



Green University of Bangladesh



Department of Computer Science and Engineering (CSE)

Faculty of Sciences and Engineering Semester:

(Fall, Year:2025), B.Sc. in CSE (Day)

Lab Report NO # 03

Course Title: Database Lab

Course Code: CSE 302 Section: 232_D1

Lab Experiment Name: Create a Photo Gallery using HTML and CSS

Student Details:

Name	ID
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Lab Date : 25 .10. 2025

Submission Date : 30.10. 2025

Course Teacher's Name : Tanpia Tasnim

[For Teachers use only: Don't Write Anything inside this box]

Lab Report Status

Marks:

Comments:.....

Signature:.....

Date:.....

1. TITLE OF THE LAB EXPERIMENT

Design and develop a **Photo Gallery** web page displaying faculty profiles of the Green University of Bangladesh using **HTML** and **CSS layout techniques**.

2. OBJECTIVES / AIM

- To create a web-based photo gallery using HTML and CSS.
- To practice using the **CSS Grid layout** for organizing images.
- To make a responsive design that adjusts based on screen size.
- To display faculty information with images, names, and designations.

3. INTRODUCTION

This experiment demonstrates how to use **HTML and CSS** to design a responsive **photo gallery**.

The web page shows faculty members from the Department of CSE at Green University of Bangladesh.

A total of **10 faculty images** are displayed, arranged **five per row** using the **CSS Grid layout**. Each faculty profile includes an image, name, and designation, all linked to the university's official faculty webpage.

4. PROCEDURE / ANALYSIS / DESIGN

Step-by-Step Process:

1. Created a new HTML file named faculty-gallery.html.
2. Added structural elements like <header>, <div class="gallery">, and <footer>.
3. Used <div class="faculty"> for each faculty member to include an image, name, and designation.
4. Linked an external CSS file (styles.css) for styling and layout control.
5. Applied **CSS Grid** to display five faculty images per row.
6. Added responsive design rules using **media queries** to ensure compatibility on smaller devices.

Page Layout Structure:

HTML Structure:

<header> (title and university name)

<div class="gallery">

└─ <div class="faculty"> (Image + Name + Designation)

</div>

</div> (copyright)

Design Flow (CSS):

- display: grid; used for gallery layout
- grid-template-columns: repeat(5, 1fr); for 5-column structure
- @media queries used for responsiveness

5. IMPLEMENTATION

HTML Code:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>GUB CSE Faculty Gallery</title>

  <link rel="stylesheet" href="styles.css">

</head>

<body>

  <header>

    <h1>Department of CSE – Faculty Gallery</h1>

    <h2>Green University of Bangladesh</h2>

  </header>

  <div class="gallery">

    <div class="col">
```

```
<a
href="https://www.green.edu.bd/profile/Prof.%20Dr.%20Md.%20Mohammad%20Shorif%20
Uddin/378">
```

```
<div class="card h-90 faculty-profile">
```

```
<div class="faculty-images">
```

```

```

```
</div>
```

```
<div class="faculty-designation">
```

```
<p class="card-text card-faculty-desi">Professor & Vice-Chancellor</p>
```

```
</div>
```

```
<div class="faculty-title">
```

```
<h5 class="card-title card-faculty-name">Prof. Dr. Md. Mohammad Shorif
Uddin</h5>
```

```
</div>
```

```
</div>
```

```
</a>
```

```
</div>
```

```
<div class="col">
```

```
<a
href="https://www.green.edu.bd/profile/Prof.%20Dr.%20Md.%20Saiful%20Azad/160">
```

```
<div class="card h-90 faculty-profile">
```

```
<div class="faculty-images">
```

```

```

```
</div>
```

```
<div class="faculty-designation">
```

```
<p class="card-text card-faculty-desi">Professor & Dean</p>
```

```
</div>
```

```
<div class="faculty-title">
```

```
<h5 class="card-title card-faculty-name">Prof. Dr. Md. Saiful Azad</h5>
```

```
</div>
```

```
</div>
```

```
</a>
```

```
</div>
```

```
<div class="col">
```

```
<a
```

```
href="https://www.green.edu.bd/profile/Professor%20Dr.%20Md.%20Ahsan%20Habib/325">
```

