**Flexbox Image Gallery – HTML Summary**

1. **DOCTYPE Declaration**
   * Declares HTML5 document type.
2. **Language Set**
   * The document language is set to English (lang="en").
3. **Meta Tags**
   * UTF-8 for character encoding.
   * viewport for responsive scaling on all devices.
4. **Title Tag**
   * Sets the browser tab title to "FlexBox".
5. **CSS Link**
   * Links an external CSS file (style.css) for styling.
6. **Main Container**
   * A <div> with class gallery wraps all image items.
7. **Image Items**
   * Each image is placed inside a <div> with class items.
   * Total of **7 images** are displayed in the gallery.
8. **Alt Attribute**
   * Each image has an empty alt="" for accessibility (can be improved by adding descriptions).

### ****Flexbox Gallery – CSS Summary****

#### 1. **Global Reset**

* \* selector resets margin and padding to 0.
* box-sizing: border-box ensures predictable sizing.

#### 2. **Body Styling**

* Applies a **linear gradient background** (red to orange).
* Full width and height (100%, 100vh).
* Background is centered, covers the screen, and doesn't repeat.

#### 3. **Gallery Container (**.gallery**)**

* Adds top margin (100px) to push gallery downward.
* Uses **Flexbox** to arrange items in a row.
* flex-wrap: wrap makes it responsive across rows.
* justify-content: center centers items horizontally.
* align-items: center aligns items vertically.
* gap: 20px adds space between images.

#### 4. **Image Container (**.items**)**

* max-width: 500px restricts container size.
* overflow: hidden hides overflow for zoom effect.
* Rounded corners using border-radius: 8px.
* Adds **box shadow** for 3D effect.

#### 5. **Image Styling**

* Fixed size for all images: 300x200px.
* Rounded corners and shadow for visual appeal.
* On **hover**, image scales to **1.5x size** with a smooth transition.

### ****CSS Grid – Gallery Layout Summary****

#### 1. **Global Reset**

* \* selector removes default spacing with:
  + margin: 0
  + padding: 0
  + box-sizing: border-box ensures borders/padding don't affect element width/height.

#### 2. **Body Styling**

* Uses a **green-to-orange linear gradient** background.
* Takes full width (100%) and full height (100vh) of the screen.

#### 3. **Gallery Container (**.gallery**)**

* margin-top: 100px pushes gallery down from the top.
* Uses **CSS Grid** layout instead of Flexbox.
* grid-template-columns: 1fr 1fr 1fr 1fr creates 4 equal-width columns.
* grid-template-rows: 1fr 1fr creates 2 rows.
* grid-gap: 40px sets spacing between rows and columns.
* justify-items: center centers content horizontally in each grid cell.
* align-content: center centers the whole grid vertically within its container.

#### 4. **Item Container (**.items**)**

* Limits width to 300px.
* overflow: hidden hides overflow for zoom effect.
* Adds rounded corners (border-radius: 8px).
* Adds **box-shadow** to give depth effect.

#### 5. **Image Styling**

* Fixed size: 300px width and height.
* Rounded corners and drop shadow.
* On **hover**, the image **zooms in (1.5x)** smoothly with:
  + transform: scale(1.5)
  + transition: 0.5s ease