

ICT-Start – Session 01

Module 2: Creating static web pages using HTML5 and CSS3

L) CSS-Grid

December 2022



Header

Link 1 Link 2 Link 3 Link 4

Left Menu

- Link1
- Link2
- Link3
- Link4
- ...

Content...

Right menu

- Link1
- Link2
- Link3
- Link4
- ...

CSS Grid

- The CSS Grid Layout offers a grid-based layout system, with rows and columns, making it easier to design web pages without having to use floats and positioning.



1	2	3
4	5	6
7	8	9

```
<body>
  <div class="grid-container">
    <div class="grid-item">1</div>
    <div class="grid-item">2</div>
    <div class="grid-item">3</div>
    <div class="grid-item">4</div>
    <div class="grid-item">5</div>
    <div class="grid-item">6</div>
    <div class="grid-item">7</div>
    <div class="grid-item">8</div>
    <div class="grid-item">9</div>
  </div>
</body>
```

1	2	3
4	5	6
7	8	9

Creates the actual grid

```
<style media="screen">
.grid-container{
  display: grid;
  grid-template-columns: 100px 100px 100px;
  grid-template-rows: 100px 100px 100px;
}

.grid-item {
  background-color: lightgray;
  border: 1px solid black;
  font-size: 30px;
  padding: 30px;
  text-align: center;
}
.grid-item:hover{
  background-color: gray;
}
```

only visuals

```
</style>
</head>
<body>
  <div class="grid-container">
    <div class="grid-item">1</div>
    <div class="grid-item">2</div>
    <div class="grid-item">3</div>
    <div class="grid-item">4</div>
    <div class="grid-item">5</div>
    <div class="grid-item">6</div>
    <div class="grid-item">7</div>
    <div class="grid-item">8</div>
    <div class="grid-item">9</div>
  </div>
</body>
</html>
```

Task 1

- Combine 5 and 6 into one

1	2	3
4	5,6	
7	8	9

- Hint:** Remember how we did it with tables?

```
<style media="screen">
  .grid-container{
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
  }
  .grid-item {
    background-color: lightgray;
    border: 1px solid black;
    font-size: 30px;
    padding: 30px;
    text-align: center;
  }
  .grid-item:hover{
    background-color: gray;
  }
</style>
</head>
<body>
  <div class="grid-container">
    <div class="grid-item">1</div>
    <div class="grid-item">2</div>
    <div class="grid-item">3</div>
    <div class="grid-item">4</div>
    <div class="grid-item">5</div>
    <div class="grid-item">6</div>
    <div class="grid-item">7</div>
    <div class="grid-item">8</div>
    <div class="grid-item">9</div>
  </div>
</body>
</html>
```

Task 1

- Combine 5 and 6 into one cell

1	2	3
4	5,6	
7	8	9

- Hint:** Remember how we did it with tables?

```
<style media="screen">
  .grid-container{
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
  }
  .grid-item {
    background-color: lightgray;
    border: 1px solid black;
    font-size: 30px;
    padding: 30px;
    text-align: center;
  }
  .grid-item:nth-child(5){
    grid-column: 2 / span 2;
  }
  .grid-item:hover{
    background-color: gray;
  }
</style>
</head>
<body>
  <div class="grid-container">
    <div class="grid-item">1</div>
    <div class="grid-item">2</div>
    <div class="grid-item">3</div>
    <div class="grid-item">4</div>
    <div class="grid-item">5,6</div>
    <div class="grid-item">7</div>
    <div class="grid-item">8</div>
    <div class="grid-item">9</div>
  </div>
</body>
</html>
```

Task 2

- Combine 1 and 4 into one cell

1,4	2	3
	5,6	
7	8	9

```
<style media="screen">
  .grid-container{
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
  }
  .grid-item {
    background-color: lightgray;
    border: 1px solid black;
    font-size: 30px;
    padding: 30px;
    text-align: center;
  }
  .grid-item:nth-child(5){
    grid-column: 2 / span 2;
  }
  .grid-item:hover{
    background-color: gray;
  }
</style>
</head>
<body>
  <div class="grid-container">
    <div class="grid-item">1</div>
    <div class="grid-item">2</div>
    <div class="grid-item">3</div>
    <div class="grid-item">4</div>
    <div class="grid-item">5,6</div>
    <div class="grid-item">7</div>
    <div class="grid-item">8</div>
    <div class="grid-item">9</div>
  </div>
</body>
</html>
```