```
<div class="card h-90 faculty-profile">
```

```
<div class="faculty-images">
```

```

```

```
</div>
```

```
<div class="faculty-designation">
```

```
  <p class="card-text card-faculty-desi">Professor & Chairperson</p>
```

```
</div>
```

```
<div class="faculty-title">
```

```
  <h5 class="card-title card-faculty-name">Professor Dr. Md. Ahsan Habib</h5>
```

```
</div>
```

```
</div>
```

```
</a>
```

```
</div>
```

```
<div class="col">
```

```
  <a href="https://www.green.edu.bd/profile/Syed%20Ahsanul%20Kabir/11">
```

```
    <div class="card h-90 faculty-profile">
```

```
      <div class="faculty-images">
```

```
        
```

```
      </div>
```

```
    <div class="faculty-designation">
```

```
      <p class="card-text card-faculty-desi">Associate Professor (Adjunct)</p>
```

```
    </div>
```

```
  <div class="faculty-title">
```

```
    <h5 class="card-title card-faculty-name">Syed Ahsanul Kabir</h5>
```

</div>

</div>

</div>

<div class="col">

<div class="card h-90 faculty-profile">

<div class="faculty-images">

</div>

<div class="faculty-designation">

<p class="card-text card-faculty-desi">Associate Professor & Director of GCITS</p>

</div>

<div class="faculty-title">

<h5 class="card-title card-faculty-name">Dr. Faiz Al Faisal</h5>

</div>

</div>

</div>

```
<div class="col">
```

```
<a href="https://www.green.edu.bd/profile/Umme%20Ruman/181">
```

```
<div class="card h-90 faculty-profile">
```

```
<div class="faculty-images">
```

```

```

```
</div>
```

```
<div class="faculty-designation">
```

```
<p class="card-text card-faculty-desi">Assistant Professor</p>
```

```
</div>
```

```
<div class="faculty-title">
```

```
<h5 class="card-title card-faculty-name">Umme Ruman</h5>
```

```
</div>
```

```
</div>
```

```
</a>
```

```
</div>
```

```
<div class="col">
```

```
<a href="https://www.green.edu.bd/profile/Shamima%20Akter/195">
```

```
<div class="card h-90 faculty-profile">
```

```
<div class="faculty-images">
```



```

```

```
</div>
```

```
<div class="faculty-designation">
```

```
<p class="card-text card-faculty-desi">Assistant Professor</p>
```

```
</div>
```

```
<div class="faculty-title">
```

```
<h5 class="card-title card-faculty-name">Shamima Akter</h5>
```

```
</div>
```

```
</div>
```

```
</a>
```

```
</div>
```

```
<div class="col">
```

```
<a href="https://www.green.edu.bd/profile/Md.%20Monirul%20Islam/421">
```

```
<div class="card h-90 faculty-profile">
```

```
<div class="faculty-images">
```

```

```

```
</div>
```

```
<div class="faculty-designation">
```

```
<p class="card-text card-faculty-desi">Assistant Professor</p>

</div>

<div class="faculty-title">

  <h5 class="card-title card-faculty-name">Md. Monirul Islam</h5>

</div>

</div>

</a>

</div>
```

```
<div class="col">

  <a href="https://www.green.edu.bd/profile/Tanpia%20Tasnim/20">

    <div class="card h-90 faculty-profile">

      <div class="faculty-images">

      </div>

      <div class="faculty-designation">

        <p class="card-text card-faculty-desi">Lecturer & PC(E)</p>

      </div>

      <div class="faculty-title">

        <h5 class="card-title card-faculty-name">Tanpia Tasnim</h5>

      </div>

    </div>

  </a>

</div>
```

</div>

</div>

<div class="col">

<div class="card h-90 faculty-profile">

<div class="faculty-images">

</div>

<div class="faculty-designation">

<p class="card-text card-faculty-desi">Lecturer</p>

</div>

<div class="faculty-title">

<h5 class="card-title card-faculty-name">Montaser Abdul Quader</h5>

</div>

</div>

</div>

</div>

```
<footer>

  <p>© 2025 Green University of Bangladesh | Department of CSE</p>

</footer>

</body>

</html>
```

CSS Code:

```
* {

  margin: 0;

  padding: 0;

  box-sizing: border-box;

