

Front-End UI/UX Mini Project

Project Submission

1. Title Page

- **Project Title:** "Photo Gallery"
- **Submitted By:** *Team Members-*
Jesvin Joby(2462083)-jesvin.joby@btech.christuniversity.in
Ashwel John(2462051)-ashwel.john@btech.christuniversity.in
Manikanta Reddy(2462140)-saligari.manikanta@btech.christuniversity.in
- **Course:** UI/UX Design Fundamentals
- **Instructor Name:**
- **Institution:** Christ University Kengeri Campus
- **Date of Submission:** 26/09/2025

2. Abstract

This project focuses on designing and developing a responsive photo gallery that allows users to browse and view images in an interactive and user-friendly manner. The gallery presents images in a clean grid layout, ensuring visual organization and easy navigation. A lightbox modal feature is implemented, enabling users to click on any image and view it in a larger size without leaving the page. The project emphasizes responsive design, making the gallery adapt seamlessly across mobile, tablet, and desktop devices. Core technologies used include HTML, CSS, JavaScript, Bootstrap, and jQuery to achieve an efficient structure, modern styling, interactivity, and responsiveness. The final outcome is a visually appealing and functional photo gallery that enhances the user experience, making it useful for personal portfolios, photography websites, and image-based showcases.

3. Objectives

- Design a user-friendly interface using modern UI principles
- Develop a fully responsive layout using only HTML and CSS
- Implement structured HTML5 semantic elements
- Apply CSS styling for branding, layout, and responsive behavior
- Ensure accessibility and readability across devices

4. Scope of the Project

- Focused on front-end design only
- No JavaScript or server-side integration
- Intended for desktop, tablet, and mobile viewports
- Used only open-source tools and pure code (no libraries)

5. Tools & Technologies Used

Tool/Technology	Purpose
HTML5	Markup and content structure
CSS3	Styling and layout management
VS Code	Code editor
Chrome DevTools	Testing and debugging

6. HTML Structure Overview

- Used semantic tags: <header>, <nav>, <main>, <section>, <footer>
- Structured into reusable sections: About, Projects, Contact
- Navigation menu using and anchor links for smooth scrolling

7. CSS Styling Strategy

- Used external CSS file (style.css) • Organized with comments and sections
- Techniques used:
 - Flexbox and Grid for layout
 - Media Queries for responsiveness
 - CSS Variables for theme customization
 - Hover

effects and transitions ○ Mobile-
first design approach

8. Key Features

Feature	Description
Responsive Design	Adapts seamlessly to all screen sizes
Smooth Navigation	Fixed top nav with anchor links
Project Cards	Flex-based layout with hover effects
Contact Form (non-functional)	Placeholder layout for inputs and button
Accessible Fonts & Colors	High contrast and readable typography

9. Challenges Faced & Solutions

Challenge	Solution
Overlapping elements on small screens	Used media queries to stack elements
Difficulty aligning items using float	Shifted to Flexbox and Grid
Typography scaling issue	Used relative units (em/rem) instead of px

10. Outcome

- Achieved a clean, consistent, and visually engaging front-end layout
- All key components function as intended using just HTML and CSS
- Learned about layout responsiveness and UI hierarchy in depth

11. Future Enhancements

- Add JavaScript for interactivity (form validation, dynamic content)
- Integrate animations or transitions
- Backend integration for form submission
- Theme toggler (light/dark mode)

