

Responsive Web

What is Responsive Web Design?

- Responsive web design makes your web page look good on all devices.
- Responsive web design uses only HTML and CSS.
- Responsive web design is not a program or a JavaScript.
- Web pages can be viewed using many different devices: desktops, tablets, and phones. Your web page should look good, and be easy to use, regardless of the device.



What is The Viewport?

- The viewport is the user's visible area of a web page.
- The viewport varies with the device, and will be smaller on a mobile phone than on a computer screen.
- HTML5 introduced a method to let web designers take control over the viewport, through the <meta> tag.
- You should include the following <meta> viewport element in all your web pages:

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

Responsive Web Design - Grid-View

- web pages are based on a grid-view, which means that the page is divided into columns
- start building a responsive grid-view.

```
* {  
  box-sizing: border-box;  
}
```

CSS Grid-View

```
.menu {  
    width: 25%;  
    float: left;  
}  
.main {  
    width: 75%;  
    float: left;  
}
```

```
.col-1 {width: 8.33%;}  
.col-2 {width: 16.66%;}  
.col-3 {width: 25%;}  
.col-4 {width: 33.33%;}  
.col-5 {width: 41.66%;}  
.col-6 {width: 50%;}  
.col-7 {width: 58.33%;}  
.col-8 {width: 66.66%;}  
.col-9 {width: 75%;}  
.col-10 {width: 83.33%;}  
.col-11 {width: 91.66%;}  
.col-12 {width: 100%;}
```

```
[class*="col-"] {  
    float: left;  
    padding: 15px;  
    border: 1px solid red;  
}
```

```
.row::after {  
    content: "";  
    clear: both;  
    display: table;  
}
```

Responsive Web Design - Grid-View



CSS3 Box Sizing

- CSS3 box-sizing property allows us to include the padding and border in an element's total width and height.

```
* {  
  box-sizing: border-box;  
}
```

```
<!DOCTYPE html>  
<html>  
<head>  
<style>  
  .div1 {  
    width: 300px;  
    height: 100px;  
    border: 1px solid blue;  
    box-sizing: border-box;  
  }
```


What is a Media Query?

- It uses the @media rule to include a block of CSS properties only if a certain condition is true.
- Media queries can help with that,
- a breakpoint where certain parts of the design will behave differently on each side of the breakpoint.

```
@media only screen and (max-width: 500px) {  
  body {  
    background-color: lightblue;  
  }  
}
```

Orientation: Portrait / Landscape

- Media queries can also be used to change layout of a page depending on the orientation of the browser.

```
@media only screen and (orientation: landscape) {  
  body {  
    background-color: lightblue;  
  }  
}
```

Image and video

- Using The width Property

```
video {  
    width: 100%;  
    height: auto;  
}
```

```
img {  
    width: 100%;  
    height: auto;  
}
```
