Sizing items in CSS

Overview

Using CSS sizes can be given to the elements, divs, images etc., in many ways, and we will cover them in this module.

Absolute sizing

Absolute sizing can be given to the images, divs, elements etc., which means that the size will be fixed and will not change according to screen sizes and will not adjust to fit the content inside it.

HTML :

```
<div>  Welcome to Coding Ninjas !  </div>
```

CSS :

```
div {
        background-color: lightblue;
        width: 150px;
        height: 150px;
}
```

Browser :

Relative sizing

- Percentage
- Rem
- Min and max
- Viewport

Percentages

Size can be given using percentages. In this, the per percentage is relative to its parent element. If there is no parent div, then it is considered relative to the viewport(screen size of the page).

HTML :

```
<div id="parent">
    <div id="child">
        Welcome to Coding Ninjas !
    </div>
</div>
```

CSS :

```
#parent {
    background-color: lightgrey;
    width: 150px;
    height: 150px;
}

#child{
    background-color: lightblue;
    height: 70%;
    width: 70%;
}
```

Browser :

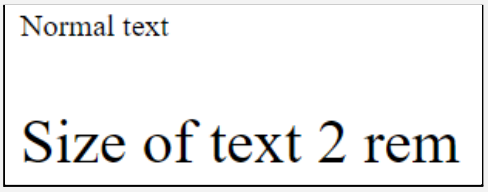
rem

This is used for font sizing, relative to the root element's font size (generally 14px).

HTML :

```
<p> Normal text </p>
<p style="font-size: 2rem;"> Size of text 2 rem </p>
```

Browser :



MIN/MAX Height/Width

Height or width properties are used to set the height and width of the element to a specific size. But its size becomes fixed with this, and this brings problems in smaller devices. The browser then gets a scrollbar to scroll through the entire content.

So, to overcome this problem, CSS provides a min and max property like min-height, max-width etc. This specifies the **maximum height/width that an element can have**. If the browser window's width becomes smaller than the element's width, the element width adjusts with the browser width.

But, a very small element is very difficult to read. So, the CSS provides another property min-width that specifies the minimum width that the element can have.

Let's understand it with an example, suppose you have a box with some content, and the words of that paragraph are not fixed, so the size of the box can not be fixed, but you want to set a minimum height. The box will always be at least this height but will then grow taller if there is more content than the box has space for at its minimum height

HTML :

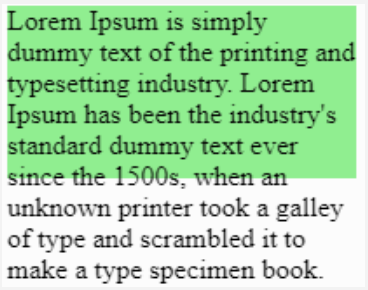
```
<div>
        Lorem Ipsum is simply a dummy text of the printing and typesetting industry.
        Lorem Ipsum has been the industry's standard dummy text ever since the 1500s,
        when an unknown printer took a galley of type and scrambled it to make a type
        specimen book.
  </div>
```

CSS :

```
div{
        background-color : lightgreen;
        height: 100px;
        width : 200px ;
```

}

Browser :

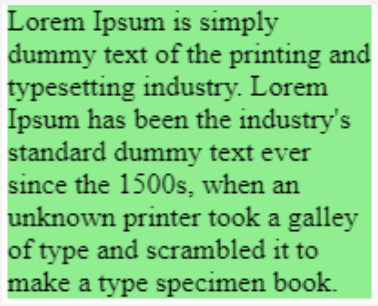


- Fixed height is not viable for this, so we'll use min-height

CSS :

```
div{
    background-color: lightgreen;
    min-height: 100px;
    width : 200px ;
}
```

Browser :



Viewport

Viewport means the visible area on the web browser and elements can have a size relative to the viewport.

- **vh** - Viewport height
- **vw** - Viewport width

SIzing of the items can be done relative to the viewport height/width like height : 80vh , width : 50vw etc.