Task 2

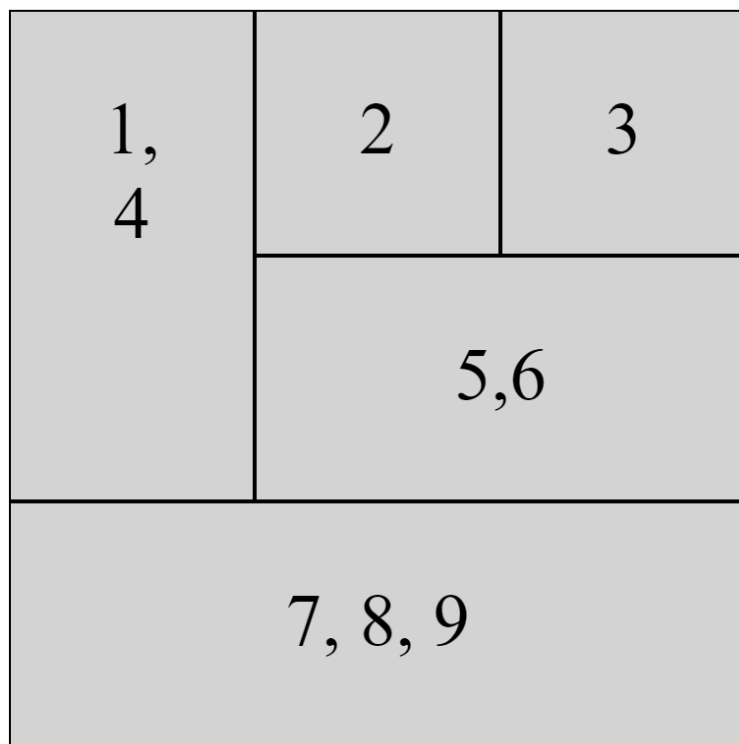
- Combine 1 and 4 into one cell

1, 4	2	3
5,6		
7	8	9

```
<style media="screen">
  .grid-container{
    display: grid;
    grid-template-columns: 100px 100px 100px;
    grid-template-rows: 100px 100px 100px;
  }
  .grid-item {
    background-color: lightgray;
    border: 1px solid black;
    font-size: 30px;
    padding: 30px;
    text-align: center;
  }
  .grid-item:first-child{
    grid-row: 1 / span 2;
  }
  .grid-item:nth-child(4){
    grid-column: 2 / span 2;
  }
  .grid-item:hover{
    background-color: gray;
  }
</style>
</head>
<body>
  <div class="grid-container">
    <div class="grid-item">1,<br>4</div>
    <div class="grid-item">2</div>
    <div class="grid-item">3</div>
    <div class="grid-item">5,6</div>
    <div class="grid-item">7</div>
    <div class="grid-item">8</div>
    <div class="grid-item">9</div>
  </div>
</body>
```

Task 3

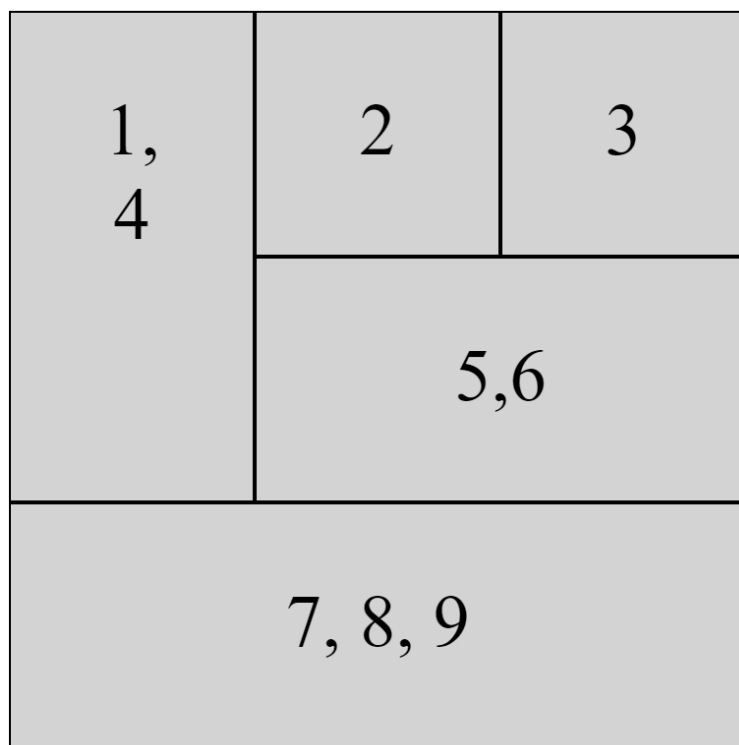
- Combine 7, 8 and 9 into one cell



```
<style media="screen">
.grid-container{
  display: grid;
  grid-template-columns: 100px 100px 100px;
  grid-template-rows: 100px 100px 100px;
}
.grid-item {
  background-color: lightgray;
  border: 1px solid black;
  font-size: 30px;
  padding: 30px;
  text-align: center;
}
.grid-item:first-child{
  grid-row: 1 / span 2;
}
.grid-item:nth-child(4){
  grid-column: 2 / span 2;
}
.grid-item:hover{
  background-color: gray;
}
</style>
</head>
<body>
<div class="grid-container">
  <div class="grid-item">1,<br>4</div>
  <div class="grid-item">2</div>
  <div class="grid-item">3</div>
  <div class="grid-item">5,6</div>
  <div class="grid-item">7</div>
  <div class="grid-item">8</div>
  <div class="grid-item">9</div>
</div>
</body>
```