}


body {

  font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

  margin: 0;

  padding: 0;

  background-color: #f5f5f5;

  color: #333;

}


header {
```

```
text-align: center;

background-color: #006633;

color: white;

padding: 30px 10px;

}
```

```
header h1 {

margin: 0;

font-size: 2rem;

}
```

```
header h2 {

margin-top: 5px;

font-weight: 400;

font-size: 1.2rem;

}
```

```
.gallery {

display: grid;

grid-template-columns: repeat(auto-fill, minmax(250px, 1fr));

gap: 30px;
```

```
padding: 50px 40px;  
max-width: 1400px;  
margin: 0 auto;  
}
```

```
.col {  
  display: flex;  
  justify-content: center;  
}
```

```
.col a {  
  text-decoration: none;  
  color: inherit;  
  width: 100%;  
  display: block;  
}
```

```
.card {  
  background-color: #fff;  
  border-radius: 15px;  
  box-shadow: 0 4px 15px rgba(0,0,0,0.1);
```

```
overflow: hidden;

transition: all 0.3s ease;

display: flex;

flex-direction: column;
}
```

```
.h-90 {

height: 100%;

}
```

```
.faculty-profile {

text-align: center;

position: relative;

}
```

```
.card:hover {

transform: translateY(-8px);

box-shadow: 0 8px 25px rgba(0,0,0,0.15);

}
```

```
.faculty-images {
```

```
overflow: hidden;

width: 100%;

position: relative;
}
```

```
.faculty-img {

width: 100%;

height: 350px;

object-fit: cover;

display: block;

transition: transform 0.3s ease;
}
```

```
.card:hover .faculty-img {

transform: scale(1.03);
}
```

```
.faculty-designation {

background: linear-gradient(135deg, #089cc2 0%, #089cc2 100%);

color: white;

padding: 15px 20px;
```



```
position: relative;

margin: 0;

border-radius: 0 0 10px 10px;
}
```

```
.card-faculty-desi {

font-size: 1rem;

color: white;

font-weight: 500;

margin: 0;

letter-spacing: 0.3px;
}
```

```
.faculty-title {

padding: 20px 15px;

background-color: #fff;
}
```

```
.card-faculty-name {

color: #2c3e50;

font-size: 1.15rem;
```

```
font-weight: 700;

line-height: 1.4;

margin: 0;

min-height: auto;
}

/* Remove old faculty styles */

.faculty,
.faculty:hover,
.faculty a,
.faculty img,
.faculty h3,
.faculty p {
    all: unset;
}

footer {
    text-align: center;

    background-color: #004d26;

    color: white;

    padding: 15px;
```

```
margin-top: 40px;

font-size: 0.9rem;

}

/* Responsive design for smaller screens */

@media (max-width: 1200px) {

  .gallery {

    grid-template-columns: repeat(auto-fill, minmax(230px, 1fr));

    gap: 25px;

  }

}

@media (max-width: 768px) {

  .gallery {

    grid-template-columns: repeat(auto-fill, minmax(200px, 1fr));

    gap: 20px;

    padding: 30px 20px;

  }

  .faculty img {

    height: 250px;

  }

}
```

```
}  
  
}  
  
@media (max-width: 480px) {  
  .gallery {  
    grid-template-columns: 1fr;  
    gap: 20px;  
  }  
  