12. Sample Code

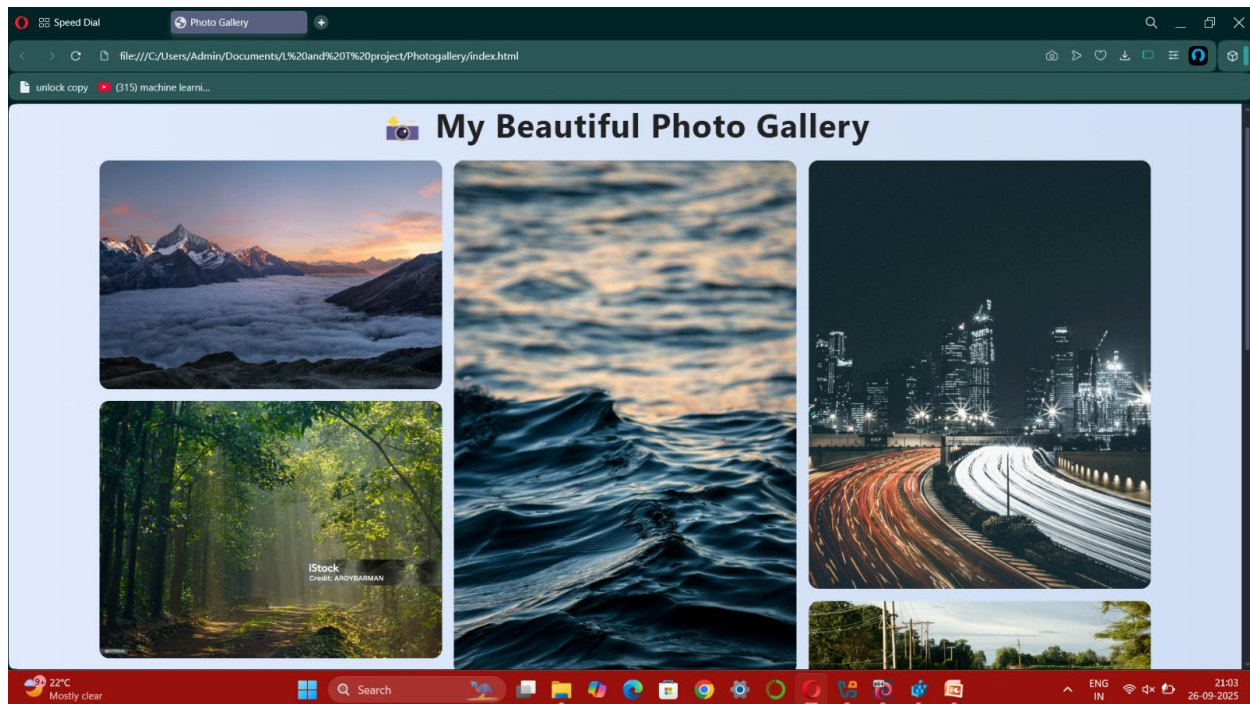
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Photo Gallery</title>
  <!-- Bootstrap CSS -->
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <link rel="stylesheet" href="css/style.css">
</head>
<body>
  <!-- Gallery Title -->
  <div class="container">
    <h1 class="gallery-title">📷 My Beautiful Photo Gallery</h1>

    <!-- Gallery Grid -->
    <div class="gallery">
      
      
      
      
      
      
      
      
      
      
    </div>
  </div>
```

```
script.js / ...
1  // =====
2  // Photo Gallery - Custom JS
3  // =====
4
5  // When a gallery image is clicked, update modal with image & caption
6  $(".gallery img").click(function() {
7    let src = $(this).attr("src");
8    let caption = $(this).attr("alt");
9    $(".modal-img").attr("src", src);
10   $(".modal-caption").text(caption);
11 });
12
```

```
1  /* =====
2  | Photo Gallery - Custom CSS
3  | ===== */
4
5  body {
6  | background: linear-gradient(to right, #e0eafc, #cfdef3);
7  | font-family: 'Segoe UI', sans-serif;
8  | color: #333;
9  | margin: 0;
10 | padding: 0;
11 | }
12
13 /* Title */
14 .gallery-title {
15 | margin: 40px 0 20px;
16 | text-align: center;
17 | font-weight: 700;
18 | font-size: 2.5rem;
19 | color: #222;
20 | letter-spacing: 1px;
21 | }
22
23 /* Masonry-style gallery layout */
24 .gallery {
25 | column-count: 3;
26 | column-gap: 15px;
27 | }
```

13. Screenshots of Final Output



11. Conclusion

The Photo Gallery project provides a simple, responsive, and user-friendly way to showcase images. Using HTML, CSS, JavaScript, Bootstrap, and jQuery, it delivers a clean grid layout with a modal view for larger display. The project meets its goal of creating an interactive gallery suitable for portfolios and photography websites.

12. References

- L&T LMS : <https://learn.lntedutech.com/Landing/MyCourse>