**Q: 14**

**Title:**

L1 - Debugging a Responsive Grid Layout

**Problem Statement:**

A developer attempted to create a **responsive grid layout** for a gallery, but the layout is breaking on certain screen sizes. Your task is to **debug and fix** the issues in the given code so that it behaves as expected.

**Expected Behavior**:

1. On screens **larger than 1024px**, the gallery should display **4 columns**.
2. On screens between **768px and 1024px**, the gallery should display **2 columns**.
3. On screens **smaller than 768px**, the gallery should display a **single column**.

**Issues**:

1. The layout breaks on screens larger than **1024px**, displaying only **2 columns** instead of **4 columns**.
2. On screens between **768px and 1024px**, the grid alignment is incorrect, causing items to overlap.
3. On small screens (**less than 768px**), the layout works as expected and requires no changes.

**Fix the bugs** to make the layout responsive and ensure proper alignment on all screen sizes.

**Submission Guidelines:**

* Submit your Masai Git directory link with the **debugged HTML and CSS files**.

**Provided Code (Bugged Version):**

**HTML:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Responsive Grid Debugging</title>

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

</head>

<body>

<h1>Responsive Gallery</h1>

<div class="gallery">

<div class="item">Item 1</div>

<div class="item">Item 2</div>

<div class="item">Item 3</div>

<div class="item">Item 4</div>

<div class="item">Item 5</div>

<div class="item">Item 6</div>

</div>

</body>

</html>

**CSS (Bugged):**

/\* Base styles for mobile-first design \*/

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 20px;

text-align: center;

}

h1 {

margin-bottom: 20px;

}

.gallery {

display: grid;

grid-template-columns: 1fr;

gap: 20px;

padding: 10px;

}

/\* Medium screens (768px to 1024px) \*/

@media (min-width: 768px) {

.gallery {

grid-template-columns: repeat(3, 1fr); /\* BUG: Should be 2 columns \*/

gap: 15px; /\* BUG: Items are overlapping \*/

}

}

/\* Large screens (above 1024px) \*/

@media (min-width: 1024px) {

.gallery {

grid-template-columns: repeat(2, 1fr); /\* BUG: Should be 4 columns \*/

}

}

**How to Test:**

1. Save the updated index.html and styles.css files in the same directory.
2. Open index.html in a browser.
3. Resize the browser window to test the layout for:
   * Single-column layout on small screens (<768px).
   * Two-column layout on medium screens (768px–1024px).
   * Four-column layout on large screens (>1024px).

**Submission Instructions:**

* Ensure your final project contains the fixed index.html and styles.css files.
* Test the layout on various screen sizes before submitting your Git directory link.