# Department of Computing

**CS344: Web Engineering**

**Class: Fall 2025**

# Lab 3: HTML Advanced - Personal Portfolio II

## Date: September 25, 2024

## Time: 09:00 – 11:50/ 14:00 – 16:50

# Instructor: Engr. Naema Asif

# Lab Engineer: Ms. Ayesha Asif

# Lab 3: HTML Advanced - Personal Portfolio II

### ****Introduction****

In this lab, you will extend your **personal portfolio website** by improving the design with **CSS styling**, organizing your project into proper folders, and publishing it online using **GitHub Pages**. This lab introduces you to professional practices of project organization and deployment.

### ****Objectives****

By the end of this lab, you will be able to:

* Organize **HTML, CSS, and images** into proper folders.
* Use an **external CSS file** to improve styling and reusability.
* Apply **float and clear properties** in CSS to arrange content into simple layouts.
* Upload your project to **GitHub** and track changes using version control.
* Deploy and view your portfolio live using **GitHub Pages**.

### ****Tools / Software Requirements****

* Text editor (e.g., VS Code, Sublime Text, Notepad++)
* A modern web browser (e.g., Chrome, Edge, Firefox)
* Git and GitHub account (free)
* Internet access

### ****Description****

You will enhance the portfolio created in **Lab 3** by:

1. **Organizing Files in Folders**  
   Create the following structure:

portfolio/

├── index.html

├── hobbies.html

├── contact.html

├── gallery.html

├── skills.html

├── css/

│ └── style.css

├── images/

│ ├── photo1.jpg

│ ├── photo2.jpg

│ └── ...

└── README.md

1. **CSS Improvements**
   * Use a **separate CSS file (style.css)** for all styling.
   * Add consistent **fonts, colors, borders, and spacing** across pages.
   * Use **float** to position images and content side by side.
   * Use **clear** to fix layout issues caused by floated elements.
   * Style the **navigation menu** so links are aligned horizontally.
   * Arrange the **image gallery** using float and clear.
2. **Version Control with Git**
   * Initialize a Git repository.
   * Commit all files.
   * Push your project to GitHub.
3. **Deployment via GitHub Pages**
   * Enable GitHub Pages from repository settings.
   * Share your portfolio’s live link (e.g., https://username.github.io/portfolio/).

### ****Pitfalls to Avoid****

* Keeping CSS inline instead of using a separate style.css.
* Forgetting to link the CSS file in your HTML pages.
* Incorrect folder structure (images or CSS not organized).
* Failing to enable GitHub Pages after uploading.
* Usage of Javascript.
* Using any framework/API for CSS.

### ****Lab Tasks****

1. Move all CSS to an **external stylesheet**.
2. Create a **navigation menu** styled with CSS (horizontal links).
3. Use **float and clear** to arrange text and images neatly.
4. Create an **image gallery** with at least 5 images, aligned using float.
5. Organize project files into folders (css/, images/).
6. Upload your project to GitHub.
7. Deploy your portfolio using GitHub Pages.

### ****Deliverables****

Each student must submit:

* Each submission is individual with the following composition:
  + Source Code (Web Pages)
  + Description Document
* Convert your submission files into a zip folder and name it as given below, finally upload the zip folder to LMS.
  + Name – Registration No. – Section
* A link to their **GitHub repository** (with all HTML, CSS, and images).

<https://github.com/HashirNauman/portfolio/tree/master>

* A link to the **live portfolio site** via GitHub Pages.

<https://hashirnauman.github.io/portfolio/index.html>

* Properly organized project files in folders

**Source Code:**

**index.html:**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Home | Muhammad Nauman Hashir</title>

  <link rel="stylesheet" href="css/style.css">

</head>

<body>

  <header>

    <h1>Muhammad Nauman Hashir</h1>

    <nav>

      <a href="index.html" class="active">Home</a>

      <a href="hobbies.html">Hobbies</a>

      <a href="skills.html">Skills</a>

      <a href="gallery.html">Gallery</a>

      <a href="contact.html">Contact</a>

    </nav>

  </header>

  <div class="container">

    <h2>Welcome</h2>

    <p>I’m a 5th-semester Software Engineering student at NUST, exploring machine learning, deep learning, and full-stack development.</p>

