

Module 2: Website Layouts

Video 2.2: Understanding Grid Lines - Solution

Task 1: Basic Grid Layout

- Create a basic grid layout with three rows and three columns.
- Apply different background colors to each grid cell.

Desired Output:

1	2	3
4	5	6
7	8	9

Solution Code (CSS):

```
.grid-container {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-template-rows: repeat(3, 100px);
}
.item:nth-child(1) {
  background-color: #ffd700;
}
.item:nth-child(2) {
  background-color: #ff6347;
}
.item:nth-child(3) {
  background-color: #87ceeb;
}
.item:nth-child(4) {
  background-color: #98fb98;
}
.item:nth-child(5) {
  background-color: #9370db;
}
.item:nth-child(6) {
  background-color: #ffa500;
}
.item:nth-child(7) {
  background-color: #20b2aa;
}
.item:nth-child(8) {
  background-color: #ff4500;
}
.item:nth-child(9) {
  background-color: #00ffff;
}
.item {
  border: 1px solid black;
  display: flex;
  align-items: center;
  justify-content: center;
  font-size: 1.5rem;
}
```

Task 2: Responsive Grid Layout

- Create a responsive grid layout with four columns. The layout should change to two columns on smaller screens.
- Apply different background colors to even and odd grid cells.

Desired Output:

1	2	3	4
5	6	7	8
9			

On Smaller Screen:

1	2
3	4
5	6
7	8
9	

Solution Code (CSS):



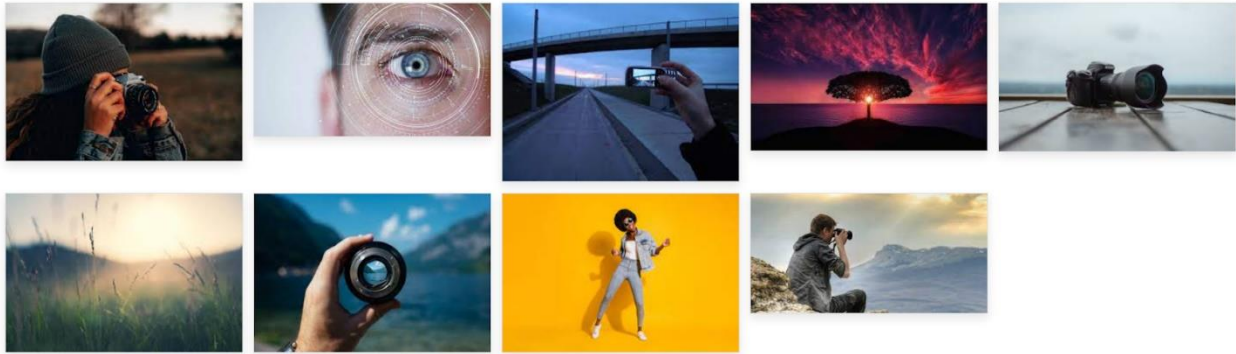
```
.grid-container {  
  display: grid;  
  grid-template-columns: repeat(4, 1fr);  
  grid-gap: 10px;  
}  
.item:nth-child(odd) {  
  background-color: #ffd700;  
}  
.item:nth-child(even) {  
  background-color: #ff6347;  
}  
@media (max-width: 768px) {  
  .grid-container {  
    grid-template-columns: repeat(2, 1fr);  
  }  
}
```



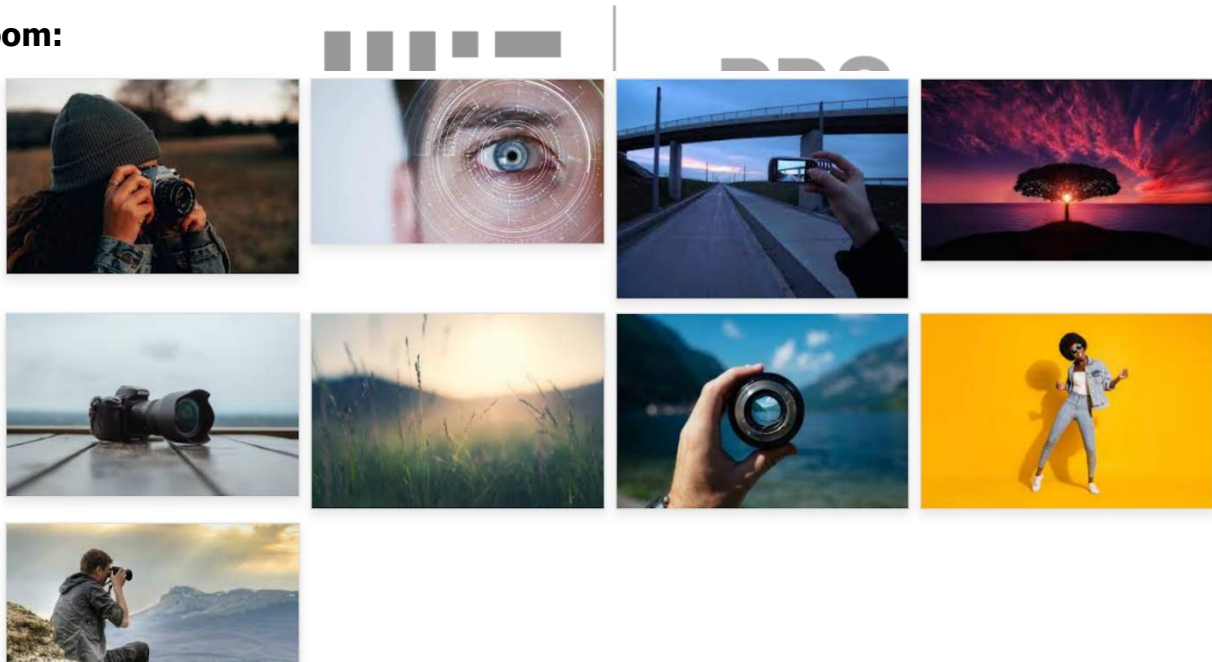
Task 3: Image Gallery Grid

- Create an image gallery grid with a dynamic number of columns based on the screen width. The images should maintain their aspect ratio and be centered within each cell.

Desired Output:



Upon Zoom:



Replace the numbers in the div with class="item" tag with img tags.

Solution Code (CSS):

```
.grid-container {  
  display: grid;  
  grid-template-columns: repeat(auto-fill, minmax(200px, 1fr));  
  grid-gap: 10px;  
}  
.item img {  
  max-width: 100%;  
  height: auto;  
  display: block;  
  margin: 0 auto;  
  border: 1px solid #ddd;  
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);  
  transition: transform 0.2s ease-in-out;  
}  
.item img:hover {  
  transform: scale(1.05);  
}
```

