallery-item {
    width: 280px;
    height: 300px;
    object-fit: cover;
    transition: transform 0.3s ease-out;
    cursor: pointer;
    border-radius: 10px;
}

.gallery-item:hover {
    transform: scale(1.1);
}

.lightbox {
    display: none;
    position: fixed;
    top: 0;
    left: 0;
    width: 100%;
    height: 100%;
    background: rgba(0, 0, 0, 0.8);
    justify-content: center;
    align-items: center;
    flex-direction: column;
}

.lightbox img {
    max-width: 80%;
    max-height: 80%;
    transition: transform 0.3s ease-out;
}

.close {
    position: absolute;
    top: 20px;
    right: 20px;
    font-size: 30px;
    color: white;
    cursor: pointer;
}

.zoom-controls {
    margin-top: 20px;
}

.zoom-controls button {
    padding: 10px;
    margin: 5px;
    font-size: 20px;
    cursor: pointer;
}
```

Step 3: Implement JavaScript Functionality

```
document.addEventListener("DOMContentLoaded", function () {
    const galleryItems = document.querySelectorAll(".gallery-item");
    const lightbox = document.getElementById("lightbox");
    const lightboxImg = document.getElementById("lightbox-img");

    galleryItems.forEach(item => {
        item.addEventListener("click", function () {
            lightbox.style.display = "flex";
            lightboxImg.src = this.src;
        });
    });

    document.querySelector(".close").addEventListener("click", closeLightbox);

    function closeLightbox() {
        lightbox.style.display = "none";
        lightboxImg.style.transform = "scale(1)";
    }

    function zoomIn() {
        let currentScale = parseFloat(getComputedStyle(lightboxImg).getPropertyValue("transform").split(",")[3]) || 1;
        lightboxImg.style.transform = `scale(${currentScale + 0.2})`;
    }

    function zoomOut() {
        let currentScale = parseFloat(getComputedStyle(lightboxImg).getPropertyValue("transform").split(",")[3]) || 1;
        if (currentScale > 0.5) {
```

```
      lightboxImg.style.transform = `scale(${currentScale - 0.2})`;
    }
  }

  window.zoomIn = zoomIn;
  window.zoomOut = zoomOut;
  window.closeLightbox = closeLightbox;
});
```

Output:

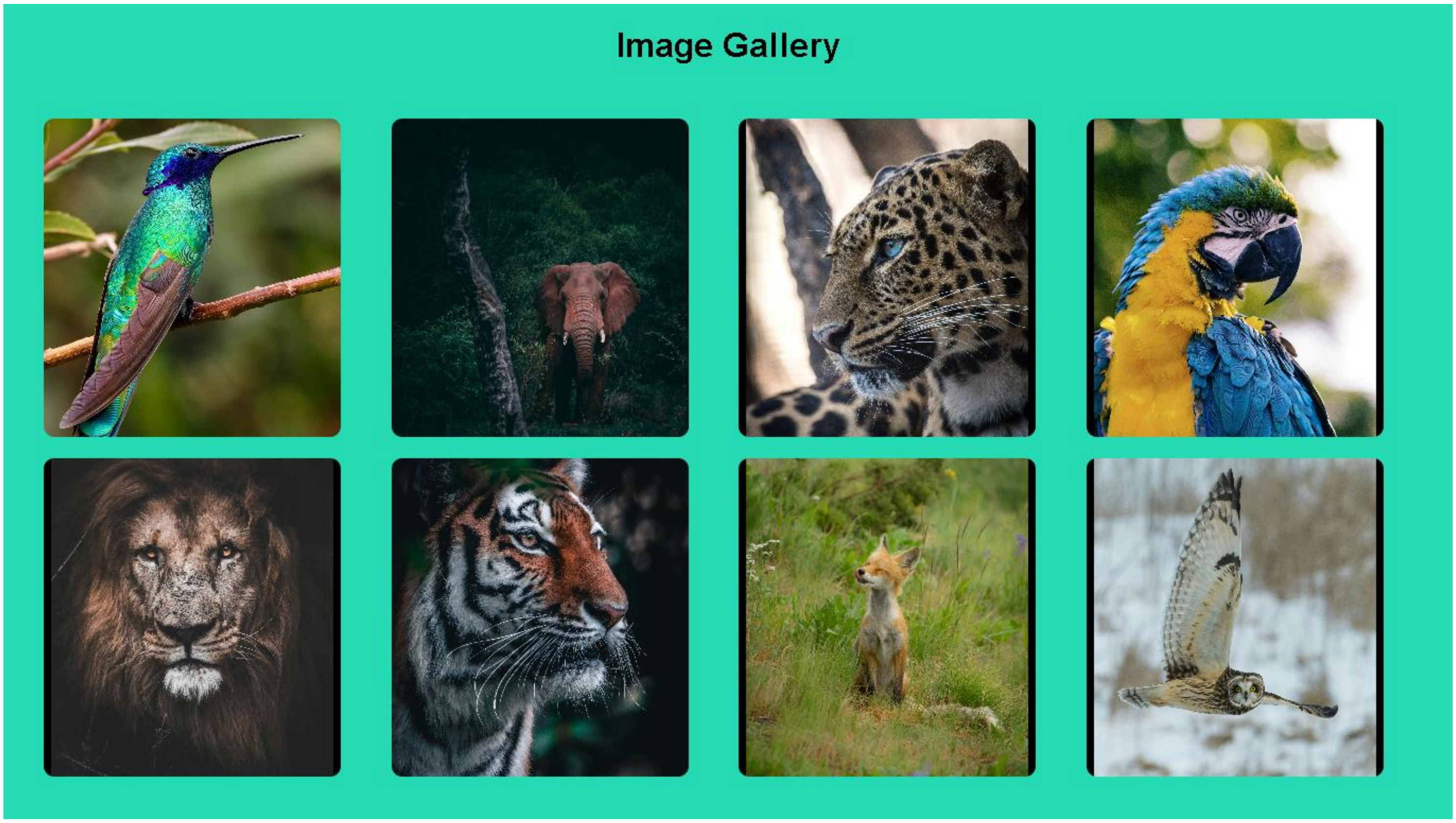
Image Gallery