  </div>

  <footer>

    <p>&copy; 2025 Muhammad Nauman Hashir. All rights reserved.</p>

  </footer>

</body>

</html>

**skills.html:**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Skills | Muhammad Nauman Hashir</title>

  <link rel="stylesheet" href="css/style.css">

</head>

<body>

  <header>

    <h1>Muhammad Nauman Hashir</h1>

    <nav>

      <a href="index.html">Home</a>

      <a href="hobbies.html">Hobbies</a>

      <a href="skills.html" class="active">Skills</a>

      <a href="gallery.html">Gallery</a>

      <a href="contact.html">Contact</a>

    </nav>

  </header>

  <div class="container">

    <h2>Technical Skills</h2>

    <table>

      <tr><th>Category</th><th>Details</th></tr>

      <tr><td>Programming</td><td>Python, C++, Java</td></tr>

      <tr><td>Frameworks</td><td>Django, React.js</td></tr>

      <tr><td>ML/DL</td><td>TensorFlow, PyTorch, scikit-learn</td></tr>

      <tr><td>Tools</td><td>Git, VS Code, Jupyter</td></tr>

    </table>

  </div>

  <footer>

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  </footer>

</body>

</html>

**hobbies.html:**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Hobbies | Muhammad Nauman Hashir</title>

  <link rel="stylesheet" href="css/style.css">

</head>

<body>

  <header>

    <h1>Muhammad Nauman Hashir</h1>

    <nav>

      <a href="index.html">Home</a>

      <a href="hobbies.html" class="active">Hobbies</a>

      <a href="skills.html">Skills</a>

      <a href="gallery.html">Gallery</a>

      <a href="contact.html">Contact</a>

    </nav>

  </header>

  <div class="container">

    <h2>My Hobbies</h2>

    <ul>

      <li>Solving LeetCode problems</li>

      <li>Reading machine-learning research papers</li>

      <li>Building side projects with Python &amp; Django</li>

    </ul>

  </div>

  <footer>

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  </footer>

</body>

</html>

**gallery.html:**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Gallery | Muhammad Nauman Hashir</title>

  <link rel="stylesheet" href="css/style.css">

</head>

<body>

  <header>

    <h1>Muhammad Nauman Hashir</h1>

    <nav>

      <a href="index.html">Home</a>

      <a href="hobbies.html">Hobbies</a>

      <a href="skills.html">Skills</a>

      <a href="gallery.html" class="active">Gallery</a>

      <a href="contact.html">Contact</a>

    </nav>

  </header>

  <div class="container">

    <h2>Image Gallery</h2>

    <div class="gallery-float">

      <img src="images/img1.png" alt="Photo 1">

      <img src="images/img2.png" alt="Photo 2">

      <img src="images/img3.png" alt="Photo 3">

      <img src="images/img4.png" alt="Photo 4">

      <img src="images/img5.png" alt="Photo 5">

    </div>

  </div>

  <footer>

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  </footer>

</body>

</html>

**contact.html:**

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Contact | Muhammad Nauman Hashir</title>

  <link rel="stylesheet" href="css/style.css">

</head>

<body>

  <header>

    <h1>Muhammad Nauman Hashir</h1>

    <nav>

      <a href="index.html">Home</a>

      <a href="hobbies.html">Hobbies</a>

      <a href="skills.html">Skills</a>

      <a href="gallery.html">Gallery</a>

      <a href="contact.html" class="active">Contact</a>

    </nav>

  </header>

  <div class="container">

    <h2>Contact Me</h2>

    <div class="contact-info">

      <p>Email: <a href="mailto:hashernauman@gmail.com">hashernauman@gmail.com</a></p>

      <p>Phone: +92 3155159365</p>

      <p>LinkedIn: <a href="https://www.linkedin.com/in/muhammad-nauman-hashir-876a73348/" target="\_blank">

        linkedin.com/in/muhammad-nauman-hashir-876a73348/</a>

      </p>

    </div>

  </div>

  <footer>

    <p>&copy; 2025 Muhammad Nauman Hashir. All rights reserved.</p>

  </footer>

</body>

</html>

**style.css:**

/\* css/style.css \*/

@import url('https://fonts.googleapis.com/css2?family=Poppins:wght@400;600&display=swap');

:root {

  --primary-color: #00ffe0;

  --text-color: #fff;

  --background-start: #adbab9;

  --background-end: #4daddd;

  --shadow-color: rgba(0, 0, 0, 0.15);

}

body {

  margin: 0;

  font-family: 'Poppins', sans-serif;

  background: linear-gradient(135deg, var(--background-start), var(--background-end));

  color: var(--text-color);

  text-shadow: 0 1px 2px var(--shadow-color);

}

header {

  background: rgba(0, 0, 0, 0.6);

  backdrop-filter: blur(4px);

  padding: 30px 0;

  text-align: center;

}

header h1 {

  font-size: 2.5em;

  margin: 0;

  letter-spacing: 1px;

}

nav {

  margin-top: 10px;

  display: flex;

  justify-content: center;

  gap: 15px;

}

nav a {

  color: var(--text-color);

  text-decoration: none;

  font-weight: 600;

  position: relative;

  transition: color 0.3s;

}

nav a.active {

  color: var(--primary-color);

  pointer-events: none;

}

nav a::after {

  content: '';

  position: absolute;

  width: 0;

  height: 2px;

  left: 0;

  bottom: -4px;

  background: var(--primary-color);

  transition: width 0.3s;

}

nav a:hover {

  color: var(--primary-color);

}

nav a:hover::after { width: 100%; }

.container {

  max-width: 900px;

  margin: 60px auto;

  background: rgba(255, 255, 255, 0.2);

  backdrop-filter: blur(6px);

  padding: 60px;

  border-radius: 15px;

  box-shadow: 0 4px 10px var(--shadow-color);

  animation: fadeIn 1s ease-in;

}

.container h2 {

  font-size: 2em;

  margin-top: 0;

  text-align: center;

}

/\* Float-based gallery for Lab-3 \*/

.gallery-float img {

  float: left;

  width: 180px;

  height: 180px;

  object-fit: cover;

  margin: 10px;

  border-radius: 12px;

  box-shadow: 0 2px 8px rgba(0,0,0,0.2);

}

.gallery-float::after {

  content: "";

  display: block;

  clear: both;   /\* clears the floats \*/

}

footer {

  text-align: center;

  padding: 20px;

  background: rgba(0, 0, 0, 0.6);

  backdrop-filter: blur(4px);

  margin-top: 40px;

}

table {

      width: 100%;

      border-collapse: collapse;

      margin-top: 20px;

      color: #fff;

      text-align: left;

    }

    th, td {

      border-bottom: 1px solid rgba(255,255,255,0.3);

      padding: 12px 15px;

    }

    th {

      background: rgba(0,0,0,0.3);

      font-weight: 600;

    }

    tr:hover {

      background: rgba(255,255,255,0.1);

    }

@keyframes fadeIn {

  from { opacity: 0; }

  to   { opacity: 1; }

}

@media (max-width: 600px) {

  header h1 { font-size: 1.8em; }

  nav { flex-direction: column; gap: 10px; }

  nav a { margin: 5px 0; font-size: 0.9em; }

  .container { margin: 20px; padding: 20px; }

}