  .faculty img {  
    height: 300px;  
  }  
}
```

6. TEST RESULT / OUTPUT

Expected Output:

1. The webpage displays **10 faculty members** in a **grid layout**.
2. On desktop: **4 images per row**.
3. On tablet: **3 images per row**.
4. On mobile: **2 images per row**.
5. Each image shows a name and designation below it.
6. Hovering on a faculty card slightly enlarges it (scale effect).
7. All links open in a new tab.
8. The layout is responsive and visually clean.

Department of CSE – Faculty Gallery

Green University of Bangladesh



Professor & Vice-Chancellor

**Prof. Dr. Md. Mohammad
Shorif Uddin**



Professor & Dean

Prof. Dr. Md. Saiful Azad



Professor & Chairperson

**Professor Dr. Md. Ahsan
Habib**



Associate Professor (Adjunct)

Syed Ahsanul Kabir



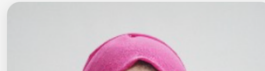
Professor & Vice-Chancellor

**Prof. Dr. Md. Mohammad
Shorif Uddin**



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Prof. Dr. Md. Saiful Azad



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**Professor Dr. Md. Ahsan
Habib**



Associate Professor (Adjunct)

Syed Ahsanul Kabir



Associate Professor & Director of
GCITS

Dr. Faiz Al Faisal



Assistant Professor

Umme Ruman



Assistant Professor

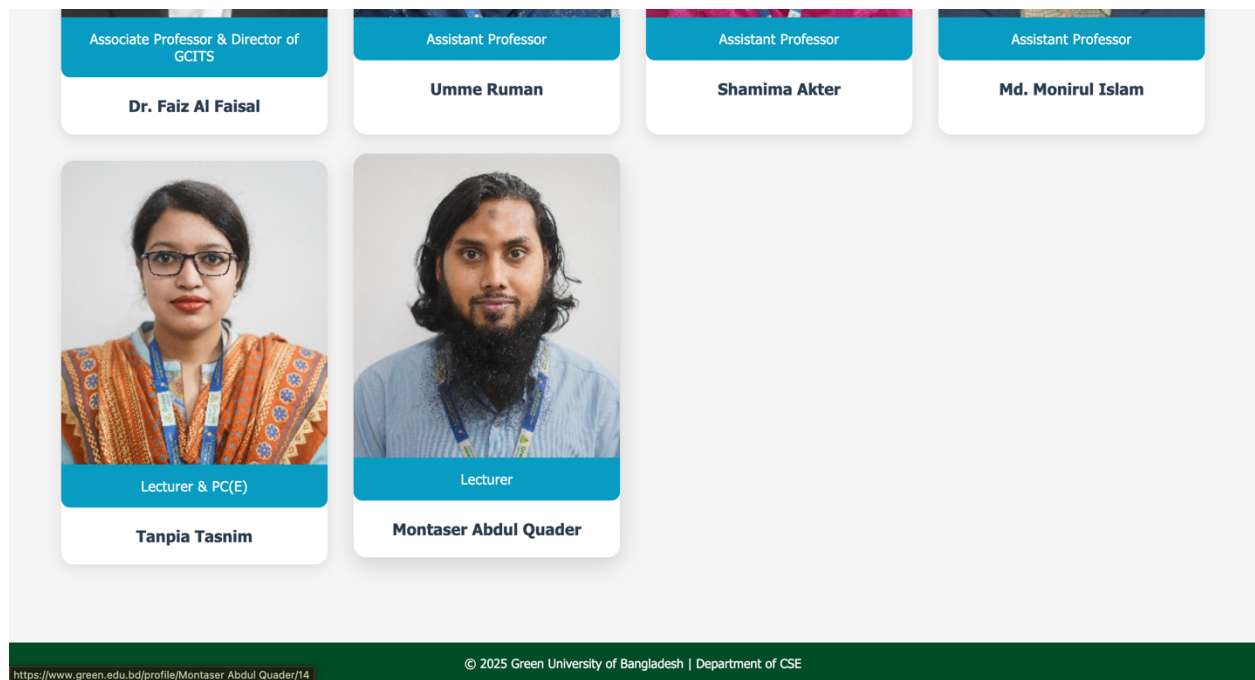
Shamima Akter



Assistant Professor

Md. Monirul Islam

https://www.green.edu.bd/profile/Dr._Faiz_Al_Faisal/180



7. ANALYSIS AND DISCUSSION

- ❖ **What went well:** The grid layout worked smoothly, and responsiveness was achieved through media queries.
- ❖ **Challenges faced:** Maintaining equal image size and spacing across devices.
- ❖ **Learning outcome:**
 - Learned to use CSS Grid effectively.
 - Understood how to apply responsive web design principles.
 - Gained experience linking real data and designing clean layouts.
- ❖ **Achievement:** The gallery design met all task requirements.

8. SUMMARY

In this experiment, a **Photo Gallery webpage** was successfully developed using HTML and CSS to showcase the **CSE faculty of Green University of Bangladesh**. The project demonstrated layout structuring using **CSS Grid**, responsive design techniques, and hover animations for an engaging user interface.