Task 3

- Combine 7, 8 and 9 into one cell



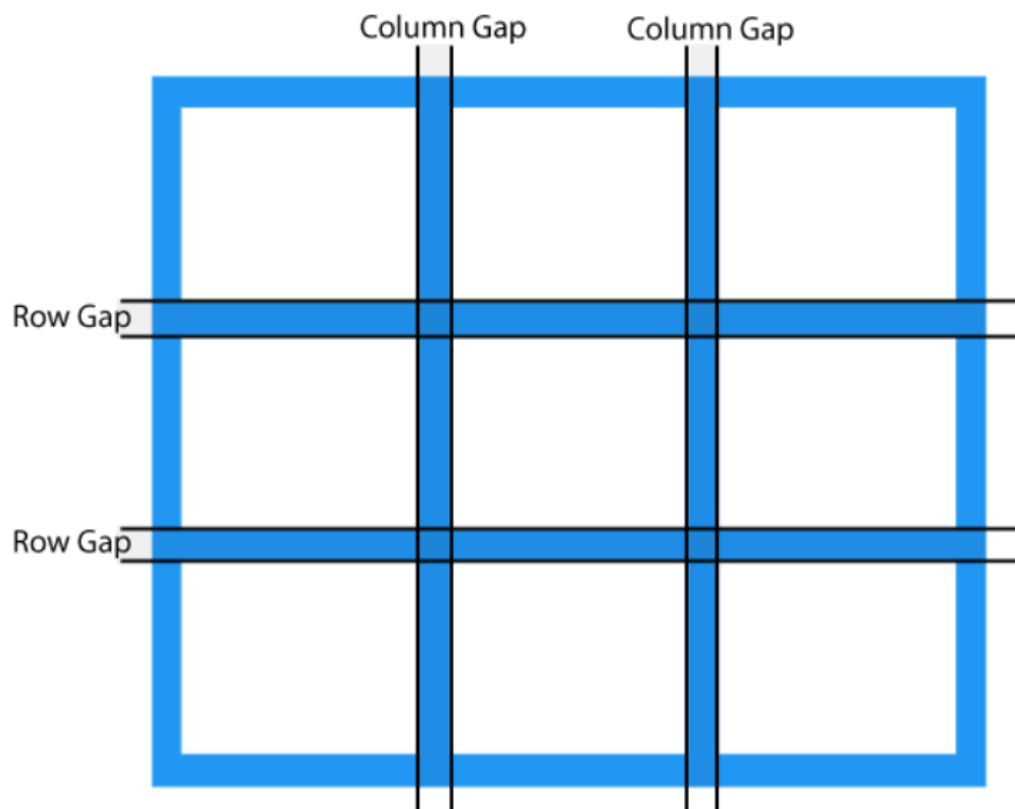
```
<style media="screen">
.grid-container{
  display: grid;
  grid-template-columns: 100px 100px 100px;
  grid-template-rows: 100px 100px 100px;
}
.grid-item {
  background-color: lightgray;
  border: 1px solid black;
  font-size: 30px;
  padding: 30px;
  text-align: center;
}
.grid-item:first-child{
  grid-row: 1 / span 2;
}
.grid-item:nth-child(4){
  grid-column: 2 / span 2;
}
.grid-item:last-child{
  grid-column: 1 / span 3;
}
.grid-item:hover{
  background-color: gray;
}
</style>
</head>
<body>
<div class="grid-container">
  <div class="grid-item">1,<br>4</div>
  <div class="grid-item">2</div>
  <div class="grid-item">3</div>
  <div class="grid-item">5,6</div>
  <div class="grid-item">7, 8, 9</div>
</div>
</body>
```

Grid Gaps

1	2	3
4	5	6
7	8	9

=>

1	2	3
4	5	6
7	8	9



```
.grid-container{  
  display: grid;  
  grid-template-columns: 100px 100px 100px;  
  grid-template-rows: 100px 100px 100px;  
  gap: 20px;  
}
```

You can adjust the gap size by using one of the following properties:

- `column-gap`
- `row-gap`
- `gap`

Exercices